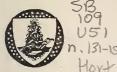


## UNITED STATES DEPARTMENT OF AGRICULTURE



INVENTORY No. 131



Washington, D. C.

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Issued August, 1942

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1937 (Nos. 123342 to 124625)

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## INTRODUCTORY STATEMENT

This inventory, No. 131, records the plant material (Nos. 123342 to 124625) received by the Division of Plant Exploration and Introduction during the period from April 1 to June 30, 1937.

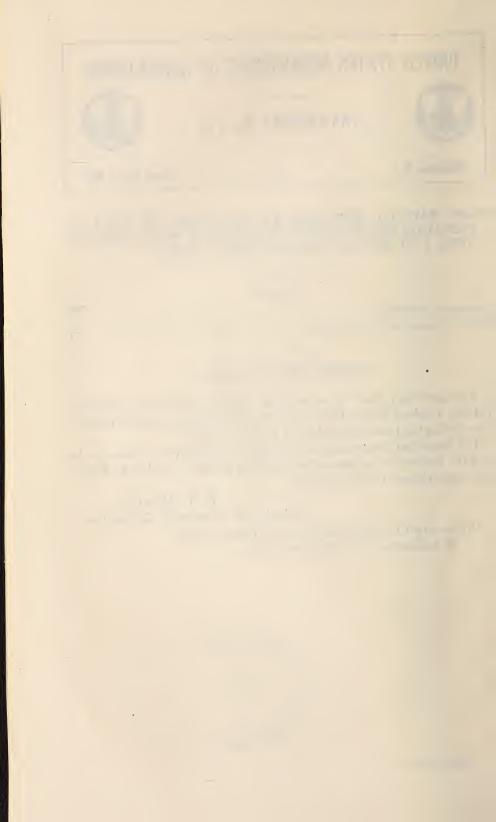
The botanical determinations of seeds introduced have been made and the nomenclature determined by Paul Russell, who has had general supervision of this inventory.

B. Y. Morrison,

Principal Horticulturist, in Charge.

Division of Plant Exploration and Introduction, Washington, D. C., October 7, 1941.





## INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

123342 to 123376. Punica granatum L. | 123342 to 123376—Continued. Punicaceae. Pomegranate.

From the Union of Soviet Socialist Republics. Cuttings presented by Dr. A. Strebkova, Azerbaijan Experiment Station, Mar-Received April 29, dakjany, Caucasus. 1937

123342. No. 670. Veles.

123343. No. 672. Kirmizi kabuch.

123344, No. 668, Kara-Bala-mursal,

123345, No. 680, Zebeida,

123346. No. 678. Han-nar.

123347, No. 665, Chinei.

123348, No. 673, Schirin-nar,

123349. No. 1. Vir. N. 1.

123350. No. 4430. N. 198.

123351. No. 4426. Veles.

123352. No. 4417. Gulosha.

123353. No. 4441. Schirin-nar.

123354, No. 4437, N. 463.

123355, No. 4508, N. 51.

123356. No. 4547. N. 22.

123357, No. 4416, N. 209,

123358. No. 4494. Ferganski N. 32.

123359. No. 4411. N. 450.

123360. No. 4422. N. 215.

123361, No. 4424, N. 217.

123362, No. 4432, N. 201.

123363, No. 4470, Schirin-nar,

123364. No. 4447. N. 10.

123365, No. 4414, Ochik kurinski,

123366. No. 4541. Surh pechak.

123367. No. 4468. Tursch-ner.

123368. No. 4463. N. 491.

123369. No. 6420. Kai-nar.

123370. No. 6421. Ochik-nar.

123371. No. 6423. [No varietal name.]

123372. No. 6444. Armud-schirin-nar,

123373. No. 6451. Schoulanski N. 888.

123374. No. 6446. Kirmizi schoulanski N.

123375. No. 6443. Balsi-mursal (Kalinkabuk)

123376. No. 6452. Kirmizi Kabuch grand-

123377 and 123378. PERILLA NANKINENSIS (Lour.) Decaisne. Menthaceae.

Seeds purchased from the Yokohama Nursery Co., Ltd., Yokohama. Received April 22, 1937.

For previous introduction see 45264.

123377. A form with green leaves.

123378. A form with red leaves.

¹It should be understood that the names of varieties of fruits, vegetables, cereals, and other plants used in this inventory are those under which the material was received when introduced by the Division of Plant Exploration and Introduction, and further, that the printing of such names here does not constitute their official publication and adoption in this country. As the different varieties are studied, their entrance into the American rade forecast, and the use of varietal names for them in American literature becomes necessary, the foreign varietal designations appearing in this inventory will be subject to change with a view to bringing the forms of the names into harmony with recognized horticultural nomenclature.

horticultural nomenclature.

It is a well-known fact that botanical descriptions, both technical and economic, seldom mention the seeds at all and rarely describe them in such a way as to make possible identification from the seeds alone. Many of the unusual plants listed in these inventories are appearing in this country for the first time, and there are no seed samples or herbarium specimens with ripe seeds with which the new arrivals may be compared. The only identification possible is to see that the sample received resembles seeds of other species of the same genus or of related genera. The responsibility for the identification, therefore, must necessarily often rest with the person sending the material. If there is any question regarding the correctness of the identification of any plant received from this Division, herbarium specimens of leaves and flowers should be sent in so that definite identification can be made.

can be made.

## 123379 to 123389.

From Costa Rica. Seeds collected by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received April 21, 1937.

123379. ACANTHORHIZA Sp. Phoenicaceae. Palm.

Palma de escoba. A spiny-trunked, palmate-leaved palm about 15 feet high, found growing in dense woods.

123380. ASTROCARYUM ALATUM Loomis. Phoenicaceae. Palm.

A handsome tropical woodland palm, with a trunk 12 to 18 feet high and numerous moderately arching, dark-green pinnate leaves 18 to 20 feet long. The large spiny fruits are in dense terminal clusters. Native to the lowlands of Costa Rica.

123381 to 123383. BACTRIS spp. Phoenicaceae. Palm.

123381. BACTRIS Sp.

Uiscoyol or Biscoyol. A slender, spinytrunked, cespitose palm 12 to 15 feet high. Inflorescence loose and with few seeds.

123382. BACTRIS Sp.

Biscoyol. A different species from P. I. 123381, although given the same name. The denser inflorescence and the brightred fruits are smaller; the trunk is very spiny.

123383. BACTRIS Sp.

Pacaya de denta. A small palm, less than 2 feet high. The small dense inflorescence bore 20 bright-red fruits in a single cluster which was very showy. A very desirable addition to patios and shaded locations.

123384. CALYPTROGYNE SARAPIQUENSIS H. Wendl. Phoenicaceae. Palm.

Cola de gallo; Suita. A Costa Rican pinnate-leaved palm, nearly stemless or with a short thick stem and numerous leaves 4 to 6 feet long. The young leaves are pinkish green and very handsome.

123385 to 123387. Geonoma spp. Phoenicaceae. Palm.

123385. GEONOMA Sp.

Palmito dulce. A slender, smooth, single-trunked palm found in the forest. The pinnate leaves are very graceful, and the relatively large inflorescence is pinkish, loose, with the small black fruits, less than a quarter of an inch in diameter, rather widely scattered on the branches.

## 123386. GEONOMA Sp.

Surtuba. A slender, smooth-trunked palm, 12 to 15 feet high, which prefers moist locations in dense shade. The black fruits are rather sparsely placed

123379 to 123389-Continued.

on the thick branches of the rather pinkish inflorescence.

123387. GEONOMA Sp.

This is a different species from Surtuba (P. I. 123386); the dull purplishred inflorescence is somewhat larger, but the branches are much more slender and the fruits are about a quarter as large.

123388. HELICONIA sp. Musaceae.

Platanillo. The inflorescence is erect when young but drooping with age; bracts dark red; fruits bright china blue.

123389. (Undetermined.)

A bush or small slender tree, growing in dense woods. The mottled brown seeds, the size and shape of medium-sized olives, are covered by thin bright-red flesh and occur singly in a yellow fruit which splits into equal divisions at maturity, allowing the seed to drop.

123390 to 123398.

From India. Scions and seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 1, 1937.

From the Fruit Research Station, Kodur, Madras Presidency, March 18, 1937.

123390 to 123392. CITRUS spp. Rutaceae. 123390. CITRUS sp.

No. 1516. Fruit 4 to 5 inches long, like a rough lemon in most characters, very warty with prominent protuberances, petiole more prominent than in rough lemons. Root system very strong. 123391. CITRUS sp.

No. 2517. A local bud sport. Fruit pale yellow, insipid. The tree is a vigorous grower and is used as stock.

123392. CITRUS Sp.

No. 2518. Kichli. The so-called "country" orange of the Madras area, possibly related to the sour orange (Citrus aurantium L.). Introduced under the name "maderaspatana," not considered a valid name.

123393 to 123397. MANGIFERA INDICA L. Anacardiaceae. Mango.

123393. No. 2511. Neelum. A regular bearer giving two crops a year; fruits medium to small, stone medium small, flavor good.

123394. No. 2512. Baneshan. Fruit small to medium; skin thin and yellow. A good keeper and an important commercial variety of Cycars.

123395. No. 2513. Alampur Baneshan. A medium-sized fruit, long and tapering to the tip, blotched green and yellow; stone small, skin thin, fiberless; the best mango of the district.

123390 to 123398-Continued.

123396. No. 2514. Mulgoa. Fruit green, of good flavor and no fiber; skin thick; a good keeper.

123397. No. 2515. Rumani. A consistent and regular bearer, giving two crops a year over a longer period than Neelum. Fruit round and larger than Neelum, but not so good in flavor or so good a keeper; color green, inclined to yellow. One of the best commercial mangoes of the Presidency.

123398. NYMPHAEA sp. Nymphaeaceae.

No. 2519. Flowers white, 3 to 5 inches across, borne above the water.

123399 to 123401. Phaseolus vulgaris L. Fabaceae. Common bean.

From Australia. Seeds presented by S. Fish, Biological Branch, Plant Research Laboratory, Burnley Gardens, Burnley, Victoria. Received April 28, 1937.

123399. Canadian Wonder (Burnley Selection).

123400. Pale Dun.

123401, Yarra.

123402 to 123410.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Leningrad. Received April 26, 1937.

123402. ALLIUM LEDEBOURIANUM Schult. f. Liliaceae.

A stout-stemmed allium 1 to 2 feet high, native to the Altai region in Siberia. The linear leaves are terete, and the rosy-pink flowers are in dense hemispherical umbels about 1 inch in diameter.

For previous introduction see 104885. 123403. Allium sp. Liliaceae.

Received as Allium moly, but the seeds are not of that species.

123404, ALLIUM Sp. Liliaceae.

123405. BERGENIA PACIFICA Komarov. Saxifragaceae.

A woody perennial with elliptic leaves 2 to 6 inches long, hardly evergreen, and flowering stems over a foot high, with racemes of many showy red flowers. It may be a variety of Bergenia crassifolia. Native to northeastern Asia.

123406. PARROTIA PERSICA (DC.) Meyer. Hamamelidaceae. Persian parrotia.

A shrub or small tree up to 15 feet high, with spreading branches and ovate-oblong, coarsely crenate leaves 3 to 4 inches long, which turn scarlet, yellow, and orange in the autumn and remain on the branches a long time. The flower heads, which appear in March before the leaves, are rather inconspicuous except for the pendent purple stamens; the ovoid

123402 to 123410-Continued.

fruits are half an inch long with recurved lobes. Native to Iran [Persia].

For previous introduction see 118361.

123407. PHILADELPHUS TENUIFOLIUS Rupr. Hydrangeaceae.

A shrub up to 8 feet high with slender spreading branches, thin ovate-oblong leaves 2 to 5 inches long, and greenish-white, slightly fragrant flowers 1 inch across, in small racemes. Native to Manchuria.

123408 to 123410. ROSA spp. Rosaceae.

Rose.

123408. ROSA AMBLYOTIS Meyer.

A stout-branched shrub with purple stems, native to Siberia. The leaflets are usually 7, the pink flowers are solitary, and the fruits are about one-half inch long.

For previous introduction see 54172. 123409. Rosa glauca Vill.

A European shrub closely related to Rosa canina, but having broadly ovate, bluish-green leaflets and purplish flowers.

For previous introduction see 54207. 123410. Rosa Tuschetica Boiss.

A low shrub, native to the Caucasus region, with small, firm ovate leaflets and solitary pink flowers.

For previous introduction see 54155.

123411 to 123416. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From the Union of Soviet Socialist Republics. Seeds presented by Prof. P. I. Lisitsyn, Plant Breeding Station, Moscow. Received April 28, 1937.

A collection of red clover strains with the corolla tube of shorter length than normal

123411. No. 121.

123412. No. 304.

123413. No. 307.

123414. No. 317.

123415. No. 318. 123416. No. 319.

123417. VIOLA ALTAICA Ker. Violaceae.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Leyden. Received April 26, 1937.

A hardy perennial violet with short stems, ovate, crenate leaves having long channeled petioles, and a single large pale-yellow flower on a stout scapelike peduncle. Native to the Altai region, Siberia.

123418. RHODODENDRON ALBRECHTII Maxim. Ericaceae.

From North Wales. Seeds presented by Lord Aberconway, Bodnant, Tal-y-Cafa. Received April 26, 1937.

### 123418—Continued.

A deciduous shrub 3 to 5 feet high, with obovate to oblanceolate membranous leaves which turn yellow in autumn. The rotate-campanulate, red-purple flowers, 2 inches across, in clusters of three to five, appear with the leaves. It is somewhat like Rhododendron schlippenbachii and is native to Japan.

For previous introduction see 117066.

# 123419. HEDERA HELIX L. Araliaceae. English ivy.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Amsterdam. Received April 28, 1937. Variety Digitata.

# 123420 and 123421. ORYZA SATIVA L. Poaceae. Rice.

From Italy. Seeds presented by Stazione Sperim, Risicoltura, Vercelli. Received April 26, 1937.

123420. General Rossi.

123421. Gigante Vercelli.

## 123422 and 123423. ORYZA SATIVA L. Poaceae. Rice.

From India. Seeds presented by the Botanical Laboratory, Titabar Farm, Titabar. Received May 6, 1937.

123422. Bengali jaha. No.226.

123423. Jahari. No. 240.

# 123424. Gossypium falmerii Watt. Malvaceae. Cotton.

From Mexico. Seeds collected by George B. Hinton, in Pungarabato, and presented through the Division of Cotton and Other Fiber Crops and Diseases. Received May 6, 1937.

A much-branched shrub with leaves mostly linear, 1 to 3½ inches long, sometimes 3-lobed, and small pale-yellow flowers followed by small fruits with fuzzy seeds. Native to Mexico.

## 123425. EPISCIA CUPREATA (Hook.). Hanst. (Achimenes cupreata Hook.). Gesneriaceae.

From Puerto Rico. Plants presented by T. B. McClelland, Superintendent, Agricultural Experiment Station, Mayaguez. Received July 21, 1934. Numbered May 6, 1937.

A tender perennial a few inches high, suitable for warm house culture. Under favorable conditions it produces a mass of stolons extending several feet from the mother plant. The entire plant is covered with soft hairs, and the ovate crinkled leaves are copper tinged above; the small solitary flowers are scarlet red. Native to Colombia.

#### 123426 to 123432.

From England. Plants presented by Sir Arthur W. Hill, Director, Royal Botanic Gardens, Kew, Surrey. Received May 7, 1937. 123426. ARUNDINARIA ANCEPS Mitf. Poaceae.

Bamboo.

Because of the uncertainty of its origin, this arundinaria was named anceps (doubtful). It is now believed to be native to northern India. The culms are round and slender and are reported to grow 10 to 15 feet high in England. On small plants there are 2 or 3 branches at each node, with rather long branchlets having 8 to 10 linear-lanceolate leaves. The leaves are light green, over 2 inches long and three-eighths of an inch wide. The tessellation (cross venation) is minute and unusually regular.

123427. CHIMONOBAMBUSA FALCATA (Nees)
Nakai (Arundinaria falcata Nees). Poaceae.
Bamboo.

A slender clump bamboo growing to a height of 20 feet, but not exceeding one-half inch in diameter, having the young stems covered with a bluish-white, waxy coating soon turning yellowish green. The light-green, striate-veined leaves are 4 to 6 inches long by one-third of an inch wide, with downy sheaths. The species is not very hardy, being native to the lower slopes of the Himalayas in northwestern India.

For previous introduction see 110335.

123428. THAMNOCALAMUS FALCONERI Hook. f. (Arundinaria falconeri (Van Houtte) A. and C. Riviere). Poaceae. Bamboo.

A bamboo with a cylindrical culm, which, when young, has 8 to 10 branches at each node; these branches vary in length, are exceedingly slender, often purplish in color, and have 4 to 7 leaves gathered near the tips. The leaves are lanceolate, 1½ to 4 inches long by 3½ to 3½ of an inch wide. The slenderness of the branches gives this bamboo a distinctive beauty.

For previous introduction see 114413.

123429. CHIMONOBAMBUSA MARMOREA (Mitf.) Makino (Arundinaria marmorea (Mitf.) Makino). Poaceae.

A small bamboo growing 3 feet or more high. The internodes of the culm are very short, with 3 branches at each node, 2 short and 1 long. The bright-green, nearly sessile leaves are up to 4½ inches long by % to % of an inch wide, rough on both sides and with tessellated venations. The degree of hardiness of the plant is not definitely known, though it is reported to have withstood a temperature of about 8° F, without injury in England.

For previous introduction see 116089.

#### 123426 to 123432-Continued.

123430. SINARUNDINARIA MURIELAE (Gamble) Nakai (Arundinaria murielae Gamble). Poaceae. Bamboo.

A handsome bamboo, understood to grow to a height of 10 to 15 feet. It is reported to produce masses of culms, which is unusual for hardy bamboos. The culms turn to a rich yellow with age, and there are 1 to many branches at the nodes. On small plants a branch may bear 2 to 3 leaves up to 2% inches long by %6 of an inch wide. There are usually 3 pairs of secondary veins and the intermediates are 5 to 8. The tessellation is rather close.

For previous introduction see 90302.

123431. THAMNOCALAMUS SPATHIFLORUS (Trin.) Munro (Arundinaria spathiflora Trin.). Poaceae. Bamboo.

A rare bamboo, said to grow in clumps with slender culms up to 35 feet high and with branches tufted at the nodes; the narrow leaves, up to 6 inches long, are gathered 2 to 4 at the ends of the branchlets.

For previous introduction see 114413.

123432. PHYLLOSTACHYS SULPHUREA VIRIDIS
Young (Phyllostachys mitis A. and C.
Riviere). Poaceae. Bamboo.

A Chinese bamboo up to 30 feet high, with yellow stems and brown-spotted sheaths.

## 123433 to 123438. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Morocco. Seeds presented by H. Brayard, Directeur, Station Experimentale de Marrakech. Received May 4, 1937.

123433. Aurore.

123434. Hatif de Cologne.

123435. Gloria de Mordin.

123436. Reine de Reives.

123437. Potager de Viljoule.

123438. Sans Parcille.

# 123439 to 123441. Soja Max (L.) Piper. Fabaceae. Soybean.

From Burma, India. Seeds presented by Rev. R. S. Buker, Kentung. Received May 10, 1937.

123439. No. 1. A small straw-yellow bean with brown hilum.

123440. No. 2. A medium-small, straw-yellow seed, slightly brown, cloudy, hilum dark brown.

123441. No. 3. A medium-sized, yellowishgreen seed with light- to dark-brown hilum.

#### 123442 to 123450.

From France. Seeds presented by R. Salgues, Director, Brignoles Botanic Garden. Received May 10, 1937. 123442 to 123450-Continued.

123442. Astragalus glycyphyllos L. Fabaceae. Milkvetch.

A prostrate, spreading, herbaceous perennial, native to Asia Minor.

For previous introduction see 104560.

123443. Astragalus Hamosus L. Fabaceae. Milkvetch.

An annual, gray-green hairy plant, with prostrate or ascending stems 8 inches to 1 foot long. It is native to sunny places in the Mediterranean countries.

For previous introduction see 78765.

123444. Brachypodium phoenicoides (L.) Roem. and Schult. Poaceae. Grass.

A perennial European grass 1 to 2 feet high, with narrowly linear leaves, slender stems, and narrow flower clusters having oblong spikelets sessile on the axis.

For previous introduction see 76759.

123445, CUCUMIS MELO L. Cucurbitaceae.

Muskmelon.

123446. LATHYRUS APHACA L. Fabaceae. Pea.

A semiprostrate or ascending yellow-flowered leguminous herb, native to Asia Minor.

For previous introduction see 69856.

123447. LAVATERA OLBIA L. Malvaceae.

Treemallow.

A shrubby perennial, native to southern Europe, about 6 feet in height. The 3- or 5-lobed oblong leaves are softly hairy, and the solitary, reddish-purple flowers are sometimes over 2 inches across.

For previous introduction see 58650.

123448. RUBIA PEREGRINA L. Rubiaceae.

A herbaceous perennial climber with whorled oblong or lanceolate leathery leaves. Native to the Mediterranean region.

123449. STACHYS RECTA L. Menthaceae.

A tall herbaceous perennial with erect or ascending stems about 2 feet high, creanate oblong-ovate or lanceolate leaves 1 to 1½ inches long, and distant whorls of about 10 yellowish-white flowers. Native to southern Europe.

123450. VICIA MELANOPS Sibth, and Smith. Fabaceae.

#### 123451 to 123576.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

Unless otherwise mentioned, this material was all collected in the Madras Presidency in February and March, 1937.

123451 and 123452. ABELMOSCHUS ESCU-LENTUS (L.) Moench. Okra.

123451. No. 2429. *Bendikai*. From Mangalore, March 1. White fruit, 6 inches long, from a plant 5 feet high.

123452. No. 2444, Bendikai. From Kasargod.

123453. ACACIA sp. Mimosaceae.

No. 2334. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A quick-growing tree with attractive foliage and an abundance of fragrant creamy flowers. Often planted in groves.

123454. ADINA CORDIFOLIA (Roxb.) Benth. and Hook. Rubiaceae.

No. 2450. From Nilambur, March 4. A large handsome deciduous tree found in the foothills of the Himalayas from Jumna eastward up to 3,000 feet altitude. The leaves are cordate, and the yellow flowers are borne in small heads.

For previous introduction see 116769.

123455 and 123456. AMARANTHUS spp. Amaranthaceae.

From Kasargod, March 3. Used as a potherb.

123455. AMARANTHUS Sp.

No. 2442. Chore Chira.

123456. AMARANTHUS Sp.

No. 2445. Belta Chira.

123457. ARTOCARPUS Sp. Moraceae.

No. 2426. From Bangalore, February 28. An attractive tree with small deeply toothed leaves 6 inches long. The flavorless, papillose fruit is as large as a grape-fruit.

123458. BAUHINIA sp. Caesalpiniaceae.

No. 2453. From Nilambur, March 4. A medium-sized tree, found in teak forests with pods 18 by 11/4 inches.

123459. Begonia sp. Begoniaceae.

No. 11039. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A perennial with attractive cerise flowers, growing in moss on rock faces in the rain forest.

123460 to 123465. BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceae.

Waxgourd.

Nos. 123460 and 123461 were presented by the Superintendent of the Rice Research Station at Petambi, February 22.

123460. No. 2384. Kumbalanga. A smooth elongate fruit 2 feet long, covered with bloom; a good keeper; used as a vegetable and for confections.

123461. No. 2388. Vaidyam Kumbalanga.
A small fruit 6 inches long, used only in medicine.

123462. No. 2419. Kumbalanga. From Mangalore, February 27. Fruit elon-

## 123451 to 123576-Continued.

gate, 16 by 14 inches, pale green, no bloom, used as a vegetable.

123463. No. 2420. Kumalakai. From Mangalore, February 27. Fruit subglobose, 6 to 8 inches in diameter, covered with bloom, used as a vegetable.

123464. No. 2435. Nareyan Kumbalanga. From Kasargod, March 2. Said to be a large form covered with bloom.

123465. No. 2470. From Madura, March 7. Fruit elongate, 18 inches long by 12 inches across, covered with heavy bloom; used as a vegetable and for candying.

123466. BIGNONIA sp. Bignoniaceae.

No. 2495. From Bangalore, Mysore State, February 9. A vigorous climber, used on trellises.

123467. CALOPHYLLUM INOPHYLLUM L. Clusiaceae.

No. 2431. From Kasargod, March 2. A large tree with leaves like those of the magnolia, producing fruits about 1 inch in diameter. A bitter aromatic greenish oil is extracted from the seeds and used for illumination by the poorer classes. The strong durable reddish wood is used by cabinetmakers, also for masts and railway ties.

For previous introduction see 80684.

123468 to 123476. CAPSICUM ANNUUM L. Solanaceae. Common redpepper.

123468. No. 2383. From Shoranur, March 23. Fruit pointed, 1½ inches long, red, very hot.

123469. No. 2428. From Mangalore, March 1. Fruit top-shaped, 1 to 1½ inches high; red, very pungent.

123470. No. 2411. Manesru. From Kasargod, February 27. Fruit pointed, 2 to 3 inches long by 1 inch broad; red, hot.

123471. No. 2402. Monji. From Tellicherry, February 25. Strains No. 2400 to 2404 are much alike, but vary in length and width; said to be distinct.

123472. No. 2410. Manesru. From Kasargod, February 27. Fruit pointed, 4 inches long by ½ to ¾ of an inch wide; red, hot.

123473. No. 2404. Morigi. From Tellicherry, February 25.

 123474. No. 2401. Morigi. From Tellicherry, February 25. Like No. 2400 (P. I. No. 123475), but shorter.

123475. No. 2400. Morigi. From Tellicherry, February 25. Fruit red, pointed, to 3 inches long; hot.

123476. No. 2403. Morigi. From Tellicherry, February 25.

123477. Cassia alata L. Caesalpiniaceae. Ringworm cassia.

No. 2496. From Mangalore, March 1. A shrub up to 10 feet high, sometimes cultivated as an ornamental, with pinnate leaves 2 feet long and showy yellow flowers. Native to tropical America.

For previous introduction see 106487.

123478. Cassia sp. Caesalpiniaceae.

No. 2465. From Nilambur, March 6. A well-shaped thorny bush about 8 feet high, probably yellow flowered.

- 123479 to 123492. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.
  - 123479. No. 1. Mettupalaiyam. From Mettupalaiyam, February 21. Fruit subglobose, 10 inches long, with fine verniculations of darker green, distinctly and abundantly ribbed; flesh red; rind ¼ of an inch thick, the thinnest rind observed on this expedition.
  - 123480. No. 2. From Coimbatore, February 21. Fruit globose, 8 inches in diameter, green with fine irregular lines of darker green; flesh red, seedy; rind thin.
  - 123481. No. 3. From Coimbatore, February 21. Fruit subglobose, 1 foot in diameter, green with broad blotched lines of darker green; flesh red; rind 1 inch thick.
  - 123482. No. 4. From Coimbatore, February 21. Fruit subglobose, deep green with discernible blotched stripes of darker green; flesh red; texture good, blending into the half-inch green rind; seeds large.
- 123433. No. 2320. From Coimbatore, February 12. Fruit subglobose, 14 inches long, deep green, veined darker; flesh red; rind three-fourths of an inch thick.
- Nos. 123484 to 123486 were presented by the Superintendent of the Rice Research Station, Petambi, February 22.
- 123484. No. 2390. Kummatti. Described as like a small watermelon, but used as a curry vegetable.
- **123485.** No. 2391. *Kummatti*. Like No. 2390 (P. I. 123485), but of a different race.
- 123486. No. 2392. Chakkaravellari. Fruit globose, 6 to 10 inches in diameter, smooth, green mottled; flesh red and sweet.
- 123487. No. 2397. Vataka. From Tellicherry, February 24. Fruit globose, 6 to 8 inches in diameter, green, reticulated; flesh white and pink, crisp, low in sugar content; early.

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123451 to 123576-Continued.

- 123488. No. 2408. From Payyanur, February 26. Fruit globose, 8 inches in diameter, pale green with broad blotched ribs of darker green; flesh red, low sugar content.
- 123489. No. 2409. Vataka. From Kasargod, February 26. Fruit globose, 6 inches in diameter, pale green, reticulated; flesh red, insipid.
- 123490. No. 2417. From Mangalore, February 27, but the fruit is said to have come from Kundapur. Fruit subglobose, 1 foot in diameter; pale green, reticulated; flesh red.
- 123491. No. 2418. Vataka. From Mangalore, February 27, but said to have come from Kundapur. Fruit subglobose, 1 foot in diameter, deep green with rib lines darker green; rind thick, flesh red; few seeds.
- 123492. No. 2466. Purchased in Madura, March 7.
- 123493 to 123506. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

From Coimbatore, February 21.

- 123493. No. 1. Fruit small, gold brown with broad rib lines, often flattened, 6 by 8 inches; flesh mealy, sweetish, 2 inches thick, half green and half salmon-colored.
- 123494. No. 2. Fruit. subglobose, 4½ inches in diameter, brownish yellow, mottled, traces of irregular ribs; flesh 1 inch thick, salmon-colored, juicy, acid.
- 123495. No. 3. Fruit banana-shaped, often nearly 18 inches long, smooth, golden yellow, more or less blotched with green; flesh mealy, white, neutral, inclined to be acid.
- 123496. No. 4. Fruit 6 by 4 inches, unribbed, lemon yellow, netted; flesh pale salmon, juicy, not acid, but of an interesting flavor.
- 123497. No. 5. Fruit subglobose, 5 inches in diameter, smooth, pink brown with broad green rib lines, flesh ¾ of an inch thick, half green, half salmon-colored, juicy, neutral.
- 123498. No. 6. Fruit globose, 6 inches in diameter, yellow blotched green with deep green ribs; flesh 1½ inches thick, varying in color from salmon at center to half green near the rind; pleasantly acid.
- 123499. No. 7. Fruit subglobose, 4 by 3½ inches, red brown with conspicuous ribs of pale netting; flesh ¾ of an inch thick, fragrant, acid.

- 123500. No. 8. Fruit subglobose, 6 by 4 inches, orange and greenish black, flecked, netted; flesh salmon-colored. 1½ inches thick, mealy, acid.
- 123501. No. 9. Fruit elongate, 10 by 6 inches, yellow to orange with green shading and more or less green ribbing; flesh salmon-colored, 1½ inches thick, mealy, subacid.
- 123502. No. 10. Fruit oblong, 6 inches long, red brown, nearly smooth, with broad green ribs; flesh salmon-colored, 1½ inches thick with the seeds embedded, rather sweet, interesting, juicy.
- 123503. No. 11. Fruit subglobose, 10 by 5 Inches, golden-brown, finely flecked with dark green, smooth, unribbed; flesh 1% inches thick, salmon-colored, mealy, fragrant and pleasantly acid.
- 123504. No. 12. Fruit globose, 6 inches in diameter, yellow, heavily netted, ribbed; flesh firm, pale salmon-colored, 1¾ inches thick with embedded seeds, sweetish. A good keeper.
- 123505. No. 13. Fruit subglobose, 5 inches in diameter, smooth, red brown, not ribbed; flesh yellow, rather juicy, neutral with delicate flavor.
- 123506. No. 14. Fruit 6 by 3 inches, yellow, blotched brown; rind firm; flesh white, sweetish with seeds embedded.
- 123507 to 123516. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.
  - 123507. No. 2389. Kakiri. From Petambi, February 22. Presented by the Superintendent of the Rice Research Station. An elongate fruit with small spines and crisp flesh.
  - 123508. No. 2439. *Kakerika*. From Kasargod, March 2.
  - 123509. No. 2467. From Madura, March 7.
  - 123510. No. 2468. From Madura, March 7.
  - 123511. No. 2382. Walerika. From Petambi, February 22. Fruit about 16 inches long and 6 inches wide, inclined to taper toward the stem, yellow, netted or blotched with dark green; flesh firm; a good keeper.
  - 123512. No. 2385. Walerika. Presented by the Superintendent of the Rice Research Station, Petambi, February 22. Probably a long cucumber; a good keeper.
  - 123513. No. 2399. Walerika. From Tellicherry, February 25. Fruit eggshaped, 6 inches long, green and yellow, variously marked; flesh good; keeps for months.

#### 123451 to 123576-Continued.

- 123514. No. 2421. Walerika. From Mangalore, February 27. Fruit 14 by 6 inches, tapering at both ends but sharply so at the stem end, orange-colored, netted with deep green. This variety will not keep over 3 or 4 months.
- 123515. No. 2440. *Unda Kakeri*. From Kasargod, March 2. Said to be 18 inches long.
- 123516. No. 2452. From Nilambur, March 14. Fruit ovoid, about 3 inches long, green, ribbed white, smooth; flesh bitter. A good keeper.

## 123517. Cucumis sp. Cucurbitaceae.

No. 2398. From Tellicherry, February 24. Fruit oval, 1 foot long, orange yellow, more or less ribbed green, or the reverse; flesh firm, keeps for months. Attractive fruits and flesh of good quality; interesting novelty.

123518. CUCUMIS sp. Cucurbitaceae.

No. 2441. From Kasargod, March 2.

- 123519 to 123523. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.
  - 123519. No. 2305. From Bangalore, Mysore State, February 9. Fruit ovoid, buff brown, weighs about 30 pounds, flesh coarse and not very sweet; grown in the summer and will keep for 6 months.
  - 123520. No. 2386. Matabar. Presented by the Superintendent of the Rice Research Station at Petambi, February 22. Fruit yellow, flattened, ridged, 1 to 2 feet in diameter; flesh slightly sweet. A good keeper.
    - 123521. No. 2416. Mattan. From Kasargod, February 27. Fruit flattened, 18 by 12 inches, ribbed, smooth, buff pink. A good keeper.
    - 123522. No. 2469. Mattan. From Madura, March 7. Fruit flattened, strongly ribbed, creamy buff to red buff, 18 by 12 inches. Keeps for several months.
    - 123523. No. 2407. From Kasargod, February 26. Fruit cucumber-shaped, 14 by 5 or 6 inches, smooth orange-colored; said to be a good keeper; flesh rather insipid.
- 123524. CARYOTA sp. Phoenicaceae. Palm. No. 2432. From Kasargod, March 2. An attractive palm about 10 feet high.
- 123525. Dolichos Lablab L. Fabaceae. Hyacinth-bean.

No. 2456. From Madura, March 7. Used either as green or dry beans; tolerates dry conditions.

123526. DOLICHOS LABLAB L. Fabaceae.

Hyacinth-bean,

No. 2476. Awara Kai. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, but said to have come from the plains below.

123527. ELAEOCARPUS sp. Elaeocarpaceae.

No. 2485. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13. A tree found in the rain forest; the fruit is apparently eaten by animals.

123528. FICUS ASPERRIMA Roxb. Moraceae.

No. 2381. From Petambi, February 22. A small clinging shrub 12 feet high, growing on the trunk of a tree; covered with attractive orange fruits.

123529. FLACOURTIA MONTANA J. Grah. Flacourtiaceae.

No. 2380. From Petambi, February 22. A large handsome evergreen tree with large shiny elliptical leaves and an abundance of attractive fruit of the size of small cherries with their taste and color.

123530. FLACOURTIA sp. Flacourtiaceae.

No. 2425. From Mangalore, February 28. A beautiful well-formed tree with elliptical, evergreen leaves and crimson fruits with an agreeable acid flavor.

123531. Fuchsia sp. Onagraceae.

No. 2340. From Ootacamund, Nilgiri Hills, February 16, at 7,000 feet altitude. A scraggly shrub 8 feet tall, with long pendent racemes of large cerise flowers. Found growing in thickets.

123532. GARCINIA sp. Clusiaceae.

No. 2427. From Mangalore, March 1. Fruit tomato-shaped 2 inches long; skin purple red; pulp acid, not pleasant. Tree not seen.

123533. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

No. 2393. Charanga. Gift of the Superintendent, Rice Research Station, Petambi, February 22. A mixture of necked and round varieties, used as vegetables when young and tender and as dippers and containers when ripe.

123534. LAGENARIA LEUCANTHA (Duchesne)
Rusby. Cucurbitaceae. Calabash gourd.
No. 2434. Charenga. From Kasargod,
March 2.

123535. LAVANDULA sp. Menthaceae.

No. 2493. From Kodai Kanal, Palni Hills, at 7,590 feet altitude, March 14. A perennial 4 feet high, found on open slopes. The fleshy, hairy leaves are arranged closely in fours, and the flowers are in dense spikes 3 to 4 inches long.

123451 to 123576-Continued.

123536. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

No. 2430. From Mangalore, March 1. Fruit 1 foot long and ridged.

123537. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 2451. From Nilambur, March 4. Fruit smooth, elongate, 4 by 1¾ inches. Of possible interest to breeders and gourd growers.

123538. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

No. 2396. From Sharanur, February 2. Fruit red, 2 inches long.

123539. Momordica Charantia L. Cucurbitaceae. Balsam-pear.

No. 2387. Kaypakka. Presented by the Superintendent, Rice Research Station, Petambi, February 22. Fruit 6 to 12 inches long, used as a tonic for stomach trouble.

123540. CASTALIA PUBESCENS (Willd.)

Woodr. and Wood. Nymphaeaceae.

No. 2406. From Kasargod, February 26. A slightly fragrant, very attractive, day-blooming waterlily, 6 inches across with large purplish-green, toothed, reniform leaves, scabrous above, and purple-red flowers borne 6 inches above the water.

123541. NYMPHAEA STELLATA Willd. Nymphaeaceae.

No. 2423. From Tellicherry, February 25. The fragrant, day-blooming white flowers, about 3 inches across, are borne about 6 inches above the surface of the water of shallow ponds.

123542. NYMPHAEA STELLATA Willd. Nymphaeaceae.

No. 2424. Putali. From Mangalore, March 1. A lily growing in a pond 6 feet deep. The fragrant flowers, white flushed pink on the outer petals, are 4 inches across and bloom in the daytime; they are borne 6 inches above the surface of the water.

123543. OENOTHERA Sp. Onagraceae.

No. 2472. From Kodai Kanal, Palni Hills, at 7,500 feet altitude. A biennial up to 4 feet high, with large yellow flowers about 2 inches across.

123544. OSBECKIA sp. Melastomaceae.

No. 2341. From Kotagiri, Nilgiri Hills, February 18, at 6,000 feet altitude. A low shrub about 4 feet high, with large purple flowers; found growing on open slopes.

123545 to 123550. ORYZA SATIVA L. Poaceae. Rice.

From Coimbatore, February 21.

123545. No. 2344. 123547. No. 2356. 123546. No. 2355. 123548. No. 2359.

123549. No. 2370. 123550. No. 2497. 123551 to 123555. Phaseolus spp. Fabaceae. Bean.

123551. PHASEOLUS LUNATUS L.

Lima bean.

No. 2415. Walaawawara. From Kasargod, February 27. Beans used both as green beans and dried.

123552 to 123555. Phaseolus vulgaris L. Common bean.

Nos. 123552 and 123553 were from Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 11. Used as green pods or dried beans.

123552. No. 2477. 123554. No. 2481. 123553. No. 2478.

123555. No. 2443. Avore. From Kasargod, March 2. Green pods eaten.

123556. PISUM SATIVUM L. Fabaceae.

No. 2433. From Mangalore, March 2. Said to have come from Bombay.

123557. PISUM SATIVUM L. Fabaceae.

Pea

Pea.

No. 2482. From Kodai Kanal, Palni Hills, March 11, at 7,500 feet altitude. Vines 3 feet high, free from disease, but the green peas are not sweet.

123558. PONGAMIA PINNATA (L.) W. F. Wight. Fabaceae.

No. 2200. From Mandassa, January 27. A large dense attractive tree, used for roadside planting.

123559. RHODODENDRON ARBOREUM J. E. Smith, Ericaceae. Tree rhododendron.

No. 2492. From Kodai Kanal, Palni Hills, March 14, at 7,500 feet altitude. A scrubby tree, often 2 feet in diameter and only 25 feet high, growing on most isolated slopes where no other trees grow. Flowers crimson, sometimes spotted with black.

For previous introduction see 122127.

123560, RUBUS Sp. Rosaceae.

No. 2332. From Ootacamund, Nilgiri Hills, February 15, at 7,000 feet altitude. A scandent shrub growing on the edge of the forest to a height of 30 feet and covered with sour, black-red fruits which are hard to separate from the calyx.

123561. SALVIA COCCINEA Juss. Menthaceae.

No. 2489. From Kodai Kanal, Palni Hills, February 13, at 7,500 feet altitude. A small herb up to 18 inches high, with spikes of rather large scarlet flowers, growing along a roadside.

For previous introduction see 13688.

123562, SAXIFRAGA Sp. Saxifragaceae.

123451 to 123576-Continued.

No. 2327. From Ootacamund, Nilgirl Hills, February 14, at 7,000 feet altitude on open isolated slopes. Growing in clumps with thick fleshy leaves on a stem 4 feet high which bears a corymb of large persistent yellow flowers.

123563 to 123566. Solanum spp. Solanaceae.

123563 and 123564. Solanum melongena L. Eggplant.

Baden Kai From Kasargod, February 27.

123563. No. 2413. Fruit almost round, 5 to 6 inches across, green with darker green mantle.

123564. No. 2414. Fruit ovoid, 5 inches long, pale green; few seeds.

123565. SOLANUM Sp.

No. 2328. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A thorny bushy perennial up to 3 feet high, with purplish flowers and orange-red fruits, growing along the roadside.

123566. SOLANUM Sp.

No. 2500. From Kodai Kanal, Palni Hills, March 14, at 7,500 feet altitude. A shrub up to 6 feet high, growing at the edge of the forest; flowers white; fruits crimson.

123567. STERCULIA sp. Sterculiaceae.

No. 2455. From Nilambur, March 6. A handsome tree.

123568. SWIETENIA MACROPHYLLA King. Meliaceae. Mahogany.

No. 2448. From Nilambur, March 4. A large attractive, well-formed tree, native to tropical America, with compound leaves made up of 3 to 5 pairs of elliptic-oblong leaflets 4 to 8 inches long and small flowers in panicles; the ovoid woody fruits are 6 inches long and contain winged seeds 3 to 5 inches long.

For previous introduction see 94200.

123569. TECTONA GRANDIS L. f. Verbenaceae. Teak.

No. 2447. From Nilambur, March 4. A large tree with huge deciduous leaves. An attractive avenue tree.

For previous introduction see 119910.

123570. TERMINALIA TOMENTOSA (Roxb.) Wight and Arn. Combretaceae.

No. 2395. From Nilambur, February 23. A tall timber tree of the deciduous (teak) forest

123571. LAGERSTROEMIA SPECIOSA (Muench.)
Pers. Meliaceae.

No. 2454. From Nilambur, March 5. A tall tree with smooth, light-colored bark.

123572. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

No. 2438. Bagada payaru. From Kasargod, March 2. Used while tender or as dry beans.

123573 and 123574. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae.

## Asparagus-bean.

From Kasargod, March 2. Used while the pods are tender or as dried beans.

123573. No. 2436. Altanda payaru. 123574. No. 2437. Ola payaru.

## 123575. VIOLA sp. Violaceae.

No. 2484. From Kodai Kanal, Palni Hills, March 12, at 7,500 feet altitude. A small plant spreading by runners with white to old-rose flowers.

## 123576. (Undetermined.)

No. 2329. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A dense bush about 8 feet high, growing on isolated slopes. Foliage attractive; flowers small, three-fourths of an inch in diameter, abundant, lavender-rose and very attractive; fruit edible but seedy.

# 123577 to 123603. Soja Max (L.) Piper. Fabaceae. Soybean.

- From China. Seeds presented by Dr. Moses Swen, Hopei Provincial College of Agriculture, Paotingfu, Hopei. Received May 12, 1937.
  - 123577. Hopei E-3. Medium size, straw-yellow seed with hilum varying from brown to black.
  - 123578. Hopei E-4. Medium size, strawyellow seed with brown hilum; badly mottled with brown and black.
  - 123579. Hopei E-5. Medium size, straw-yellow seed with light-brown hilum.
  - 123580. Hopei E-6. Medium size, strawyellow seed with brown hilum, more or less mottled with brown.
  - 123581. Hopei E-7. Medium large, strawyellow seed with brown hilum, slightly mottled with brown.
  - 123582. Hopei E-8. Small, straw-yellow seed with brown hilum, badly mottled with brown.
  - 123583. Hopei E-9. Medium size, strawyellow seed with light-brown to black hilum; mottled slightly with brown and black.
  - 123584. Hopei E-10. Medium size, strawyellow seed with light-brown hilum, badly mottled with brown.
  - 123585. Hopei E-11. Medium size, strawyellow seed with brown hilum, badly mottled with brown and black.

## 123577 to 123603-Continued.

- 123586. Hopei E-601. Large green seed with brown hilum; green cotyledons.
- 123587. Hopei E-602. Medium size, yellowish-green seed with brown hilum; green cotyledons.
- 123588. Hopei E-606. Medium size, yellowish-green seed with brown hilum, slightly mottled with brown.
- 123589. Hopei E-607. Medium small, yellowish-green seed with black hilum, badly mottled with black.
- 123590. Hopei E-610. Medium size, light yellowish-green seed with light-brown hilum.
- 123591. Hopei E-611. Medium size, glossy light yellowish-green seed with light-brown hilum.
- 123592. Hopei E-701. Medium small, flat, black seed quite similar to Wilson-Five; cotyledons yellow.
- 123593. Hopei E-702. Medium large, glossy-black seed; cotyledons green and yellow.
- 123594. Hopei E-703. Medium large, somewhat flattened, black seed; yellow cotyledons.
- 123595. Hopei E-704. Medium size, black seed; yellow cotyledons.
- 123596. Hopei E-705. Medium large, somewhat flattened black seed; yellow cotyledons.
- 123597. Hopei E-706. Large dull-black seed; yellow cotyledons.
- 123598. Hopei E-708. Medium large, dull-black seed; green cotyledons.
- 123599. Hopei E-801. Medium large, brown seed; seed coat slightly split.
- 123600. Hopei E-802. Medium size, glossy light-brown seed.
- 123601. Hopei E-803. Medium large, reddish-brown seed; tendency of seed coat to split.
- 123602. Hopei E-804. Large, somewhat flattened, black and brown seed; colors arranged in concentric rings similar to the Meyer (P. I. 17852).
- 123603. Hopei E-805. Large black and brown seed, colors arranged in concentric rings similar to the *Meyer* (P. I. 17852).

## 123604 to 123609.

From Australia. Seeds presented by J. M. Wistler, Dinninup, Western Australia, through C. D. Tribble, of California. Received April 28, 1937.

A collection of native shrubs.

123604. CHORIZEMA sp. Fabaceae.

123605 to 123607. HIBBERTIA spp. Dilleniaceae. 123604 to 123609-Continued.

123605. HIBBERTIA Sp.

A small shrub 6 to 12 inches high; flowers yellow, very floriferous.

123606. HIBBERTIA Sp.

A handsome shrub 1 foot high, with large yellow flowers.

123607. HIBBERTIA Sp.

A shrub 18 inches high, found growing in sandy loam, with large handsome yellow flowers.

123608. Kennedia comptoniana (Andrews) Link. Fabaceae.

A shrubby vine with single lanceolate leaflets and terminal as well as axillary racemes of pea-shaped flowers ranging from white through rose to purple.

For previous introduction see 113768.

123609. (Undetermined.)

A shrub 2 feet high from Perth, Western Australia.

123610 to 123614. PHLEUM PRATENSE L. Poaceae. Timothy.

From Norway. Seeds presented by H. Wexelsen. Felleskjøpets Stamsedgard, Hjellum. Received May 5, 1937.

123610. Selection Fa.

123611. Selection 16-3.

123612. Selection 58-0.

123613. Selection F42.

123614. Grindstad, a local strain.

123615. CARICA PAPAYA L. Papayaceae.

Papaya.

From Venezuela. Seeds from the Granda Modelo del Estado Tachira, presented through J. L. Colom, Division of Agricultural Cooperation, Pan American Union. Received May 6, 1937.

123616. STENOMESSON VARIEGATUM
(Ruiz and Pav.) Macbride (S. incarnatum Baker). Amaryllidaceae.

From Huancayo, Peru. Bulbs presented by Paul G. Ledig, Huancayo Magnetic Observatory, Carnegie Institution of Washington, D. C. Received July 1, 1930. Numbered in May 1937.

A tender amaryllid, native to Peru, with numerous thick lorate leaves about 1½ feet long and a stout scape with several funnel-shaped flowers in an umbel. The flowers, 2 to 3 inches long, are variable in color, pale or bright red, or tawny.

123617. Citrus sp. Rutaceae.

From Greece. Plants presented by John Vorrés, Athens. Received May 19, 1937.

A seedless orange, introduced for the use of plant breeders.

123618 to 123621. Gossypium spp. Malvaceae. Cotton.

From India. Seeds presented by the Cotton Research Station, Lyallpur, through Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

A collection of cotton strains evolved on the hot plains of the Punjab from American stock.

123618. No. 2457. Research Station No. 47 F.

123619. No. 2458. Research Station No. 43 F.

123620. No. 2459. Research Station No. 289 F.

123621. No. 2460. Research Station No. 4 F.

123622 to 123624. CITRUS spp. Rutaceae.

From Brazil. Seeds collected by Dr. H. S. Fawcett, Citrus Experiment Station, Riverside, Calif. Received May 17, 1937.

123622. CITRUS AURANTIFOLIA (Christm.) Swingle. Lime.

Ranghpur lime (Laranja Rosa). S. A. No. 9. From São Paulo, March 1937.

123623. CITRUS SINENSIS (L.) Osbeck.

S. A. No. 10. From Montenegro, Rio Grande do Sul, April 9, 1937. A sweet orange without any acid.

123624. CITRUS Sp.

S. A. No. 11. From Uruguanya, April 11, 1937. A very large sweet seedling orange from a tree over 50 years old.

## 123625 and 123626.

From Rio de Janeiro, Brazil. Seeds presented through Dr. Doris M. Cochran, United States National Museum, Washington, D. C. Received May 24, 1937.

123625. Pterodon sp. Fabaceae.

A tree with pinnate foliage and racemes of violet-pink flowers.

123626. XYLOPIA sp. Annonaceae.

The fruits and seeds of this evergreen tree are sometimes used as condiments.

123627. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From India. Plants collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1937.

No. 2422. From Kasargod, Madras Presidency, March 1, 1937. Some tubers are free from fiber and the flesh is more or less sweeter than ours.

123628 to 123637. SACCHARUM. Poa- 123645 to 123660—Continued. Sugarcane. ceae.

From the Hawaiian Islands. Cuttings presented by the Experiment Station, Hawaii Sugar Planters Association, Honolulu. Received May 25, 1937.

123633. 31-1211. 123628. 31-156. 123629. 26 C 270. 123634. 31-1213. 123630. 30-2417. 123635, 31-2343, 123636. 31-2441. 123631, 30-4422, 123637. 31-711. 123632, 31-626,

123638 to 123644. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

From India. Seeds presented by Dr. J. S. Patel, Oil Seeds Specialist, Coimbatore, Madras Presidency. Received May 26, 1937.

123638. A. H. 45. H. G. No. 1.

123639. A. H. 259. Philippine White.

123640. A. H. 34. Small Japan.

123641. A. H. 32. Gindiyaltam Bunch.

123642. A. H. 1. Local Mauritius.

123643. A. H. 811.

123644. A. H. 784. Gigantea.

## 123645 to 123660.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 27, 1937.

123645 to 123659. ORYZA SATIVA L. Poaceae.

From the Rice Research Station, Department of Agriculture, Sabour, Behar, Bengal, April 12, 1937.

123645. No. 2656. Zinjinia. (Local.) Life cycle 100 days.

123646. No. 2657. Surgoza. (Local.) Life cycle 100 days.

123647. No. 2658. Sathi. (Local.) Life cycle 60 days.

123648. No. 2659. Kolaha. (Local.) Life cycle 100 days.

123649. No. 2660. 144 I. Life cycle 120 davs.

123650. No. 2661. 141 BK. Life cycle 120 days."

123651. No. 2662. 115 BK. Life cycle 120

123652. No. 2663. 5763 Aus. Life cycle 90 days.

123653. No. 2664. Black Ghora. (Local.) Life cycle 80 days.

123654. No. 2665. 5537 Aus. Life cycle 90 days.

123655, No. 2666. Brown Ghora. (Local.) Life cycle 80 days.

123656. No. 2697. 5 Brali. (Local.) Life cycle 90 days.

123657. No. 2698. 98 BK. Life cycle 135 days.

123658. No. 2699. 16 BK. Life cycle 135 days.

123659. No. 2700. 76-1. Life cycle 120 days.

123660. ZEA MAYS L. Poaceae.

No. 2670. From Jaumpur, United Provinces, April 15, 1937. A locally grown corn, said to have edible ears in 6 weeks after sowing. The Allahabad Agricultural Institute says that this is the only corn they have succeeded in growing.

#### 123661 to 123664.

From France. Seeds presented by Maurice Jeanson, St. Quentin-on-Tourmont, par Rue (Somme). Received May 5, 1937.

123661 to 123663. Soja Max (L.) Piper. Fabaceae. Soybean.

Soja du Marquenterre.

123661, 1934 crop.

123662. 1935 crop.

123663. 1936 crop.

123664. ZEA MAYS L. Poaceae.

Giant popcorn du Marquenterre. A cross between Golden Bantam sweet corn and popcorn.

## 123665 to 123671.

From India. Seeds purchased from G. Ghose & Co., Town-End, Darjeeling. Received May 17, 1937.

123665. ALLIUM JACQUEMONTI Kunth. Liliaceae.

123666. ALLIUM WALLICHIANUM Steud. Lil-

A tall allium, native to eastern Asia, with narrow flat leaves about 3 feet long and purple flower heads.

For previous introduction see 99715.

123367. COLCHICUM LUTEUM Baker. Melanthiaceae.

A spring-blooming colchicum with few fleshy strap-shaped leaves about 9 inches long and 1 to 3 golden flowers over an inch across. Native to the temperate Himalayas from 4,000 to 7,000 feet alti-

For previous introduction see 112109.

123668 and 123669. IRIS CLARKEI Hook. f. Iridaceae. Clarke iris.

A curiously local iris native to the Himalayas in a circumscribed area in the Sikkim and Bhutan region at altitudes between 6,000 and 11,000 feet, in ground that is swampy half the year and frozen hard under snow most of the remaining months. The narrow leaves droop at the tips; the upper surface is polished and shiny, the under

## 123665 to 123671-Continued.

side glaucescent. The solid stem is 2 feet long and bears 1 or 2 lateral heads.

For previous introduction see 122099. 123668. A form with pale-blue flowers.

123669. A form with dark-blue flowers.

123670. STYRAX HOOKERI C. B. Clarke. Styracaceae. Snowbell.

A tree often 40 feet high, native to Sikkim and Bhutan at altitudes between 6,000 and 7,000 feet. The white flowers, 1 inch long, are tomentose outside, and the young branches are stellate-pubescent. The wood is white, close grained, and moderately hard.

For previous introduction see 122142.

123671. Viola distans Wall. Violaceae

VIOLA DISTANS Wall. Violaceae Violet.

A prostrate violet with slender stems 1 to 14 inches long, variable leaves, and palelilae or blue flowers about one-half inch across. Native to the temperate Himalayas at altitudes of 5,500 to 10,000 feet.

# 123672 and 123673. Dolichos Lablab L. Fabaceae. Hyacinth-bean.

From Africa. Seeds presented by the Agricultural Department, Kenya Colony, through Anna E. Jenkins, Bureau of Plant Industry, United States Department of Agriculture. Received May 26, 1937.

123672. A form with brown seeds.123673. A form with black seeds.

123674. LIVISTONA MARIAE F. Muell.
Phoenicaceae. Palm.

From central Australia. Seeds presented through David Barry, Jr., Los Angeles, Calif. Received June 3, 1937.

From trees growing along the Finke River, Palm Valley. An erect palm with fan-shaped leaves divided into narrow plicate segments.

For previous introduction see 95077.

## 123675 to 123695.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 6, 1937.

Collected in the Madras Presidency in March 1937.

123675. Amygdalus persica L. Amygdalaceae. Peach.

No. 2491. From Kodai Kanal, Palni Hills. Fruit about 2 inches in diameter, more or less conspicuously beaked; flesh white, decidedly red around the stone, flavor good. The trees fruit and flower at the same time and bear well.

123676 and 123677. ALLIUM CEPA L. Liliaceae. Onion.

#### 123675 to 123695—Continued.

From Sidhout, March 23. Healthy plants growing amid fierce desert winds (temperature 103° F. in the shade); sometimes the leaf tips become burned.

123676. No. 2538. A red globe onion.

123677. No. 2539. Like No. 2538, but sample contains both red and white sorts.

123678. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

No. 2522. From Sidhout, March 20. Fruit elongate, 18 inches long, pale green with strange broad chain lines of blackgreen over blotches of sea green; rind 1¼ inches thick; flesh red, texture good, but sugar content low.

123679 to 123688. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

123679. No. 2508. Kharbuza. From Madras, March 17, but said to have come from the Cuddapah District. Fruit globose, up to 10 inches in diameter, lemon yellow with traces of green rib lines and of green netting; flesh white, thick, and sweet.

123680. No. 2509. Kharbuza. From Madras, March 17, but said to have come from the Cuddapah District. Fruit globose, tapering slightly, yellow, netted; flesh white, thick, watery, and not very sweet.

123681. No. 2520. Catasa. From Cuddapah, March 20. Fruit flattened, 8 to 5 inches, yellow to yellow white, smooth to netted, often with trace of ribbing; flesh white, 2½ inches thick, fairly sweet.

123682. No. 2523. Jalleur Iami. From Sidhout, March 20. Fruit subglobose, about 12 inches in diameter, tapering slightly toward the stem, gold brown, heavily netted; flesh white, 2½ inches thick, juicy, but low in sugar content.

123683. No. 2526. Tela Batasa. From Sidhout, March 20. Fruit flattened, 6 by 4 inches, smooth, yellow white, unribbed; flesh white, thin, but very sweet.

123684. No. 2527. Shiranjer. From Sidhout, March 20. Fruit subglobose to 7 inches in diameter, mottled orange brown, green with traces of ribs, smooth; flesh greenish, juicy, sweet. One of the best.

123685. No. 2528. Papai. From Sidhout, March 20. Fruit 8 inches in diameter, rather top-shaped with a rather prominent navel, smooth, lemon yellow, mottled and ribbed green; flesh thick, white, sweet.

123686. No. 2529. Mashrufatta. From Sidhout, March 20. Fruit oval, taper-

### 123675 to 123695-Continued.

ing rather unevenly and more to the stem end, yellow to gold brown, riblined paler, moderately netted; flesh juicy, white, thick, fairly sweet.

123687. No. 2534. Khandas. From Chennur, March 20. Fruit elongate, tapering abruptly to the stem, often with a conspicuous navel, 12 to 16 inches in diameter, white, obscurely netted; flesh thick, white, juicy, fairly sweet.

123688. No. 2540. From Cuddapah, March 23. Fruit elongate, smooth with a conspicuous navel, yellow green and orange mottled. Probably a cross.

123689. CUCUMIS sp. Cucurbitaceae.

No. 2462. From Madura, March 7. A wild cucurbit, sold dry, used as a vegetable.

123690. Cucurbita Moschata Duchesne.

Cucurbitaceae.

Cushaw.

No. 2494. From Kodai Kanal, Palni Hills, March 4, at 7,500 feet altitude. Fruit ovoid, 1 foot long, smooth with ribs, buffy; flesh rather coarse but of pleasant flavor when cooked.

123691. Entada sp. Mimosaceae.

No. 11315. From Mahendra Giri, January 24, at 4,000 feet altitude. A climbing vine. 123692 and 123693. Phaseolus vulgabis L. Fabaceae. Common bean.

From Kodai Kanal, Palni Hills, March 11. Used as green pods or dry beans.

123692. No. 2479.

123693. No. 2480.

123694. PHOENIX sp. Phoenicaceae. Palm. No. 2541. From Cuddapah, March 23. A palm up to 10 feet high, which bears fruit when only 3 feet high.

123695. Solanum sp. Solanaceae.

No. 2461. From Madura, March 7. Sold on the market in a dried condition and used as a vegetable.

123696. MUNTINGIA CALABURA L. Elaeocarpaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received May 24, 1937.

A tropical American tree with a spreading crown, pinnate leaves, and small white flowers. The small berries make good tarts or jam and the leaves are used for tea. A yellow-fruited form; normally the fruits are red.

For previous introduction see 91301.

123697 and 123698. ARACHIS spp. Fabaceae. Peanut.

From Brazil. Plants collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received 123697 and 123698-Continued.

September 25, 1936. Numbered in May 1937.

123697. No. 3982. Plants collected at Capão Bonito, Matto Grosso, September 5, 1936, in hard red clay, mixed with sand. [Seeds of this number were assigned P. I. No. 118456.]

123698. No. 3992. Plants from the Fazenda das Moças, near Campo Grande, Matto Grosso, September 9, 1936. [Seeds of this number were assigned P. I. No. 118458.]

123699. HYPARRHENIA RUFA (Nees) Stapf. Poaceae.

From Costa Rica. Seeds presented by Don Fernando Castro, through the United Fruit Co., Boston, Mass. Received May 27, 1937.

123700 to 123719. Amygdalus communis L. Amygdalaceae. Almond.

From the Union of Soviet Socialist Republics.
Plants presented by Dr. A. Richter, Crlmean Section, Yalta Institute, through Dr. A. M. Popov, Acting Director, Department of New Cultures and Introduction, Institute of Plant Industry, Leningrad. Received April 15, 1937.

123700. No. 3605-435-P.

123701. No. 3643-418-P.

123702. No. 3626-423-P.

123703. No. 3619-453-P.

123704. No. 3628-414-P.

123705. No. 3609-446-P.

123706. No. 3636-427-P.

123707. No. 3610-432-P.

123708. No. 3648-448-P. 123709. No. 3639-415-P.

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123710. No. 3652-363-P. 123711. No. 3649-452-P.

123712. No. 3600-444-P.

123713. No. 463-P.

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123714. No. 3651-429-P.

123715. No. 3597-461-P.

123716. No. 3602-436-P.

123717. No. 3634-424-P.

123718. No. 3624-455-P.

123719. No. 3627-450-P.

123720 and 123721. PISTACIA VERA L. Anacardiaceae. Pistachio.

From the Union of Soviet Socialist Republics. Scions presented by Miss Vera Gorbunova through Dr. A. M. Popov, acting Director, Department of New Cultures and Introduction, Institute of Plant Industry, Leningrad. Received April 15, 1937.

123720. No. 132.

123721. No. 188.

123722 to 123732. MALUS SYLVESTRIS

Mill. Malaceae.

Apple.

From England. Plants purchased from Charles Townsend, Ltd., Fordham, Cambridgeshire. Received April 15, 1937.

123722. Charles Ross.

123723. Crimson Cox's Orange.

123724. Ellison's Orange.

123725. George Carpenter.

123726. John Standish.

123727. Lady Henniker.

123728. Mèrè de Ménage.

123729. Norfolk Royal.

123730. Red Joaneting (Juneating).

123731. Rival.

123732. St. Everard.

## 123733 to 123739.

From France. Plants purchased from Pépinieres de La Maladrerie, Caen (Calvados). Received April 15, 1937.

123733 to 123736. Malus sylvestris Mill. Malaceae. Apple.

123733. Bedan des parts.

123734. Bonte Normand.

123735, Cremiere.

123736. Long Bois.

123737 to 123739. Pyrus spp. Malaceae.

123737. Beurré Gris Lisambert.

123738. Doyenné St. Michel.

123739. Williams Duchess.

123740 and 123741. VITIS VINIFERA L.
Vitaceae. European grape.

From Greece. Cuttings presented by Prof. B. Krimbas, Ecole Superieure Agronomique, Athens. Received April 19, 1937.

123740. Fraula.

123741. Siderites.

### 123742 to 123757.

From England. Plants purchased from George Bunyard & Co., Ltd., Maidstone, Kent. Received April 20, 1937.

123742 to 123752. Malus sylvestris Mill.

Malaceae.

Apple.

123742. Aldenheim Blenheim.

123743. Easter Orange.

123744. Laxton's Epicure.

123745. Lord Burghley.

123746. Lord Hindlip.

123747. Lord Lambourne.

123748. Maidstone Favorite.

123749. May Queen.

123750. Rosenbery.

123751. Sandling.

123752. Sunglow.

123742 to 123757-Continued.

123753 and 123754. PRUNUS spp. Amygda-laceae.

123753. Schreckens Bigarreau cherry.
123754. Triaug cherry.

123755 to 123757. Pyrus spp. Malaceae. Pear.

123755. Admiral Gervais.

123756. Emile d'Heyst.

123757. Laxton's Superb.

123758 to 123761. ORYZA SATIVA L. Po-aceae. Rice.

From India. Seeds presented by B. S. Kadam, Crop Botanist, Rice Breeding Station, Karjat (Kolaba), Bombay Presidency. Received April 21, 1937.

123758. Patni 6.

123759. Kolamba 79.

123760. Maskaty 1315.

123761. Mugad 161.

123762 to 123768. Rubus spp. Rosaceae.

From England. Plants and root cuttings purchased from M. B. Crane, John Innes Horticultural Institution, London. Received April 22, 1937.

123762. Rubus Borreri Bell Salter.

Blackberry.

A blackberry with procumbent stems, corymbose panicles of rose-colored or white flowers, and bright jet-black fruits. Native to England.

123763. RUBUS NITIDIOIDES W. Watson.

A rubus with subcrect stems and rather large lilac flowers, followed by large frults resembling those of *Rubus selmeri*. Native to England.

123764 and 123765. RUBUS ULMIFOLIUS Schott. Elmleaf blackberry.

A blackberry with curving-prostrate canes armed with straight prickles. The compound leaves are made up of 3 or 5 coriaceous, evergreen, obovate or orbicular, sharply serrate leaflets, and the medium-sized flowers are red and sometimes double. It is native to Europe.

For previous introduction see 86829.

123766. Rubus schlechtendahlii Weihe. Blackberry.

A blackberry related to Rubus macrophyllus; native to Europe.

123767.  $\times$  Rubus thyrsiger Banning and Focke.

A hybrid of *Rubus scaber*, differing from that species in having a narrow, often elongated inflorescence and broader leaflets, pilose beneath.

123768. RUBUS.

John Innes. A cross between Rubus ulmifolius and R. thyrsiger.

123769 to 123778. EUGALYPTUS spp. Myrtaceae.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received April 1, 1937.

123769. EUCALYPTUS CALOPHYLLA Lindl.

Variety Rosca. A medium-sized Australian tree with dense foliage and dark, corky, deeply furrowed bark. The thick firm leaves are ovate-lanceolate, and the flowers, pink in this variety, are often one-half inch across and appear in large panicles. It is an ornamental tree of slow growth, not enduring frost or drought.

For previous introduction see 106333.

123770. EUCALYPTUS CRUCIUS Maiden.

A small tree 25 feet or less high, glaucous throughout, with small, thick, ovate to lanceolate leaves over an inch long. Native to Western Australia.

For previous introduction see 111871.

123771. EUCALYPTUS DIVERSICOLOR F. Muell.

Karri-gum.

A tall tree up to 350 feet in height, native to Western Australia, straight in habit and a fairly rapid grower. The very dense and elastic wood is considered superior timber, being used by wheelwrights and for shipbuilding. The tree prefers a moist climate, is somewhat frost resistant, but will not endure dry heat.

For previous introduction see 106335. 123772. EUCALYPTUS EREMOPHILA Maiden.

A spreading shrub or medium-sized tree with smooth scaly bark, shiny, leathery, lanceolate leaves about 3 inches long, and few-flowered umbels of small yellow flowers. Native to Western Australia.

123773. EUCALYPTUS ERYTHROCORYS F. Muell.

Usually a shrub 8 to 10 feet high, this eucalypt is sometimes a tree up to 30 feet high. The broadly linear, rigid leaves are 6 inches long, and the large flowers, in axillary clusters, have bright-red, fleshy caps over the buds; the long stamens are yellow. The ribbed, hemispherical fruits are 1 to 2 inches long. Native to Western Australia.

For previous introduction see 111872. 123774. EUCALYPTUS ERYTHRONEMA TURCZ.

A small Australian tree with reddish bark, thick shining lanceolate leaves 3 inches long, and recurved umbels of red flowers.

For previous introduction see 77282.

123775. EUCALYPTUS MACROCARPA Hook.

A stout shrub or small tree up to 15 feet high, with thick, rigid, cordate, glaucous leaves 6 inches long and large soli-

123769 to 123778-Continued.

tary, brilliant-orange or crimson flowers. Native to Western Australia.

For previous introduction see 111873.

123776. EUCALYPTUS MARGINATA J. E. Smith.

An Australian shrub or small tree often clear of branches for two-thirds of its height. The hard durable wood is used for timber, piles, and railway ties. The tree will grow in a great variety of soils, but prefers moist, well-drained situations.

For previous introduction see 106340.

123777. EUCALYPTUS MICROCORYS F. Muell.

A tall tree with persistent wrinkled bark, thin broadly lanceolate leaves, and small white flowers. The yellowish timber is especially useful for ballroom floors because of its greasy nature. Native to Australia.

For previous introduction see 106341.

123778. EUCALYPTUS PYRIFORMIS TURCZ.

A shrub or small tree found in Western and South Australia where it attains a height of 8 to 10 feet. The very thick, narrow leaves are rarely more than 3 inches long, and the large flowers are red when fresh. The yellowish-white wood is hard, heavy, and durable.

For previous introduction see 111875.

123779 to 123781. Delphinium spp. Ranunculaceae. Larkspur.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received April 8, 1937.

123779. DELPHINIUM CANDIDUM Hemsl.

A dwarf perennial delphinium with palmately five-lobed leaves up to 5 inches across and large white, sweet-scented flowers.

For previous introduction see 113840.

123780. DELPHINIUM MACROCENTRUM Oliver.

A perennial delphinium up to 6 feet high, bearing numerous blue-green to deep-blue flowers.

For previous introduction see 113841.

123781. DELPHINIUM WELLBYI Hemsl.

A perennial delphinium about 2 feet high, with palmate leaves 2 to 3 inches across and large blue flowers. Native to Ethiopia.

123782 and 123783. VIOLA spp. Violaceae. Violet.

From England. Seeds presented by the Royal Botanic Gardens, Kew, Surrey. Received April 8, 1937.

123782. VIOLA ARMENA Boiss. and Huet.

A stemless perennial violet with ovate leaves and very small flowers. Native to the Caucasus region. 123782 and 123783-Continued.

123783. VIOLA CONTEMPTA Jord.

An annual violet with erect or ascending stems, ovate or oblong-ovate leaves, and pale-blue flowers. Native to Europe.

123784 to 123788. Viola spp. Violaceae.

From Switzerland. Seeds presented by the Director, Botanic Garden, Geneva. Received April 14, 1937.

123784. VIOLA Sp.

Introduced under the name Viola arborea Forsk., a homonym.

123785. VIOLA BERTOLONII de Salis.

A perennial violet with stems about a foot high, oval, oblong, or lanceolate leaves, and blue flowers. Native to Corsica.

123786. VIOLA DACTYLOIDES Roem. and Schult.

A stemless perennial violet with paleblue flowers. Native to northeastern Asia. 123787. VIOLA GRACILIS Sibth. and Smith.

A violet from southern Europe and Asia Minor, with stems about a foot high and violet or yellow flowers.

123788. VIOLA UNIFLORA L.

A hardy violet with cordate leaves on stems about 6 inches high and terminated by a single yellow flower. Native to eastern Asia.

123789 and 123790. TRIFOLIUM PRATENSE
L. Fabaceae. Red clover.

From England. Seeds purchased from the Clover Growers' Ltd., Montgomery. Received April 19, 1937.

123789. Cotswold Late Flowering.

123790. Montgomery Late Flowering.

## 123791 to 123793.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received April 9, 1937.

123791. CARISSA OPACA Stapf. Apocynaceae.

Presented by the Forest Research Institute, Dehra Dun, India. A spreading, thorny, evergreen shrub up to 12 feet high, with elliptic-ovate to suborbicular leaves up to 2 inches long and sweet-scented, white, pink-tinged flowers about ½ inch across. Native to the Himalayan region.

123792. Cassia leptophylla Vog. Caesalpiniaceae.

Presented by the Botanic Garden, Rio de Janeiro, Brazil. A Brazilian tree with pinnate leaves composed of 9 to 12 lanceo-late-oblong leaflets and many small yellow flowers in terminal racemes about 6 inches long. Native to Brazil.

123791 to 132793-Continued.

123793. SAPIUM DISCOLOR (Champ.) Muell. Arg. Euphorbiaceae.

Presented by the Botanic Garden, Hong Kong, China. A glaucous shrub or small tree, with long-petioled elliptic leaves about 2 inches long and short dense spikes of greenish flowers. Native to tropical Asia.

123794. ATTALEA sp. Phoenicaceae.

Palm.

From Brazil. Seeds presented by P. Campos Porto, Director, Instituto de Biologia Vegetal, Jardim Botanico, Rio de Janeiro. Received April 8, 1937.

The attaleas are attractive tropical American palms of distinctive appearance, with long pinnate leaves usually in a large erect tuft.

123795. PENTACLETHRA MACROLOBA (Willd.) Kuntze (Pentaclethra filamentosa Benth.). Mimosaceae.

From Costa Rica. Seeds collected by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received April 5, 1937.

Cavilan. A large forest tree in the forests about Cairo, Costa Rica. In clearings, the tree makes a handsome crown of foliage which is composed of large shining mimosalike leaves. The small white flowers are in dense clusters about 6 inches long. The wood is prized because of its resistance to decay and termites, being used for posts, railroad ties, and other purposes. The sapwood is light-colored, but the heartwood is bright red. The tree appears to prefer well-drained locations with good soil.

For previous introduction see 108584.

123796. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Canada. Seeds purchased from the Dominion Seed Branch, Department of Agriculture, Calgary, Alberta. Received April 13, 1937.

Altaswede red clover.

123797. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Canada. Plants presented by C. Howard Fisher & Sons, Queenston, Ontario. Received April 24, 1937.

H. Fisher No. 10.

123798 to 123807. VIOLA spp. Violaceae.

From Sweden. Seeds presented by Dr. S. Skottsberg, Director, Botanic Garden, Göteberg. Received April 14, 1937.

123798. VIOLA BATTANDIERI W. Becker.

An Algerian violet up to about 1½ feet

high, with ovate leaves and violet or yellow flowers. It is allied to Viola munbyana.

123798 to 123807-Continued.

123799. VIOLA Sp.

Received under the name "caspia," for which a place of publication has not been found.

123800. VIOLA CYANEA Celak.

A stemless European violet with broad cordate-ovate bright green leaves and skyblue flowers.

123801. VIOLA BATTANDIERI W. Becker.

An Algerian violet up to about 1½ feet high, with ovate leaves and violet or yellow flowers. It is allied to Viola munbyana.

For previous introduction and description see 123798.

123802. X VIOLA FLORAIRIENSIS Correvon.

A dwarf tufted violet with pale-green leaves; the flower centers are light lilac with the two upper petals deep violet. It is supposed to be a hybrid between Viola calcarata and V. cornuta.

123803, VIOLA JOOI Janka.

A stemless violet with oblong or ovatecordate leaves and rather large fragrant lilac flowers. Native to Europe.

123804. VIOLA PERSICIFOLIA Roth.

A violet native to Europe.

For previous introduction see 28259.

123805. VIOLA SEPINCOLA Jord.

A European violet allied to Viola odorata. 123806. Viola Sieheana W. Becker.

A perennial about 5 inches high, with reniform-cordate basal leaves, broadly ovate stem leaves, and pale-blue or white flowers. Native to Asia Minor.

For previous introduction see 108802.

123807. VIOLA VIARUM Pollard.

123808. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Canada. Seeds presented by the University of Manitoba, Winnipeg. Received April 20, 1937.

Manhardy red clover.

123809 to 123813. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Germany. Seeds presented by Dr. A. Fischer, Kaiser-Wilhelm Institut für Züchtungsforschung, Müncheberg/Mark. Received April 20, 1937.

123809. Altfrankische.

123810. Hochzucht Bendeleben.

123811. Hochzucht Mahndorfer.

123812. Pfalzer.

123813. Ungarische.

## 123814 to 123832.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 5, 1937. 123814 to 123832-Continued.

Material collected in the Madras Presidency in January and February 1937, unless otherwise mentioned.

123814. Amygdalus persica L. Amygdalaceae. Peach,

No. 2295. From Bangalore, Mysore, February 9. Fruit green yellow, 2 inches high; flesh white, red around the pit, good flavor. The tree produces two crops a year and is said to be never completely dormant.

123815. CAPSICUM ANNUUM L. Solanaceae. Redpepper.

No. 2379. From Kotagiri, Nilgiri Hills, at 7,000 feet altitude. Fruit strawberry shaped, 1 inch high, red, mild.

123816. CESTRUM AURANTIACUM Lindl. Sola naceae.

No. 2333. From Ootacamund, Nilgirl Hills, at 7,000 feet altitude, February 15. A large shrub with wavy, shining, ovate to oblong leaves 3 to 5 inches long and spikes of showy orange-colored flowers followed by large white berries. Native to Guatemala; cultivated as an ornamental in the Tropics of both hemispheres.

123817 and 123818. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

From Coimbatore, February 10 and 12. 123817. No. 2313. Tarbuz. Fruit elon-

gate, dark green, 15 inches long; flesh red, of fair quality; rind white and green, ¼ to ½ inch thick.

123818. No. 2321. Fruit ovoid, 1 foot long, medium green, blotched ribbed with darker green; flesh red; rind white and green, 1/4 inch thick, a very thin rind.

123819 to 123824. Cucumis melo L. Cucurbitaceae. Muskmelon.

From Coimbatore, February 12.

123819. No. 2314. Fruit 8 by 6 inches, lemon yellow, closely netted; flesh sea green, firm, flavorless; rind very hard, an extreme type never before seen.

123820. No. 2315. Fruit subglobose, 10 inches in diameter, smooth, deeply ribbed, blotched russet and dark green; flesh salmon-colored, fragrant.

123821. No. 2316. Gosapala. Fruit subglobose, 1 foot long, pale yellow, netted, line-ribbed green; flesh pale salmon color, fragrant.

123822. No. 2317. Gosa. Fruit subglobose, 8 inches, smooth, unribbed, yellow white; flesh white, acid.

123823. No. 2318. Kaleri Kala. Fruit cucumber-shaped, 1 foot long, 4 inches in diameter, smooth, unribbed, orange yellow; flesh white, mealy and subacid, no fragrance.

123814 to 123832-Continued.

123824. No. 2319. Malampuram. Fruit 8 by 4 Inches, golden brown, unfibbed but rib-lined white; flesh pale salmon color, seeds embedded in the flesh, not sour, but not fragrant.

123825. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

No. 2296. From Bangalore, Mysore, February 9, 1937. An elongate pumpkin 2½ feet long, ribbed, buff brown; flesh not sweet, rather coarse. Grown in summer.

123826. HELICHRYSUM BRACTEATUM (Vent.) Willd. Asteraceae.

No. 2326. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A plant 3 feet high with yellow flowers, found on roadsides and in fields.

123827. FRAGARIA VESCA L. Rosaceae.

Alpine strawberry.

No. 2293. From Bangalore, Mysore, February 9. Fruit about 2 inches long; watery, but of good flavor.

123828. RHODODENDRON ARBOREUM NILA-GIRICUM (Zenk.) C. B. Clarke. Ericaceae.

No. 2322. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 14. A tree about 2 feet in diameter, of scrubby form, laden with crimson flowers, growing, usually, where other trees cannot. Tolerates freezing at 10° F. and also summer heat. Probably as adaptable as *Rhododendron arboreum*, which it closely resembles. 123829. Rueus sp. Rozaceae.

No. 2324. From Ootacamund, Nilgiri Hills, at 7.000 feet altitude, February 14. Semiscandent vigorous shrub up to 2 feet high, with long clusters of small yellow fruit.

123830. Salvia verbenaca L. Menthaceae.

No. 2323. From Ootacamund, Nilgiri Hills, at 7,000 feet altitude, February 14. A hardy herbaceous perennial 1 to 2 feet high, with broadly ovate or oblong leaves and simple or somewhat branched racemes of small blue flowers. Native to Europe. 123831. SOLANUM sp. Solanaceae.

No. 2180. From Mahendra, January 22, at 2,000 feet altitude. Fruit globose, 1 inch in diameter, yellow.

123832. VERBENA Sp. Verbenaceae.

No. 2325. From Ootacamund, Nilgiri Hills, February 14, at 7,000 feet altitude. A perennial about 18 inches high, with 2 or 3 long spikes of purple flowers. Found growing in open ground.

#### 123833 to 123838.

From Sweden. Seeds presented by Dr. Robert E. Fries, Director, Botanic Garden, Stockholm. Received April 13, 1937. 123833 to 123838-Continued.

123833. ELSHOLTZIA IANTHINA (Kanitz.) Dunn. Menthaceae.

A small erect herb with dense terminal spikes of small lavender-colored flowers. Native to Kansu Province, China.

123834. ELSHOLTZIA PATRINII (Lepech.)
Garcke (E. cristata Willd.). Menthaceae.

For previous introduction see 65864.

123835. Hosta ventricosa (Salisb.) Stearn. Liliaceae.

A plantainlily with broad cordate-ovate leaf blades about 10 inches long and lavender-purple flowers about 2 inches long in elongated racemes, on scapes up to 3 feet tall. Native to China.

For previous introduction see 117052.

123836 to 123838. VIOLA spp. Violaceae.

Violet.

123836. VIOLA PALMENSIS (Webb and Berth.) Webb and Berth.

A perennial violet with stems about 1 foot high and nodding purple flowers. Native to the Canary Islands.

123837. VIOLA ELATIOR Fries.

A perennial violet with tall erect stems, sometimes 18 inches high, lanceolate leaves and large pale-blue flowers. Native to Europe.

For previous introduction see 28253. 123838. VIOLA LABRADORICA Schrank.

123839 and 123840. SACCHARUM SPONTANEUM L. Poaceae. Sugarcane.

From India. Cuttings presented by the Imperial Sugarcane Breeding Station, Lawley Road, Coimbatore, South India. Received April 29, 1937.

123839, S. H. 244, 123840, S. H. 249.

123841. QUERCUS Sp. Fagaceae. Oak.
From France. Plants purchased from
N. Maurizot, Saint-Didier, France. Received April 29, 1937.

Truffle oak.

123842 and 123843. ZINNIA spp. Asteraceae.

From Italy. Seeds presented by Dr. Marlo Ercoli, curator, La Mortola, Ventimiglia. Received April 22, 1937.

123842. ZINNIA PERUVIANA L. (Z. pauciflora L.).

No. 1721. An erect annual with lanceolate to oblong-ovate leaves and yellow flower heads about an inch across, the rays sometimes red or purple. Native to the Peruvian Andes.

123843. ZINNIA MULTIFLORA L. (Z. verticillata Cav.).

123842 and 123843-Continued.

No. 1722. A zinnia found wild along fence rows and roadsides. The small flower heads are a light brick red.

For previous introduction see 102643.

123844. BAUHINIA GLAUCA Wall. Caesalpiniaceae.

From China. Seeds presented by the Botanic Garden, Hong Kong, through F. G. Walsingham, Atkins Institution, Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received April 9, 1937.

A woody climber with slender branchlets and small deeply cleft leaves 1 to 3 inches long. The small white flowers are in dense terminal corymbs. Native to tropical India. For previous introduction see 67540.

201 previous introduction acc or

123845. Citrus sp. Rutaceae.

From Brazil. Seeds presented by Agesilau A. Bitancourt, Sub-Director de Biologia Vegetal, São Paulo. Received April 27, 1937.

Laranja cravo orange.

123846. Orbignya speciosa (Mart.) Barb.-Rodr. (Attalea speciosa Mart.). Phoenicaceae. Babassu nut.

From Brazil. Seeds presented through J. W. T. Duvel, Commodity Exchange Administration, United States Department of Agriculture. Received November 19, 1936. Numbered April 15, 1937.

A palm, native to Brazil and the Guianas, which is very much like the Cohune palm, but its fruits, 3 to 4 inches long, are much larger. An edible oil is extracted from the seeds and is now being exported to the United States.

For previous introduction see 99608.

123847 to 123849.

From Biltmore, N. C. Plants presented by C. D. Beadle, Biltmore estate. Received April 12, 1937.

A collection of bamboos, originally obtained from a European nursery.

123847. ARUNDINARIA sp. Poaceae.

Bamboo.

A handsome running bamboo that bears some resemblance to Semiarundinaria fastuosa but has not exceeded about 9 feet in height. There are ultimately 1 to 3 branches at each node of the palm except near the base, and the internodes are often slightly flattened above the branches; culm sheaths are semipersistent. Leaves 6 to 8 on a branch, broad lanceolate, glabrous, 3 to 5 inches long, 3% to 1 inch wide. 123848. SASA DISTICHA (Mitf.) E. G. Camus. Poaceae. Fern bamboo.

A dwarf hardy bamboo of running habit, 2½ to 3 feet and rarely 5 feet high, with small, closely-ranked leaves. It is useful 123847 to 123849—Continued.

as a roadway border where soil conditions do not favor too rapid spreading.

123849. ARUNDINARIA Sp. Poaceae.

Bamboo.

A handsome running bamboo with culms 4½ feet high, unbranched below but with several branches at each node of the upper half and with rough leaves up to 9 inches long and 1¼ inches wide; culm sheaths persistent.

123850. NEANTHE BELLA O. F. Cook. Phoenicaceae. Palm.

From Washington, D. C. Seeds from plants grown in greenhouses of the Department of Agriculture. April 1, 1937.

These seeds were obtained from hand-pollinated flowers. A small graceful palm with a slender stem a few feet high and spreading deep-green pinnate leaves 1 to 2 feet long. Native to open forests in Guatemala, at about 3,000 feet altitude.

123851. QUERCUS Sp. Fagaceae. Oak.
From France. Plants purchased from Léopold Laval, Propriétaire-Trufficulteur-Récoltant, Martel. Received April 1, 1937.

Truffle oak.

### 123852 to 123904.

From New Mexico. Seeds collected by Leslie N. Godding, Soil Conservation Service, Albuquerque. Received April 3, 1937.

123852. AGASTACHE RUPESTRIS (Greene) Standley. Menthaceae.

A perennial herb 1 to 3 feet high, native to the mountains of southwestern New Mexico. The linear-lanceolate entire leaves, about 2 inches long and pleasantly aromatic, and the showy, tubular, coralred flowers, 1 inch long, are borne in loose panicles.

For previous introduction see 101092.

123853. AMOREUXIA PALMATIFIDA Mog. and Sesse. Cochlospermaceae.

A bushy perennial with digitately-parted leaves and showy yellow flowers in panicles. Native to Mexico.

123854. Anthericum torreyi Baker. Lilia-ceae.

An anthericum 1½ to 2 feet high, with narrow linear leaves and a scape of many small yellow flowers. Native to the southwestern United States.

123855. ARALIA HUMILIS Cav. Araliaceae.

An unarmed shrub 3 to 7 feet high, with bipinnate leaves and small black berrylike fruits. Native to Mexico.

123856. ASTER GLAUCODES Blake. Asteraceae.

A perennial aster with long roots.

123852 to 123904-Continued.

123857. BOUVARDIA TRIPHYLLA Salisb. Rubiaceae.

A small shrub with showy red flowers about 1 inch long. Native to Mexico.

123858. BRICKELLIA sp. Asteraceae.

123859. CALOCHORTUS sp. Liliaceae.

123860. CISSUS INCISA (Nutt.) Desmoul. Vitaceae.

123861. CLEMATIS Sp. Ranunculaceae.

123862. ERYTHRINA FLABELLIFORMIS Kearney. Fabaceae. Western coralbean.

A low, spiny, deciduous shrub 2 to 4 feet high, native to the upper foothills of the Southwest. The beans range in color from cream through coffee color to bright scarlet.

For previous introduction see 42204. 123863. Eupatorium sp. Asteraceae.

A very handsome, clear white-flowered, rather bushy eupatorium, growing in rocky canyons in protected but not shaded places.

123864. EUSTOMA RUSSELLIANUM (Hook.) G.

Don. Gentianaceae.

An annual or biennial 1 to 2 feet high, with ovate to lanceolate-oblong leaves and large lavender-purple flowers. Native to the southwestern United States.

123865. FAGONIA CALIFORNICA Benth. Zygophyllaceae.

A compact woody perennial about 1 foot high, with small trifoliolate leaves and small purplish flowers. Native to California.

123866. FENDLERA RUPICOLA Engelm. and Gray. Hydrangeaceae.

An erect bushy shrub up to about 6 feet high, with small elliptic to oblong-lanceolate leaves and, usually, solitary pink or pink-tinged flowers about 1 inch across. Native to Texas and New Mexico.

123867. Fraxinus greggii A. Gray. Oleaceae. Ash.

123868. HEDEOMA sp. Menthaceae.

123869. HEDEOMA sp. Menthaceae.

123870. HIBISCUS COULTERI Harv. Malvaceae.

A low shrubby hibiscus with small white or pale-yellow flowers. Native to Mexico. 123871. Jatropha Angustidens (Torr.) Muell. Arg. Euphorbiaceae.

123872. LIATRIS sp. Asteraceae.

123873 and 123874. LEIOSTEMON AMBIGUUS (Torr.) Greene. Scrophulariaceae.

123875. LIPPIA LIGUSTRINA (Lag.) Britton. Verbenaceae.

A shrub up to about 9 feet high, with small lanceolate-oblong leaves and axillary spikes of small, fragrant flowers, white or tinged with violet. Native to Brazil.

123852 to 123904-Continued.

123876. LIPPIA WRIGHTII A. Gray. Verbenaceae.

123877. LOBELIA sp. Campanulaceae.

123878. LONICERA ALBIFLORA Torr. and Gray. Caprifoliaceae.

A shrub 3 to 7 feet high, sometimes twining, with oval leaves over an inch long and showy white or yellowish-white flowers. Native to the United States.

123879. ASTER Sp. Asteraceae.

A very showy aster with purple flowers. 123880. MAURANDY ANTIRRHINIFLORA Willd. Scrophulariaceae.

A slender vine with thin, hastate-triangular leaves and solitary axillary, pale-blue flowers 1 inch or more long, similar in appearance to snapdragon. Native to northern Mexico and the southwestern United States.

For previous introduction see 104556.

123881. MAURANDYA WISLIZENI A. Gray. Scrophulariaceae.

For previous introduction see 4129.

123882. MELAMPODIUM LEUCANTHUM Torr. and Gray. Asteraceae.

A low, white-flowered, shrubby composite allied to Melampodium cinereum. Native to Texas.

123883. MENODOROPSIS LONGIFLORA (A. Gray) Small. Oleaceae.

123884. Nissolia schottii (Torr.) A. Gray. Fabaceae.

A scandent legume with a stem 2 to 3 feet long, branching from a somewhat woody base, and racemes of small yellow flowers. Native to Mexico.

123885. NOLINA BIGELOVII (Torr.) S. Wats. Liliaceae.

A woody perennial with a stout trunk often 5 to 15 feet high, many linear rigid leaves and a tall scape bearing a dense compound panicle of small white flowers. 123886. Oenothera hookeri Torr. and Gray. Onagraceae.

A tall, showy, yellow-flowered evening primrose. Native to the western United States.

123887. OENOTHERA Sp. Onagraceae.

123888. Parosela greggii (A. Gray) Heller. Fabaceae.

A low shrub with silky hairy branches and densely hairy compound leaves with 5 to 11 obovate leaflets less than half an inch long. The pink flowers are in dense spikes about 1 inch long. Native to Mexico and Arizona.

123889. PAROSELA JOHNSONI (S. Wats.) Vail (Daleà johnsoni S. Wats.). Fabaceae.

A diffusely branched shrub with smooth gray bark, leaves 1 to 2 feet long com-

## 123852 to 123904—Continued.

posed of 5 to 11 leaflets, and loose racemes of deep-purple flowers terminating the leafy branchlets.

For previous introduction see 41771.

123890. Pectis sp. Asteraceae.

123891 to 123896. PENSTEMON spp. Scrophulariaceae.

123891. PENSTEMON GLABRA Pursh.

A herbaceous perennial, 1 to 2 feet high, with showy bright blue to violetpurple flowers in panicles. Native to the Rocky Mountains.

123892. PENSTEMON BARBATUS (Cav.) Roth.

An erect, tall, herbaceous perennial with firm, lanceolate to linear leaves and terminal clusters of long slender light-pink to carmine flowers. Native to western North America.

123893. PENSTEMON Sp.

123894. PENSTEMON Sp.

123895. Penstemon sp.

123896. PENSTEMON SPECTABILIS Thurb.

A tall herbaceous perennial with slender simple stems up to 4 feet high, ovate to oblong leathery leaves 2 to 3 inches long, and open panicles, 6 to 12 inches long, of many blue or blue-purple flowers about 1 inch long. Native to the southwestern United States.

123897. PETALOSTEMON sp. Fabaceae.

123898. PSILOSTROPHE Sp. Asteraceae.

123899. Salvia sp. Menthaceae.

123900. SALVIA EARLEI Woot, and Standl. Menthaceae.

123901. SOPHORA SECUNDIFLORA (Ortega) DC. Fabaceae.

A shrub or small tree, up to 35 feet high, native to Mexico. The evergreen pinnate leaves are made up to 7 to 11 elliptic to oblong leaflets 2 inches long, and the fragrant violet-blue flowers, 1 inch long, are in racemes.

For previous introduction see 99699.

123902. VERBENA Sp. Verbenaceae.

123903. VERBENA sp. Verbenaceae.

123904. ZAUSCHNERIA CALIFORNICA Presl. Onagraceae. Hummingbird-trumpet.

A half-hardy perennial with showy scarlet flowers resembling those of the fuchsia, but erect, not pendent. It is rather variable in form of leaves and in hardiness. Native to the southwestern United States. For previous introduction see 45193.

123905 to 123917. MALUS SYLVESTRIS Malaceae. Mill. Apple.

From Canada. Scions presented by M. B. Davis, Central Experimental Farm, Department of Agriculture, Ottawa. Received

123905 to 123917—Continued.

April 6, 1937. 123911. Mantet. 123912. Manton. 123905. Angus. 123906. Breakey. 123913. Osman. 123907. Elkhorn. 123914. Patricia. 123908. Godfrey. 123915. Rosilda. 123909. Gretna. 123916. Stevenson. 123910. Manitoba. 123917. Toba.

123918 to 123928. Medicago spp. Faba-Medick. ceae.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad. Received April 3, 1937.

123918 to 123920. MEDICAGO HEMICYCLA Grossh.

A perennial alfalfa with ascending stems about 2 feet high. Native to the Transcaucasus region at altitudes between 2,000 and 6,000 feet.

For previous introduction see 111618.

123918. From the Republic of Georgia. No. K. 191/16695.

123919. From Armenia. No. 214/16719. 123920. From Armenia. No. K. 158/

123921 to 123924. MEDICAGO HISPIDA Gaertn. 123921. From Azerbaijan. No. K. 182/ 16675.

123922. From California, U. S. A. No. 298/164326.

123923. From Shanghai, China. No. K. 104/5365.

123924. From Germany. No. K. 54/690. 123925 to 123928, MEDICAGO LUPULINA L. Black medick.

123925. From France. No. 41/K. 6622. 123926. From Germany. No. K. 143/ 1819.

123927. From Germany. No. K. 101/889. 123928. From Germany. No. K. 141/ 1830.

## 123929 to 123955.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received. April 7, 1937.

From Coimbatore, Madras Presidency, February 21, 1937.

123929 and 123930. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

Presented by Dr. Patel, Coimbatore Agricultural College.

123929. No. 2372. A prostrate plant with runners 5 feet long.

123930. No. 2373. A popular droughtresistant type which matures in 130 days, yields 1,500 pounds per acre, and has an oil content of 50 percent.

123929 to 123955-Continued.

123931 to 123955. ORYZA SATIVA L. Poaceae. Rice.

Presented by the Officiating Paddy Specialist, Agricultural Research Institute, Coimbatore.

Nos. 123931 to 123933 are strains from Aduturai.

- 123931. No. 2342. Kuruvai. An early-maturing strain of Tanjore paddy. The crop matures in 95 days and gives an average yield of 2,000 pounds of grain per acre.
- 123932. No. 2343. Kuruvai. Another improved strain of Tanjore paddy which takes a week longer to mature than No. 2342 (P. I. 123931) and yields 10 percent more grain per acre.
- 123933. No. 2345. Sarapalli. A crop largely grown in the Trichinopoly District; matures in 100 days.

Nos. 123934 to 123940 are paddy samples from Maruteru.

- 123934. No. 2346. Potti Basangi (Mtu.3). A strain which yields from 3,500 to 4,500 pounds of grain per acre.
- 123935. No. 2347. Pedha Basangi (Mtu. 4). A strain noted for enduring indifferent water supply during its vegetative growth. A yield of 3,000 to 3,500 pounds per acre has been recorded under such conditions.
- 123936. No. 2348. Garikasannavari (Mtu. 9). A strain which matures about 10 days earlier than most of the rices grown.
- 123937. No. 2349. (K. T. K. 1749). Sanna-krishnakatukulu (Mtu. 10). A fine-grained selection from Krishnakatukulu that matures in 6 months. The strain is especially suited to rich lands where other varieties would require topping.
- 123938. No. 2350. (K. T. K. 1745).

  Krishnakatukulu strain No. 1745.

  This strain is similar to Mtu. 10 (P. I. 123937) except that it is not so finegrained.
- 123939. No. 2351. (K. T. K. Krishnakatukulu. A hybrid paddy that combines the fine grain size of Krishnakatukulu and the short growing season of Basangi.
- 123940. No. 2352. Punasa Konamani. A white rice that takes 6½ months to mature but is highly esteemed for its nutritive qualities.

Nos. 123941 to 123948 are Pattambi paddy strains, grown under Pattambi conditions.

123941. No. 2353. Ptb. 1, isolated from Aryan. A strain that matures in 145 days and yields 2,500 pounds per acre.

- 123929 to 123955-Continued.
  - 123942. No. 2354. *Ptb. 2*, isolated from *Ponnaryan*. A strain that matures in 135 days and yields 2,100 pounds per acre.
  - 123943. No. 2357. Ptb. 9, isolated from Thavalakkannan, a white rice, matures in 140 days and yields 2,000 pounds per acre.
  - 123944. No. 2371. T. 890. A strain that matures in 102 days and is grown largely in dry rain-fed areas.
  - 123945. No. 2359. Isolated from Modan dirty glume and matures in 135 days, yielding from 500 to 600 pounds per acre.
  - 123946. No. 2360. Isolated from Modan black glume. A strain that matures in 135 days and yields between 500 and 600 pounds per acre. A dryland rice, cultivated on hill slopes and rising land as a rain-fed crop. Except for the glume color, it is similar to Modan dirty (P. I. 123945).
  - 123947. No. 2361. Isolated from Kattamodan. A strain that matures in 145 days, yielding between 600 and 700 pounds per acre. A dryland paddy.
  - 123948. No. 2362. Isolated from *Chennellu*. A strain that matures in 135 days and yields between 400 and 500 pounds per acre. A shade-loving and scented dryland paddy.

Nos. 123949 to 123955 are strains from Coimbatore.

- 123949. No. 2363. Tinnevelly Kar (Co. 9). A red rice, generally sown in June or July, which matures in 116 days and yields about 3,000 pounds per acre.
- 123950. No. 2364. Gobikar (Co. 10). A white rice with a dirty-colored glume, which matures in 125 days and yields about 2,500 pounds per acre.
- 123951. No. 2365. Jeeragasamba (nonscented). A small-grained variety of white rice with light-brown glume, which matures in 120 days and yields about 2,900 pounds per acre.
- 123952. No. 2366. Jeeragasamba (scented). A strain that matures in 130 days; similar to the nonscented variety (P. I. 123951).
- 123953. No. 2367. Black Puttu. Glume and rice dark purple in color. Rice glutinous. Matures in 136 days and yields about 1,775 pounds per acre. Puttu rices can be dissolved by boiling and in certain districts are converted into a gelatinous sweet.
- 123954. No. 2368. White Puttu. Glume color, gold, and rice white glutinous.

123929 to 123955-Continued.

Matures in 120 days and yields 2,700 pounds per acre.

123955. No. 2369. *Red Puttu*. Matures in 130 days; glumes long, awned.

123956 to 123958. SACCHARUM. Poaceae. Sugarcane.

From Mexico. Cuttings presented by M. C. Alcéntara, Ingenio de Cuatotolapam, Cuatotolapam, Veracruz. Received April 8, 1937.

123956. Cuato-302. Selfing of POJ 2878.

123957. Cuato-304. Selfing of POJ 2878.

123958. Cuato-307. Selfing of POJ 2878.

## 123959 to 123968.

From England. Plants purchased from the Barnham Nurseries, Ltd., Barnham. Received April 8, 1937.

123959 to 123967. MALUS SYLVESTRIS Mill. Malaceae. Apple.

123959. Charles Eure.

123960. Court Pendu Plat.

123961. Guelph.

123962. Lady Sudeley.

123963. Madresfield Court.

123964. Paraquet.

123965. Reverend W. Wilks.

123966. Royal Jubilee.

123967. Saltcote Pipin.

123968. Pyrus COMMUNIS L. Malaceae. Common pear.

Madame Soulanges.

123969. Amygdalus persica L. Amygdalaceae. Peach.

From the Union of Soviet Socialist Republics.

Plants presented by the Institute of Plant
Industry, Leningrad. Received April 9,
1937.

Liagak No. 769 T.

123970. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From Canada. Seeds presented by the Seed Branch, Department of Agriculture, Toronto. Received April 2, 1937.

Grade No. 1.

123971. Corylus sp. Betulaceae. Filbert.

From England. Plants and scions presented by Albert Blake, Malpus, Cheshire. Received April 9, 1937.

### 123972 to 123978.

From the Union of Soviet Socialist Republics. Scions presented by the Institute of Plant Industry, Leningrad. Received April 12, 1937. 123972 to 123978—Continued.

123972. PRUNUS AVIUM L. Amygdalaceae, Sweet cherry.

Tchereshnia Keplovskaya.

123973 to 123977. PRUNUS CERASUS L. Amygdalaceae. Sour cherry.

123973. Krasso Severa.

123974. Krassnopaynarskaya.

123975. Shubinka.

123976. Vassilievka.

123977. Vladimir.

123978. PRUNUS MAXIMOWICZII Rupr. Amygdalaceae. Miyama cherry.

A large handsome tree, about 50 feet high, with horizontally spreading branches, coarsely double-toothed leaves, white flowers about ¾ of an inch across, and black fruits about the size of peas. Native to northeastern Asia.

For previous introduction see 66601.

123979 to 123987. CITRUS SINENSIS (L.) Osbeck. Orange.

From Morocco. Plants presented by M. H. Brayard, Directeur de la Station Experimentale, Marrakech. Received April 12, 1937.

123979. Bernie.

123980. Bresilienne.

123981. Cornice.

123982. de Tétouan.

123983. Espagnole Sans Pépins.

123984. Imperial.

123985. Precoce de Valence.

123986. Sanguine Ovale M.

123987. Viciédo.

123988 to 123999. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Canada. Scions presented by the Dominion Experimental Station, Ottawa. Received April 12, 1937.

123988. Colombia.

123989. Emilia.

123990. Gerald.

123991. Grover.

123992. Lawfam.

123993. Linda.

123994. Newtosh.

123995. Osman.

123996. Sandow.

123997. Spicap.

123998. Spire.

123999. Spiza.

#### 124000 to 124012.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, through F. G. Walsingham. Received May 17, 1937.

124000. ACANTHOPHOENIX CRINITA (Bory)
Wendl. Phoenicaceae. Palm.

From the Department of Agriculture, Mauritius. A pinnate-leaved palm 50 to 60 feet high, with finely dissected leaves 7 to 13 feet long, silvery white beneath; the leaf sheaths, 2 to 4 feet long, are thickly covered with short brown bristles and spines. Native to the Mascarene Islands.

124001. ADINANDRA BOCKIANA E. Pritz. Theaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China. A small evergreen tree, with ovate-oblong leaves about 5 inches long. Native to China.

124002. ALNUS TRABECULOSA Hand.-Mazz. Betulaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China.

124003. ANGOPHORA LANCEOLATA Cav. Myrtaceae.

Presented by Alfred Bircher, El Saff, Egypt. An evergreen tree 70 to 80 feet tall, with deciduous bark, lanccolate, leathery leaves to 5 inches long, and small white flowers in terminal corymbs on short panicles. Native to Queensland and New South Wales.

124004. Bretschneidera sinensis Hemsl. Sapindaceae.

From the Botanical Institute, Sun Yat Sen University, Canton, China. A handsome tree about 25 feet high, with pinnate leaves, 9 to 18 inches long, of 4 to 8 lanceolate leaflets, and terminal racemes of showy pink flowers. Native to the mountains of Yunnan, China.

124005. Cordia Holstii Gurke. Boraginaceae.

Presented by Alfred Bircher, El Saff. Egypt. A tree very much like the catalpa, with broad leaves and very delicate lacelike white flowers. It is used as an avenue tree.

For previous introduction see 117048.

124006. FOKIENIA HODGINSII (Dunn) Henry and Thomas. Pinaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A coniferous tree up to 40 feet in height, native to southwestern China and probably adapted for cultivation only in the southern United States.

124007. Oncoba routledgei Sprague. Flacourtiaceae.

## 124000 to 124012—Continued.

Presented by Alfred Bircher, El Siff, Egypt. A spiny shrub or small tree up to about 18 feet high, with elliptic oblong or oblong, dark-green leaves from 3 to 5 inches long and large fragrant camellialike white flowers, followed by large globose woody-shelled fruits. It resembles Oncoba spinosa, but the spines are shorter. Native to tropical Africa.

124008. PINUS sp. Pinaceae. Pine.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. Received under the name "kwangtungensis," for which a place of publication has not been found.

124009. RHODODENDRON SIMIARUM Hance. Ericaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. An evergreen shrub, 6 to 8 feet high, with thick oblanceolate to obovate leaves about 3 inches long and racemose corymbs of 4 to 6 pink flowers. The funnel-campanulate flowers are about 2 inches long. Native to southeastern China at altitudes of about 2.000 feet.

124010. SORBUS FOLGNERI (C. Schneid.) Rehder, Malaceae. Mountain-ash.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A handsome Chinese tree with gracefully spreading branches and oval leaves, dark green above and white hairy beneath. The ovoid red berries are about one-half inch long.

For previous introduction see 79040.

124011. TABEBUIA CHRYSEA Blake. Bignoniaceae.

Presented by Sr. A. Dugand, Barranquilla, Colombia. A tree about 20 feet high, with 5-foliolate membranous leaves and many showy yellow flowers in racemes, which appear before the leaves. Native to Venezuela.

124012. TSUGA LONGIBRACTEATA Cheng. Pinaceae.

Presented by the Botanical Institute, Sun Yat Sen University, Canton, China. A hemlock about 30 feet high, with linear leaves, dark green above, and about threefourths of an inch long. Native to southwestern China.

124013 to 124023. AVENA SATIVA L. Poaceae. Oats.

From India. Seeds presented by Dr. Edgar F. Vestal, Allababad Agricultural Institute, Allababad Christian College, American Presbyterian Mission, Allababad. Received May 26, 1937. 124013 to 124023-Continued.

A collection of hybrid oats from Pusa, Bihar, grown at the Agricultural Institute.

. 124013, X-27.

124014. 8-54.

124015. B-S-1.

124016. G.

124017, K-S-10,

124018. B-52.

124019. J.

124020, C-1.

124021. Westene. From Indore, Central India.

124022. Mulga. From Indore, Central India.

124023. A local variety.

### 124024 to 124048.

From South America. Seeds collected by L. C. Corbett, Bureau of Plant Industry, United States Department of Agriculture. Received May 24, 1937.

124024. CALLIANDRA TWEEDII Benth. (Anneslia tweedii (Benth.) Lindm.). Mimosaceae.

From Argentina. A low tropical tree with bipinnate leaves made up of 3 or 4 pairs of very small, hairy, linear-oblong leaflets and globose flower heads with rather showy purplish stamens. Native to British Guiana.

For previous introduction see 104106.

124025. Peltophorum dubium (Spreng.)
Taub. (P. vogelianum Walp.). Caesalpiniaceae.

A large handsome tree 50 to 60 feet high, with broad spreading branches and bipinnate leaves giving an excellent shade. The bright-yellow flowers are in terminal panieled racemes. Native to Brazil.

For previous introduction see 42180.

124026. CRATAEGUS Sp. Malaceae.

From Valdivia, Chile.

124027. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

From Lima, Peru. A large crook-neck squash; flesh thick, yellow; skin warty.

124028. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

From Lima, Peru. From the market. Fruit large; flesh thick, yellow; skin smooth.

124029. Enterolobium timbouva Mart. Mimosaceae. Timbo.

A large tree with bipinnate leaves made up of 2 to 5 pinnae, each bearing 10 to 20 pairs of falcate-oblong leaflets and large heads of greenish flowers followed by coria124024 to 124048—Continued.

ceous kidney-shaped pods, Native to Brazil.

For previous introduction see 107293.

124030. ERYTHRINA FALCATA Benth. Fabaceae.

A tropical tree allied to Erythrina cristagalli. The oval-oblong leaflets are 4 to 6 inches long, becoming leathery with age. The scarlet flowers, a little smaller than those of E. cristagalli, are in small racemes in the upper leaf axils. Native to Brazil.

For previous introduction see 104114.

124031. Fuchsia sp. Onagraceae.

From Chile. A wild fuchsia.

124032, Jacaranda Chelonia Griseb. Eignoniaceae.

An Argentinian tree, sometimes as much as 90 feet high, with a rounded habit and attractive fernlike foliage. The large blue flowers are in terminal panicles a foot long. The wood is valued in Argentina for cabinet work.

For previous introduction see 63987.

124033. Lupinus sp. Fabaceae.

From Puella, Chile, on Lake Todos Los Santos. A yellow-flowered lupine.

124034 to 124039. LYCOPERSICON ESCULEN-TUM Mill. Solanaceae. Tomato.

124034. A thin-walled, large-celled, wrinkled tomato, abundant in the Lima market in March.

124035. From Lima, Peru, March 1937. Fruit small-celled, thick-walled, very meaty, lobed but quite smooth; flesh red.

124036. Italian-grown seeds collected in a tomato-paste factory in the Rio Negro Valley, Argentina.

124037. From Valdivia, Chile.

124038. From Trujillo, near Chau Chau, Peru.

124039. From Trujillo, March 1937. Fruit small, subglobose, 1% inches in diameter, smooth.

124040 and 124041. MYRTUS spp. Myrtaceae.

From near Niebla, Chile, March 31, 1937. An evergreen shrub 10 to 12 feet high, with leaves about ¾ of an inch long and ¾ of an inch wide, myrtle green above and much lighter green and hoary beneath, making a compact flat leaf arrangement. The white rosaceous flowers, in clusters, are followed by berries about ¼ of an inch in diameter, borne on short stems, like a string of beads, under the leaf stem.

124040. A form with bright-blue berries. 124041. A form with black berries.

124024 to 124048—Continued.

124042. Oxypetalum coeruleum (D. Don) Decne. Asclepiadaceae.

A tender vine with oblong leaves, cordate-hastate at the base and dark-blue flowers in small axillary clusters. Native to Argentina.

124043. PROSOPIS STROMBULIFERA (Lam.) Benth, Mimosaceae.

From San José, Argentina, April 23, 1937. A low shrub not over 12 inches high, with peculiar screw-shaped persistent pods that look like bright-yellow spikes of flowers a short distance away.

For previous introduction see 62080.

124044. Rubus sp. Rosaceae.

A blackberry found growing wild all over southern Chile; said to be an escape from a German introduction.

124045. TABEBUIA FLAVESCENS Griseb. Bignoniaceae.

124046, TABEBUIA sp. Bignoniaceae.

124047. TIPUANA TIPU (Benth.) Lillo (T. speciosa Benth.) Fabaceae. Tipu-tree.

A handsome unarmed tree with compound leaves that are unevenly pinnate and showy yellow flowers in loosely branched terminal panicles. The tree is a rapid grower, and its horizontal branches make it an excellent shade tree.

For previous introduction see 88263.

124048. UGNI MOLINAE (Barn.) Turcz. Myrtaceae.

From Valdivia, Chile. An evergreen shrub with leathery ovate leaves very like those of the myrtle, but with smaller flowers, shorter enclosed stamens, and reflexed. awl-shaped sepals and five petals. It is sometimes grown on walls and is about as hardy as myrtle. The edible berries are sold in the Chilean markets, but no attempt has been made to cultivate the shrub.

For previous introduction see 36151.

124049. CITRUS sp. Rutaceae.

Plants pre-From Tahiti, Society Islands. sented by Harrison W. Smith, Papeari. Received June 3, 1937.

A green-fleshed pomelo.

124050. THEOBROMA CACAO L. Sterculiaceae. Cacao.

Plants growing at the United States Plant Introduction Garden, Coconut Grove, Fla. Numbered in June 1937.

124051. WARSZEWICZIA COCCINEA (Vahl) Klotzsch. Rubiaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received June 3, 1937.

124051—Continued.

From the Plant Introduction Garden, Canal Zone. An ornamental tree with dark-green foliage and clusters of small flowers each 1/4 of an inch across. One sepal of each cluster is brilliant scarlet and over 2 inches long, making a startling splash of color against the dark leaves. The tree blooms during the wet season, whereas most of the showy flowering trees of the Tropics bloom in the dry season. Native to Trinidad, British West Indies.

For previous introduction see 105872.

124052 to 124056. ALLIUM spp. Liliaceae.

From India. Bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 3, 1937.

124052 and 124053. ALLIUM CEPA L. Onion.

Pujaz.From Hyderabad, Sind State, April 28, 1937, but said to have come from Surat.

124052. No. 2793. The bulbs of this variety keep much longer than those of any other onion previously seen on this trip.

123053. No. 2794. Possibly a good keeper.

124054 to 124056. ALLIUM SATIVUM L. Garlic.

124054. No. 2790. Lassan. From Jodhpur, Jodhpur State, April 26, 1937.

124055. No. 2791. Lassan. From Chitorgarh, Mewar State, April 23, 1937.

124056. No. 2792. Lassan. From Hyderabad, Sind State, April 28, 1937.

124057 to 124064. ORYZA SATIVA L. Poa-Rice. ceae.

From India. Seeds presented by the Rice Research Station, Lakkana. Received May 26, 1937.

124057. Bengalo.

124058. Jajai-77.

124059. Kangui-27.

124060. Kalangho.

124061. Lari.

124062. Prong-36.

124063. Silver Jubilee.

124064. Torh.

124065 to 124067.

From Europe. Seeds presented by P. Upitis, Vestiena, Latvia. Received May 28, 1937.

124065. PICEA ABIES (L.) Karst. (P. excelsa Link). Pinaceae. Norway spruce. Received as variety Lettoniensis.

124066. PINUS SYLVESTRIS L. Pinaceae. Scotch pine.

Received as variety Rigaensis.

124065 to 124067—Continued.

124067. Pyrus communis L. Malaceae.
Common pear.

A wild pear which grew at 57° north latitude.

#### 124068 to 124160.

From India. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 24, 1937.

124068. ACACIA sp. Mimosaceae.

No. 2618. From Kodur, Madras Presidency, April 19, 1937. A thorny shrub up to 8 feet high, found in hot dry forest.

124069 and 124070. ALLIUM CEPA L. Liliaceae. Onion.

Pujaz. From Patna, Bihar, April 4, 1937. Globe onions that mature in the hottest weather of the year.

124069. No. 2575. A white variety.

124070. No. 2586. A red variety.

124071. ALLIUM SATIVUM L. Liliaceae.

Garlic.

No. 2543. From Cuddapah, Madras Presidency, March 23, 1937. The smallest variety so far seen.

124072. BAUHINIA sp. Caesalpiniaceae.

No. 2547. From Cuddapah, Madras Presidency, March 23, 1937. A small tree, found in hot dry places, with irregularly twisted pods 8 inches long and 1 inch wide.

124073 to 124076. BRASSICA OLERACEA 10-TRYTIS L. Brassicaceae. — Cauliflower. From Patna, Bihar, April 6, 1937.

124073. *Phulgobi Kataki*. No. 2598. Said to be sown in summer and to be ready in November.

124074. No. 2599. Phulgobi Asni. The earliest sort grown in this district, maturing in 85 days with an excellent lead.

124075. No. 2606. Pusaha Phulgobi. The largest sort grown in this district. The seeds are the most costly because they get worm-eaten before they ripen.

124076. No. 2607. Pusaha Phulgobi. Like No. 2606 (P. I. 124075), but from a different source.

#### 124077. Brassica Rapa L. Brassicaceae.

Turnip.

No. 2615. Shalgam. From Patna, Bihar, April 8, 1937. A native flat white turnip.

124078 to 124081. CAPSICUM ANNUUM L. Solanaceae. Common redpepper.

124078. No. 2471. Merakai. From Madura, Madras Presidency, March 9, 1937. Fruit short, 1½ inches by 2 inches, red and hot.

124068 to 124160-Continued.

124079, No. 2542. From Cuddapah, Madras Presidency, March 23, 1937. Fruit red, hot, 3 inches long by ½ inch wide; end decurved.

124080. No. 2557. From Bombay, March 30, 1937, but said to have come from Goa. Fruit red, mild, about 4 inches by 2 inches. A good sweet type for salads.

124081. No. 2584. Mirch. From the market, Patna, Bihar, April 4, 1937. Fruit 3 inches long by ¾ of an inch wide, moderately hot; chiefly used green.

124082. CINCHONA sp. Rubiaceae.

No. 2488. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13, 1937. A small tree from the rain forest, with panicles of rose-purple flowers.

124083. CITRULLUS COLOCYNTHIS (L.) Schrad. Cucurbitaceae. Colocynth.

No. 2546. From Cuddapah, Madras Presidency, March 23, 1937. Fruits small, orange size; grows in desert.

124084 to 124090. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

124084. No. 2552. From Bhanapur, Hyderabad, March 26, 1937. Fruit subglobose, 8 inches in diameter and black green; flesh red and sweet.

124985. No. 2556. From Kopbal, Hyderabad, March 26, 1937. Fruit subglobose, 1 foot in diameter, green, blotched darker; flesh red, fair.

124086. No. 2562. From Bombay, April 1, 1937. Fruit globose, 1 foot in diameter, pale green, unmarked; flesh pink, fair.

124087. No. 2567. From Calcutta, April 2, 1937. Fruit elongate, 16 by 12 inches, medium green with traces of deeper green blotching; flesh pink, fair.

124088. No. 2568. From Calcutta, April 2, 1937. Fruit elongate, 16 by 10 inches, medium green, reticulated darker; flesh pink, watery.

124089. No. 2578. From Patna, Eihar, April 3, 1937. Fruit subglobose, 1 foot in diameter, dark green, lineblotched darker. Flesh pink, fair; rind thin.

124090. No. 2585. Tarbuza. From Patna, Bihar, April 4, 1937. Probably Bhagalpus stock.

124091. CROTALARIA Sp. Fabaceae.

No. 2490. From Kodai Kanal, Palni Hills, March 14, 1937. A prostrate perennial growing on sunny slopes, with ovate, shiny, hirsute leaves and large yellow flowers.

- 124068 to 124160—Continued.
  - 124092 to 124115. CUCUMIS MELO L. Cucurbitaceae. Muskmelon,

Nos. 124092 to 124104 were collected in Madras Presidency in March 1937.

- 124092. No. 2506. Kharbuza. Madras, March 17, but fruit said to have come from the Cuddapah District. Fruit flattened, 6 by 4 inches, lemon yellow, nearly smooth; flesh thick, white, sweet.
- 124093. No. 2507. Kharbuza. Madras, March 17, but said to have come from the Cuddapah District. Fruit oval, 1 foot long, yellow, netted coarsely and strongly, very firm, and apparently a good keeper; flesh thick, white, sweet, unlike any American melon known.
- 124094. No. 2510. Kharbuza. Madras, March 17, but said to have come from the Cuddapah District. Fruit subglobose, 16 inches in diameter, tapered toward the stem, golden brown, heavily ribbed and netted; flesh salmon-colored, firm, watery, not of good flavor.
- 124095. No. 2521. Tela Babasa. Sidhout, March 20. Fruit like No. 2520, but the flesh is bright salmon.
- 124096. No. 2524. Hingan. From Sidhout, March 20. Fruit oval, up to 1 foot long, deep gold, netted; flesh salmon-colored, 2 to 2½ inches thick, crisp. Said to keep 2 weeks at temperatures of 80° to 100° F.
- 124097. No. 2525. Adamshahi. From Sidhout, March 20. Fruit flattened, 8 by 5 inches, smooth, pink brown, deep ribs colored paler; flesh soft, juicy, white, fairly sweet.
- 124098. No. 2530. Burka Khirne. From the Cuddapah District, Sidhout, March 20. Fruit elongate, 12 by 6 inches, traces of heavy netting, mottled orange green with green ribbing; flesh white, fairly sweet.
- 124099. No. 2531. Shiranjir. From Chennur, March 20. Fruit fig-shaped, about 6 inches long, pink, green and brown, the colors in short lines; flesh green, often very sweet. One of the handsomest and best melons of India.
- 124100. No. 2532. Shabat Anar. From Chennur, March 20. Fruit subglobose, about 6 inches in diameter, pale yellow with traces of green rib lines, some netting; flesh white, sweet. One of the best.
- 124101. No. 2533. Probably Tela Babassa × Shanbatanar. From Sidhout, March

- 124068 to 124160-Continued.
  - 20. Fruit subglobose, white, traces of netting and of green ribbing; flesh white, juicy, sweet.
  - 124102. No. 2535. Nana Pila. From Chennur, March 20. Fruit much flattened, 8 by 4 inches, smooth yellow, more or less blotched with green; flesh white, quality unknown as specimens were unripe, but said to be especially soft.
  - 124103. No. 2536. An Adamshahi variant from Cuddapah, March 23. Fruit flattened to subglobose, heavily ribbed, smooth, pink brown; flesh soft, juicy, white, fairly sweet. Like No. 2525 (P. I. 124097), but not so flat.
  - 124104. No. 2537. White Burdami. Cuddapah, March 23. Fruits like Jal Burdami, but pale yellow instead of gold.
  - 124105. No. 2553. From Bhanapur, Hyderabad State, March 26. Fruit somewhat flattened, 8 by 7 inches, heavily ribbed, pink brown, smooth; flesh pale yellow-green, good. Much like the Adamshahi from Cuddapah, No. 2536 (P. I. 124103).
  - 124106. No. 2554. From Bhanapur, Hyderabad State, March 26. Fruit oval, 1 foot long, golden yellow, obscurely netted, no ribs; flesh 2½ inches thick, juicy, pale salmon; like Burdami of Cuddapah District in quality, but more elongate.
  - 124107. No. 2555. From Hospet, Madras Presidency, March 26. Fruit subglobose, 6 inches in diameter, blotched gold, brown and green with greenish rib lines obscurely netted to smooth; flesh thin, juicy, pale orange, insipid.
  - 124108. No. 2558. From Bombay, March 21. Fruit flattened 6 by 4 inches, ribbed, obscurely netted, orange, strongly scented; flesh orange, no fla-
  - 124109. No. 2560. From Allahabad, United Provinces, April 1. Fruit slightly flattened, 6 by 5 inches, yellow, ribbed green, smooth; flesh salmon, sour, juicy.
  - 124110. No. 2561. From Allahabad, United Provinces, April 1. Fruit globose, 4 inches in diameter, yellow, smooth, unribbed; flesh salmon, flavorless.
  - Nos. 124111 to 124113. From Calcutta, April 2.
  - 12411. No. 2563. Fruit flattened, 5 by 3 inches, ribbed, rib lines orange, smooth to obscurely netted.

#### 124068 to 124160-Continued.

124112. No. 2564. Fruit unevenly elongate, 8 by 6 inches, flattened at ends, ribbed, smooth to obscurely netted, yellow with orange rib lines, fragrant; flesh 1½ inches thick, rather flavorless.

124113. No. 1565. Phut. Fruit subglobose to 14 inches in diameter, smooth, greenish yellow, unribbed, splits open when ripe; flesh mealy, pale yellow, insipid. Fruit is tied up like a parcel before completely ripe.

Nos. 124114 and 124115 were collected at Patna, Bihar State, April 5 and 7, 1937.

124114. No. 2601. Kakri. A finely ribbed, crook-necked variety, pale green, unripe now, makes a good salad.

124115. No. 2610. Phut Fruit cucumber-shaped, 15 by 5 inches, unribbed, yellow, smooth; splits open when fully ripe; flesh white, rather insipid.

124116. CUCURBITA MOSCHATA. Duchesne. Cucurbitaceae. Cushaw.

No. 2597. Sttaphal. From Patna, Bihar, April 5. Fruits vary in size and shape, some are oval, some flattened, all are ribbed and mostly deep pinkish buff; flesh rather thin; a good keeper.

124117. Cucumis sativus L. Cucurbitaceae. Cucumber.

No. 2600. Khira. From Patna, Bihar, April 5. A cucumber for the hot weather; planted here the end of March and ready by the end of May, the hottest time of the year.

124118. DAUCUS CAROTA L. Apiaceae.

Carrot.

No. 2580. Gajar. From Patna, Bihar, April 3. Said to be a locally grown carrot. 124119 to 124121. Dolichos Lablab L. Fabaceae. Hyacinth-bean.

From Patna, Bihar, April 4, 1937.

124119. No. 2583. Makham Sem. Pods eaten green.

124120. No. 2591. Sufed Sem. Pods on the market are pale yellow.
 124121. No. 2593. Sem Sufed. Said to

124121. No. 2593. Sem Sufed. Said to have pale yellow pods.

124122. HYPERICUM sp. Hypericaceae.

No. 2486. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 13, 1937. An attractive shrub with large golden-yellow flowers about 2 inches across, growing in the open, even on sunny slopes. The plant will stand some frost.

124123. Argyreia campanulata (L.) Alston. Convolvulaceae.

No. 2551. From Hospet, Madras Presidency, March 25. An evergreen scandent or twining shrub, often in low dense

124068 to 124160-Continued.

masses, with ovate-cordate leaves 1 to 4 inches in diameter and large, wide, funnel-shaped, rose-purple flowers in 1- to 3-flowered cymes. The applelike fruits are  $\frac{3}{4}$  to  $\frac{1}{2}$  inches in diameter, including the sepals which completely envelop the fruit. Native to India.

124124. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

No. 2588. From Patna, Bihar, April 4, 1937. Probably an acclimated European variety, but this seed is Indian grown.

124125 to 124128. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae.

Calabash gourd.

124125. No. 2549. From Hospet, Madras Presidency, March 24, 1937. A wild form with bottle-shaped green fruit 18 inches long with 5 deep ribs; found climbing in thickets.

124126. No. 2574. Sitarp Turnki. From Patna, Bihar, April 3, 1937. Fruit flattened, 16 by 8 inches, faintly ribbed. Used as the resonator of a stringed instrument called a sitar.

124127. No. 2589. Kaddu. From Patna, Bihar, April 4, 1937. An elongate, bottle-shaped sort, 3 feet long.

124128. No. 2590. Lauki. From Patna, Bihar, April 4, 1937. Fruits bottleshaped, 3 feet long.

124129. LATHYRUS SATIVUS L. Fabaceae. Bittervetch.

No. 2619. Kesori. From Patna, Bihar, April 8, 1937.

124130. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

No. 2595. Jhingani. From Patna, Bihar, April 5, 1937. A popular vegetable.

124131. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 2550. From Hospet, Madras Presidency, March 25, 1937. Growing wild in thickets. Fruit elliptical, 3 inches in diameter and very ornamental.

124132. Lycopersicon esculentum Mill. Solanaceae. Tomato.

No. 2504. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 15, 1937. A wild plant growing at the edge of a forest. Fruit globular, 1 inch in diameter.

124133. Lycopersicon esculentum Mill. Solanaceae. Tomato.

No. 2559. From Bombay, March 31, 1937. Fruit round, red, 1 inch in diameter. 124134. MOMORDICA CHARANTIA L. Cucurbitaceae. Balsam-pear.

No. 2572. Uchhi. From Calcutta, April 2, 1937. Fruits top-shaped, about 1½ inches long. One of the smallest varieties cultivated, but considered one of the best.

124068 to 124160-Continued.

124135. Momordica charantia L. Cucurbitaceae. Balsam-pear.

No. 2596. Karela. From Patna, Bihar, April 5, 1937. A green fruit 5 inches long. 124136 and 124137. Morus NIGRA L. Moraceae. Black mulberry.

Shahbut. From Patna, Bihar, April 3, 1937.

124136. No. 2576. Fruit 5 inches long by three-eighths of an inch in diameter, black to purplish, sweet-acid, inclined to be a bit watery.

124137. No. 2577. Fruit 2 inches long by ½ inch in diameter, black, sweet-sour, rather insipid.

124138. ORYZA SATIVA L. Poaceae. Rice.

No. 2608. *Irani*. From Patna, Bihar, April 6, 1937. A common rice, locally grown, ripe in 120 days. The earliest variety grown here.

124139. OSBECKIA Sp. Melastomaceae.

No. 2475. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10, 1937. A bushy shrub up to 8 feet high, growing usually in the open and bearing, over a long period, an abundance of purple flowers about 2 inches in diameter. It will stand some frost.

124140. PASSIFLORA Sp. Passifloraceae.

No. 2499. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 14, 1937. An attractive climber, found at the edge of a forest, with 3-lobed, maplelike leaves. The long-tubed cerise flowers are 6 inches long, and the elliptical fruits are 4 inches long.

124141. PONGAMIA PINNATA (L.) W. F. Wight. (P. glabra Vent.). Fabaceae.

No. 2548. From Cuddapah, Madras Presidency, March 23, 1937. A handsome tree with dark shiny leaves and an abundance of small purple flowers. The leaves have value as green manure, the seeds for oil, and the tree as a whole for shade.

124142. RAPHANUS SATIVUS L. Brassicaceae. Radish.

No. 2613. Muli. From Patna, Bihar, April 8, 1937. An early, long, white radish.

124143. Rubus sp. Rosaceae.

No. 2473. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10. A shrub up to 30 feet high, which forms impassable thickets in places; found in the forest and also on sunny hillsides. Fruit yellow to orange, ½ inch in diameter, small seeds, somewhat acid, of refreshing flavor, and borne abundantly. The shrub tolerates some frost.

124068 to 124160-Continued.

124144. Rubus sp. Rosaceae.

No. 2474. From Kodai Kanal, Palni Hills, at 7,500 feet altitude, March 10, 1937. A shrub 8 feet high found in the open. The small blue-black, tomentose fruits are % of an inch in diameter.

124145. Salvia sp. Menthaceae.

No. 2571. From Kodur, Madras Presidency, March 18, 1937. Plants 3 feet high, found growing in clumps in hot dry areas. Flowers lavender.

124146 to 124151. Solanum melongena L. Solanaceae. Eggplant.

From Patna, Bibar, from April 3 to 8, 1937.

124146. No. 2605. Bengan. Fruit deep purple, 7 by 3½ inches, few seeds. A popular market variety.

124147. No. 2612. Muktakasi Bengan. Fruit subglobose, 6 inches in diameter, purple black. Considered among the best.

124148. No. 2614. Bengan. A round, light-purple fruit, 4 inches in diameter; a native variety.

124149. No. 2573. Bengan. Fruit white, 7 inches long by 2½ inches across.

124150. No. 2579. Bengan. Fruit subglobose, 5 inches in diameter, pale purplish with a mantle of dark green, and rather few seeds.

124151. No. 2592. Bengan. Fruits 7 by 3½ inches, deep purple, few seeds. A popular variety.

124152. Solanum sp. Solanaceae.

No. 2617. From Nilambur, Madras Presidency, March 5, 1937. A shrubby perennial up to 6 feet high, with whitish flowers.

124153. STRYCHNOS Sp. Loganiaceae.

No. 2545. From Kodur, Madras Presidency, March 18, 1937. A medium-sized, ornamental tree growing in dry places, with orange fruits as large as a tennis ball.

124154. TRICHOSANTHES ANGUINA L. Cucurbitaceae. Snakegourd.

No. 2582. Chichinda. From Patna, Bihar, April 4, 1937. Used as a vegetable while tender.

124155. TRITICUM AESTIVUM L. Poaceae.
Common wheat.

No. 2604. Gehum. From Patna, Bihar, April 5, 1937. A hard wheat which makes good bread.

124156. VICIA FABA L. Fabaceae.

Broadbean.

No. 2594. Bagla. From Patna, Bihar, April 5, 1937. Beans eaten both green or dried.

124068 to 124160-Continued.

124157. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

No. 2587. Labra. From Patna, Bihar, April 4, 1937. Said to have pods 1 foot long; green pods are eaten.

124158. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

No. 2566. From Calcutta April 2, 1937. Used as dry beans.

124159. (Undetermined.)

No. 2487. From Kodai Kanal, Palni Hills, March 13, 1937, at 7,500 feet altitude. An evergreen tree with a trunk 18 inches in diameter, growing in rain forest. 124160. (Undetermined.)

No. 2616. From Patna, Bihar, April 8, 1937. A prostrate leguminous perennial with an abundance of bright salmon-pink flowers, borne over a long period. Probably attractive as a rock-garden plant.

# 124161 to 124166.

From South America. Seeds collected by Raymond Stadelman, Bureau of Plant Industry, United States Department of Agriculture. Received in April and June 1937.

124161 to 124163. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From the market, Huehuetenango, Departamento Huehuetenango, Guatemala, February 25, 1937, at 1,800 meters altitude.

124161. Tomate Corriente.

124162. Manzana (apple-shaped).

124163. Pishito. A small round tomato. 124164. NICOTIANA TABACUM L. Solanaceae.

From Chiantla, Departamento Huehuetenango, Guatemala, at 2,000 meters altitude, February 27, 1937.

124165. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

Criollo. From Isnotú, near Betijoque, Estado Trujillo, Venezuela.

124166. NICOTIANA TABACUM L. Solanaceae. Tobacco.

Blanco. From Isnotú, near Betijoque, Estado Trujillo, Venezuela.

124167 to 124178. CITRUS spp. Rutaceae.

From South America. Seeds collected by Dr. H. S. Fawcett, Citrus Experiment Station, Riverside, University of California. Received June 2, 1937.

124167 to 124170. CITRUS AURANTIUM L. Seville orange.

From Bella Vista, Argentina, April 13, 1937.

124167 to 124178-Continued.

124167. S. A. 13. Naranjo Agrio de Sevilla.

124168. S. A. 15. Naranjo Agrio (Apepú).
 124169. S. A. 15-A. Naranjo Agrio Salicifolia.

124170. S. A. 16. Naranjo Agrio. 124171. CITRUS LIMETTA RISSO.

Sweet lime. S. A. 22. A small sour lime. From

Asunción, Paraguay, April 21, 1937.

124172 and 124173. CITRUS SINENSIS (L.)
Osbeck.
Orange.

124172. S. A. 20. A seedling tree from the old location of San Carlos Mission, San Carlos Correntes, near Pindafoy, April 25, 1937.

124173. S. A. 23. From Salto, Uruguay, April 28, 1937. A sweet seedling, tree 77 years old.

124174. CITRUS Sp.

S. A. 12. Laranjo Cravo. From Limeira Fruit Farm, Santos, Brazil, April 7, 1937. 124175. CITRUS Sp.

S. A. 17. From Posados, Argentina, April 24, 1937. A sour orange tree, possibly over 100 years old, near the Manez orchard.

124176. CITRUS Sp.

S. A. 18. April 23, 1937. From an old sweet seedling orange tree near the ruins of San Ignacio Mission, northeast of Posados, Argentina.

124177. CITRUS Sp.

S. A. 19. April 23, 1937. From a very old sweet seedling orange tree at the Santa Ana ruins, Argentina.

124178. CITRUS Sp.

S. A. 21. April 20, 1937. Apepú. A sour orange from the city park at Asunción, Paraguay.

#### 124179 to 124242.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 27, 1937.

124179. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

No. 2647. Bhindi. From Bhagalpur, Bihar, April 2, 1937.

124180. ABELMOSCHUS ESCULENTUS (L.)
Moench, Malvaceae. Okra.

No. 2688. *Bhindi*. From Bhopal, Bhopal State, April 16, 1937.

124181. ALLIUM CEPA L. Liliaceae. Onion. No. 2685. Pujaz. From Bhopal, Bhopal

State, April 16, 1937. Said to be a mixture of yellow and red globe onions.

124179 to 124242-Continued.

124182. Brassica oleracea botrytis L. Brassicaceae. Cauliflower.

No. 2689. *Phulgobi*. From Bhopal, Bhopal State, April 16, 1937. Said to be a locally grown variety.

124183 to 124203. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon. Nos. 124183 to 124193. Collected in Bihar State from April 8 to 11, 1937.

- 124183. No. 2611. From Patna. *Tarbuza*. Fruit subglobose, 7 inches in diameter, medium green, blotch-lined with darker green; flesh red, flat.
- 124184. No. 2620. Tarbuza. From Gaya. Fruit subglobose, 10 inches in diameter, dark green, unmarked; rind extremely thin, less than ¼ of an inch thick; flesh purple pink, fair, with the heart constituting one-half of the melon.
- 124185. No. 2621. Tarbuza. From Gaya. Fruit subglobose, 10 inches in diameter, sea green with darker green netlines; flesh bright rose, fair quality; rind very thin, ¼ inch thick.
- 124186. No. 2622. Tarbuza. From Gaya. Fruit subglobose, 10 inches in diameter, sea green obscurely netted with darker green; flesh rose; rind ½ inch thick.
- 124187. No. 2632. Tarbuza. From Gaya. Fruit subglobose, 12 inches in diameter, deep green, reticulated with darker green; rind ½ inch thick; flesh rose, fair quality.
- 124188. No. 2633. Tarbuza. From Gaya. Fruit subglobose, 14 inches in diameter, pale green with broad black stripes of darker green; rind ½ inch thick; flesh rose, good quality.
- 124189. No. 2637. Tarbuza. From Gaya. Fruit somewhat elongate, deep green, 1 foot long; flesh red; rind ½ inch tbick.
- 124190. No. 2638. Tarbuza. From Gaya. Fruit globose, 10 inches in diameter, pale green with blotched stripes of darker green; flesh red; rind ½ inch thick.
- 124191. No. 2639. Tarbuza. From Gaya. Fruit light green, unmarked, obscurely but distinctly ribbed, flattened, 1 foot by 10 inches; flesh pink, slightly acid; rind ¾ of an inch thick.
- 124192. No. 2640. Tarbuza. From Bhagalpur. Fruit globose, 18 inches in diameter, weight about 30 pounds; deep green, unmarked; rind 1 inch thick; flesh crisp and fairly sweet. This is a well-known locality for watermelons.
- 124193. No. 2641. Tarbuza. From Bhagalpur. Fruit subglobose, 14 inches in

124179 to 124242-Continued.

diameter, light green, obscurely reticulated with darker green, the lines remaining most conspicuously as rib lines; flesh dark pink, quality good; rind % of an inch thick.

Nos. 124194 to 124199. Collected at Allahabad, United Provinces, April 15, 1937. *Tarbuza*.

- 124194. No. 2671. Said to have come from Farukhabad. Fruit subglobose, 1 foot in diameter, pale green with irregular thin rib lines of darker green; rind ½ inch thick; flesh rose, of good quality.
- 124195. No. 2672. Said to have come from Farukhabad. Fruit subglobose, 1 foot in diameter, light green with blotched stripes of darker green; rind 34 of an inch thick; flesh rose, good quality.
- 124196. No. 2673. Fruit subglobose, 1 foot in diameter, greenish white, unmarked; rind ¾ of an inch thick; flesh rose, fair quality.
- 124197. No. 2674. Said to have come from Farukhabad. Fruit subglobose, 16 inches in diameter, deep green with traces of darker reticulations; flesh deep rose, of good texture and flavor. One of the best.
- 124198. No. 2675. Fruit subglobose, 16 inches in diameter, pale green with rib lines of darker green; rind ½-inch thick; flesh of good flavor and texture and with very few seeds.
- 124199. No. 2676. Fruit subglobose, 14 inches in diameter, deep green; rind ½-inch thick; flesh deep rose, of poor quality and fair flavor.
- 124200. No. 2677. From Itarsi, Central Provinces. Fruit subglobose, 10 inches in diameter, pale green with straight broad rib lines of darker green, rind 1/2-inch thick; flesh deep rose, sweet, very good.
- 124201. No. 2681. From Bhopal, Bhopal State, April 16.
- 124202. No. 2703. Tarbuza. From Ujjain, Gwalior State, April 18.
- 124203. No. 2704. Kaligara. From Ujjain, Gwalior State, April 18.
- 124204 to 124216. CUCUMIS MELO L. Cucurbitaceae. Muskmelon. Nos, 124204 to 124207, Kharbuza. From

Nos. 124204 to 124207, Kharbuza. From Gaya, Bihar State, April 9, 1937.

- 124204. No. 2623. Fruit subglobose, 10 inches in diameter, unribbed, green, heavily netted; flesh 1½ inches thick, salmon color, insipid.
- 124205. No. 2624. Fruit elongate, 12 by 7 inches, obscurely ribbed, smooth, yel-

### 124179 to 124242-Continued.

low to salmon pink, often rib lined with deep green; flesh to 1½ inches thick, pale salmon, insipid.

- 124206. No. 2625. Fruit subglobose to 8 inches in diameter, smooth, obscurely ribbed, yellow, rib lined with dark green; flesh thin, pale salmon, rather acid, poor.
- 124207. No. 2631. Fruit subglobose, somewhat flattened, 8 inches in diameter, obscurely ribbed, obscurely netted, pink brown, blotched green with deep green rib lines; flesh salmon, 1½ inches thick, fragrant but insipid.

Nos. 124208 to 124212, Kharbuza. From Bhagalpur, Bihar, April 11, 1937.

- 124208. No. 2643. Fruit elongate, 15 inches long, compressed, 7 to 10 inches in diameter, smooth with traces of ribs, lemon yellow, scented; flesh 1½ inches thick, salmon, juicy, insipid.
- 124209. No. 2644. Fruit 8 by 5 inches, heavily ribbed, smooth, pale yellow; flesh 1½ inches thick, salmon, dry, insipid.
- 124210. No. 2651. Fruit elongate, tapering to stem end, 12 by 8 inches, obscurely ribbed, yellow, nearly smooth; flesh firm, crisp, salmon, juicy, 2½ inches thick, with flavor like a raw potato.
- 124211. No. 2652. Fruit elongate, 10 by 8 inches, abruptly flattened at ends, deeply ribbed, smooth, lemon yellow, flesh 1½ inches thick, white, scented, rather dry, flavorless.
- 124212. No. 2653. Fruit subglobose, flattened at blossom end, tapering to stem end, 10 inches in diameter, heavily ribbed, slightly rusty, yellow with deep green rib lines; flesh fragrant, 2¼ inches thick, deep salmon, watery.

Nos. 124213 and 124214, Kharbuza. From Itarsi, Central Provinces, April 16, 1937.

- 124213. No. 2678. Fruit subglobose, 9 inches in diameter, flattened at the blossom end, faintly ribbed, heavily netted, with green rib lines, yellow blotched with russet brown; flesh 2 inches thick, acid, interesting.
- 124214. No. 2679. Fruit globose, 7 inches in diameter, lemon yellow, obscurely netted, broad rib lines of brownish yellow; flesh 2 inches thick, salmon, insipid.
- 124215. No. 2701. *Kharbuza*. From Ujjain, Gwalior State, April 18, 1937. A locally grown variety.
- 124216. No. 2684. *Kakri*. From Bhopal, Bhopal State, April 16, 1937. Fruit

124179 to 124242-Continued.

crook-necked, elongate, to 2 feet long, irregularly and closely ridged, pale green. A form now common on the market.

- 124217 to 124223. Cucumis sativus L. Cucurbitaceae. Cucumber.
  - 124217. No. 2636. Kakri. From Gaya, Bibar State, April 10, 1937. A hotweather cucumber.

Nos. 124218 to 124221, Kakri. From Bhagalpur, Bihar State, April 11, 1937.

124218. No. 2649. A long variety, grown in the rains.

124219. No. 2650. A short variety, grown in the hot season before the monsoon. None on the market yet.

124220. No. 2654. A long variety.

124221. No. 2655. A short variety.

Nos. 124222 and 124223, Khira. From Ujjain, Gwalior State, April 18, 1937. The famous "rains" cucumber which is known throughout northern India for its fine quality.

124222. No. 2693. 124223. No. 2696.

124224 and 124225. CUCURBITA MOSCHATA
Duchesne, Cucurbitaceae. Cushaw.

\*Kumsa.\* From Bhagalpur, Bihar, April
11, 1937.

124224. No. 2642. Fruit flattened, 14 by 8 inches, ribbed, creamy buff; flesh yellow, 2½ inches thick, moderately sweet and fine grained.

124225. No.2645. Probably a mixture of elongate and flattened varieties.

124226 to 124228. DAUCUS CAROTA L. Apiaceae. Carrot.

124226. No. 2648. From Bhagalpur, Bihar State, April 11, 1937. A purple carrot; small, stubby, and irregular.

124227. No. 2690. From Bhopal, Bhopal State, April 16, 1937. A locally grown form, said to be orange.

124228. No. 2702. From Ujjain, Gwalior, April 18, 1937. A locally grown form, said to be yellow.

124229 to 124231. DIOSPYROS spp. Diospyraceae. Persimmon.

124229. DIOSPYROS MONTANA ROXD.

Mountain persimmon.

No. 2634. Makerken. From Gaya, Bihar, April 10, 1937. A small bushy tree growing in dry places, with creamy flowers and orange fruits 1½ inches in diameter. Attractive.

124230. DIOSPYROS Sp.

No. 2603. Ghaf. From Patna, Bihar, April 5, 1937. Fruit tomato-shaped, orange yellow, astringent, 2½ to 3 inches across.

124179 to 124242-Continued.

124231. DIOSPYROS Sp.

No. 2668. From Bhagalpur, Bihar, April 13, 1937. Fruit subglobose, 2 inches in diameter, orange, somewhat sweet, edible.

124232. Ficus sp. Moraceae.

No. 2602. From Patna, Bibar, April 5, 1937. A handsome tree with light-green, elliptical leaves about 4 inches long and purple, orange-mottled fruit about 1 inch across.

124233. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

No. 2687. Rabur. From Bhopal, Bhopal State, April 18, 1937.

124234. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 2682. From Bhopal, Bhopal State, April 16, 1937.

124235. Lycopersicon esculentum Mill. Solanaceae. Tomato.

No. 2609. From Patna, Bihar State, April 7, 1937. Fruit red, 3 inches long, of good flavor.

124236. MOMORDICA CHARANTIA L. Cucurbitaceae. Balsam-pear.

No. 2683. Karela. From Bhopal, Bhopal State, April 16, 1937.

124237. Phaseolus lunatus L. Fabaceae. Lima bean.

No. 2669. From Allahabad, United Provinces, April 15, 1937. A bean with a long bearing season; said to have been introduced by a missionary.

124238. PISUM SATIVUM L. Fabaceae.

Pea.

No. 2680. Matar. From Bhopal, Bhopal State, April 16, 1937.

124239 to 124241. Solanum melongena L. Solanaceae. Eggplant.

124239. No. 2646. Bengan. From Bhagalpur, Bihar State, April 11, 1937, A large globose purple fruit.

124240. No. 2667. Bengan. From the Botanic Section, Department of Agriculture, Sabour, Bihar State, April 13, 1937. Fruit purple, drop-shaped, about 1 foot long; skin thin, few Seeds. A fine sort, derived from Bengal stock.

124241. No. 2686. Bengan. From Bhopal, Bhopal State, April 16, 1937. Fruit elongate, 12 by 4 inches, black purple.

124242. HOLOPTELEA INTEGRIFOLIA (Roxb.) Planch. Ulmaceae.

No. 2635. *Chireta*. From Gaya, Bihar State, April 10, 1937. A tall elmlike tree to 3 feet in diameter, with obovate leaves up to 4 inches long.

For previous introduction see 116039.

124243 to 124260.

From India. Seeds presented by the Lloyd Botanic Garden, Darjeeling, through R. A. Fenton, M. D., Portland, Oreg. Received June 9, 1937.

124243. ARDISIA MACROCARPA Wall. Myrsinaceae.

A shrub up to 4 feet high with narrowly ovate leaves with crisped-crenate margins, bearing conspicuous glands in the crenations. The umbels of very small reddish flowers are followed by dotted, bright-red berries ½ to ¼ of an inch in diameter. Native to Sikkim and Nepal at altitudes of 3,000 to 7,000 feet.

For previous introduction see 102752.

124244. ASTILBE RIVULARIS Buch.-Ham. Saxifragaceae.

A perennial herb, native to Nepal and western China, with stems 3 to 5 feet high, covered with tawny hairs. The biternate leaves have dentate-ovate leaflets 1 to 3 inches long, and the creamy-white flowers, with pure-white stamens, are borne in large panicled spikes at the top of the stems.

For previous introduction see 122068.

124245. CAREX CRUCIATA Wahl. Cyperaceae.

124246. Daphne involucrata Wall. Thymelaeaceae.

A lax shrub up to 20 feet high, with thin oblong-lanceolate leaves 3 to 6 inches long and silky, white, fragrant flowers in long-stemmed heads. It is native to the Sikkim region in India.

For previous introduction see 94076.

124247. ERYTHRINA ARBORESCENS Roxb. Fabaceae. Coraltree.

When covered with its racemes of bright scarlet flowers, this tree is very attractive and is often planted as an ornamental. There are but few prickles on its branches, and the thin greenish trifoliolate leaves are often a foot wide. The strongly curved pods are about 1 inch wide and 6 to 9 inches long. The tree is native to the central and eastern Himalayas up to 7,000 feet altitude.

For previous introduction see 104771.

124248. GOUANIA LEPTOSTACHYA DC. Rhamnaceae.

A climbing shrub with ovate, subcordate leaves 3 to 4 inches long and spikes 8 to 12 inches long of small greenish flowers. Native to India.

124249. GYMNOSPORIA THOMSONI Kurz. Celastraceae.

A small spiny tree with lanceolate to oblong-lanceolate leaves about 4 inches long and inconspicuous flowers. Native to the Sikkim Himalayas at altitudes of 2,000 to 5,000 feet.

124243 to 124260-Continued.

124250. ILEX HOOKERI King. Aquifoliaceae.

A small deciduous tree with leathery, narrowly oblong or lanceolate leaves 3 to 5 inches long and small globular berries % of an inch in diameter. Native to the Sikkim Himalayas.

For previous introduction see 102905.

124251. ILEX INSIGNIS Hook. f. Aquifoliaceae. Holly.

A small tree or shrub with thick grooved branches, which are purplish when young. The dark-green, leathery leaves, 5 to 9 inches long, are armed at the margins with small spine-tipped teeth. The bright-red, oval berries are nearly ½ inch long. Native to the Sikkim Himalayas where it grows at 7,000 feet altitude.

For previous introduction see 122095.

124252. Jasminum undulatum (L.) Ker. Oleaceae.

A climbing jasmine with slender hairy branches, opposite leaves about 2 inches long, and white, long-tubed flowers in terminal clusters of 6 to 10 flowers. Native to the Himalayas.

For previous introduction see 65259.

124253. LILIUM WALLICHIANUM Schult. f. Liliaceae. Wallich lily.

A lily 4 to 6 feet high, with linear leaves 6 to 9 inches long, and usually solitary, creamy, waxy-white, fragrant flowers 9 inches long which are golden yellow at the base inside and green outside.

For previous introduction see 115983.

124254. MAESA MACROPHYLLA Wall. Myrsinaceae.

A large shrub or small tree, native to the eastern Himalayas. When the bark is cut, a resinous substance exudes. The wood is light brown and moderately hard.

For previous introduction see 93214.

124255. MARSDENIA TENACISSIMA (Roxb.) Wight and Arn. Asclepiadaceae.

A climbing plant, native to the Himalayas up to 5,000 feet, from Kumaon to Burma. The bark of the stems yields a fine silky fiber which is used for bowstrings because of its strength and durability. It is also used in making fishing nets, as submersion in water does not injure it.

For previous introduction see 39685.

124256. Desmodium gyroides DC. Fabaceae.

A shrubby leguminous plant 8 to 10 feet high, native to the warmer parts of the central and eastern Himalayas. It has pubescent leaves and terminal racemes of red-purple flowers and is found growing in

124243 to 124260-Continued.

valleys, at times even on the borders of swamps.

For previous introduction see 116599.

124257. OSBECKIA CRINITA Benth. Melastomaceae.

A much-branched shrub 4 to 8 feet high, with small narrow bristly leaves and large purple or pure-white flowers borne in terminal clusters. The plant is abundant at altitudes between 4,000 and 8,500 feet in the mountains of Sikkim and Bhutan, India.

For previous introduction see 102908.

124258. OSBECKIA NEPALENSIS Hook. Melastomaceae.

An evergreen shrub about 18 inches high, native to the Himalayas, with a rough erect stem, opposite, lanceolate rigid leaves, and large purplish-rose flowers in terminal and axillary panicles or corymbs.

For previous introduction see 122113.

124259. POGOSTEMON GLABRUM Wall. Menthaceae.

An erect, stout perennial related to *Pogostemon plectranthoides*. Native to the Himalayan region at altitudes of 1,000 to 3,000 feet.

124260. RHODODENDRON ARBOREUM J. E. Smith. Ericaceae. Tree rhododendron.

A bushy tree which sometimes attains a height of 25 feet, common in the temperate Himalayas from the Indus River to Bhutan at altitudes between 5,000 and 10,000 feet.

For previous introduction see 122127.

124261. ZEA MAYS L. Poaceae. Corn. From Estonia, Europe. Seeds presented by Edward Wirgo, Estonian Ministry of Foreign Affairs, through Walter A. Leonard, Chargé d'Affairs, American Legation, Tallinn. Received May 12, 1937.

Sweet corn raised in Estonia from seed originally received from the United States.

124262. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

From India. Seeds pre-cuted by Adeltha Henry Peterson, Adyar, Madras Presidency. Received June 14, 1937.

Turai, or ridge gourá.

124263. ERYTHRINA sp. Fabaceae.

From Guatemala. Seeds presented by the Ministerio de Agricultura, Dirección General de Agricultura. Received June 11, 1937.

124264. Geonoma sp. Phoenicaceae.

Palm.

From Central America. Seeds presented through David Barry, Los Angeles, Calif. Received June 11, 1937.

#### 124264—Continued.

A palm collected on the slope of a volcano at 6,000 feet, above the line of occasional frosts. One of the forest undergrowth palms, probably requiring little heat but shade and moisture. The geonomas are slender spineless palms with a ringed, reedlike stem and with more or less pinnatisect leaves usually crowded in a showy terminal cluster.

# 124265. STYLOMA PACIFICA (Seem. and Wendl.) O. F. Cook. Phoenicaceae. Fiji fan palm.

From Virginia Key, near Miami, Fla. Seeds collected by David Fairchild on the estate of Hugh Matheson. Received June 11, 1937.

A handsome tropical fan-leaved palm from the Fiji Islands. Sometimes planted around Miami, though seldom fruiting; often confused with Styloma thurstonii, a smaller species much more common in southern Florida and often fruiting. The fruits of S. pacifica are nearly half an inch in diameter, deep purple at maturity, and are borne in large clusters among the leaves, the inflorescences being much shorter than those of S. thurstonii, which often project far beyond the leaves or droop nearly to the ground.

#### 124266 to 124376. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From China. Seeds presented by Dr. T. H. Shen, National Agricultural Research Bureau, Shaolingwei, Nanking. Received June

11, 1937.	
124266. No. 1.	124290. No. 133.
124267. No. 2.	124291. No. 137.
124268. No. 10.	124292. No. 141.
124269. No. 12.	124293. No. 154.
124270. No. 25.	124294. No. 158.
124271. No. 28.	124295. No. 164.
124272. No. 29.	124296. No. 165.
124273. No. 37.	124297. No. 169.
124274. No. 46.	124298. No. 170.
124275. No. 49.	124299. No. 171.
124276. No. 57.	
124277. No. 64.	124301. No. 187.
124278. No. 66.	
124279. No. 68.	
124280. No. 69.	124304. No. 211.
124281. No. 81.	124305. No. 212.
	124306. No. 218.
124283. No. 113.	
124284. No. 114.	
124285. No. 117.	
124286. No. 120.	
124287. No. 121.	
124288. No. 123.	124312. No. 241.
124289. No. 124.	124313. No. 242.

124266 to 124376—Continued.

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	124314. No. 246.	124343. No. 399.
	124315. No. 247.	
	124316. No. 248.	124345. No. 408.
	124317. No. 254.	124346. No. 415.
		124347. No. 423.
	124319. No. 264.	124348. No. 427.
	124320, No. 266.	124349, No. 430,
	124321. No. 267.	124350. No. 433.
	124322, No. 268.	124351. No. 444.
	124323. No. 269.	124352. No. 457.
	124324. No. 306.	124353, No. 462,
		124354. No. 471.
	124326, No. 345.	124355, No. 476.
	124327. No. 345-	A. 124356, No. 481.
	124328. No. 346.	124357. No. 483.
	124329. No. 349.	124358. No. 486.
	124330. No. 352.	124359. No. 487.
	124331. No. 357.	124360. No. 1.
	124332. No. 360.	124361. No. 2.
	124333. No. 361.	124362. No. 26.
	124334. No. 365.	124363. No. 22–14.
	124335. No. 366.	124364. No. 124.
	124336. No. 378.	124365. No. 141-9.
	124337. No. 380.	124366. No. 169.
	124338. No. 382.	124367. No. 1–195.
	124339. No. 389.	
	124340. No. 393.	
	124341. No. 395.	124370. No. 716.
	124342. No. 397.	
		24376 were received with-
	out numbers.	124375.
	124372.	124376.
	124374.	1010101
-		Driversor res con Fo
1		). Phaseolus spp. Fa- Bean.
	baceae.	Dean

baceae.

From India. Seeds presented by D. Rhind, Economic Botanist, Burma, Mandalay. Received June 2, 1937.

124377. PHASEOLUS LUNATUS L.

Lima bean.

Peleik Pya.

124378 to 124380, PHASEOLUS VULGARIS L. Common bean.

124378. Pebyugale. 124379. Pegya. 124380. Peni.

124381. CINCHONA OFFICINALIS L. ledgeriana Moens.). Rubiaceae.

From the Philippine Islands. Seeds presented by Arthur E. Fischer, Director of Forestry, Bureau of Forestry, Manila. Received June 9, 1937.

From Kaatoan, Bukidnon, Mindanao Island, about 3,500 feet above sea level.

For previous introduction see 18936.

124382 and 124383. ORYZA SATIVA L. | 124398 to 124501-Continued. Rice. Poaceae.

From India. Seeds presented by D. B. Das, Botanical Assistant, Karimganj Farm, Karimganj. Received June 14, 1937.

124382, As. 3. Basmati. 124383. S. 22. Latisail.

#### 124384 to 124390.

From Oklahoma. Seeds presented by Francis A. Flood, Oklahoma City. Received June 11, 1937.

124384 to 124389. A collection of beans that have been used for centuries by the Hopi Indians in the southwestern portion of the United States.

124384 and 124385. PHASEOLUS COCCINEUS Scarlet runner bean. L. Fabaceae.

Used like shelled peas while still green; also used for dye.

124386 and 124387. PHASEOLUS LUNATUS L. Fabaceae. Lima bean.

The baby lima bean that was taken from the Hopi country to California.

124388 and 124389. PHASEOLUS VULGARIS L. Fabaceae. Common bean.

Grown in Arizona.

124388. No. 1. 124389. No. 2.

124390. Solanum Jamesii Torr. Solanaceae. Nightshade.

From the Navajo Reservation, northwestern Arizona. A species closely related to the potato, which grows wild in the mouths of washes or creek beds that are flooded occasionally during the growing season.

For previous introduction see 28770.

124391 to 124397. ORYZA SATIVA L. Poaceae. Rice.

From India. Seeds presented by the Paddy Specialists, Coimbatore, Madras Agricultural Department, Madras Presidency. Received June 15, 1937.

124391. Mtu. 5.

124395. Co. 8.

124392. Adt. 10.

124396, T. 573.

124393. T. 225.

124397. G. E. B. 24.

124394. Co. 4.

#### 124398 to 124501.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 7, 1937.

124398 and 124399. ABELMOSCHUS ESCULEN-TUS (L.) Moench. Malvaceae.

124398. No. 2707. Bhindi. From Ujjain, Gwalior State, April 18, 1937.

124399. No. 2819. Bhindi. From Hyderabad, Sind State, April 28, 1937.

124400 and 124401. ALLIUM CEPA L. Liliaceae.

124400. No. 2722. From Udaipur, Mewar State, April 20, 1937. Said to be a red globe onion.

124401. No. 2807. From Hyderabad, Sind. State, April 28, 1937. Said to be a white globe onion.

124402 124403. BENINCASA HISPIDA and (Thunb.) Cogn. Cucurbitaceae.

Waxgourd.

124402. No. 2738. Petha. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A very large-fruited variety.

124403. No. 2748. Petha. From Udaipur, Mewar State, April 22, 1937.

124404. Beta vulgaris L. Chenopodiaceae. Common beet.

No. 2807. Palag. From Hyderabad. Sind State, April 28, 1937.

124405 to 124408. Capsicum annuum L. So-Common redpepper. lanaceae.

124405. No. 2770. Mirch. From Ajmer, Rajputana State April 27, 1937. Fruit red, mild, tapering, 4 by 11/2 inches.

124406. No. 2787. Mirch. Jodhpur State, April 26, 1937. Fruit red, tapering, 5 by 11/2 inches; flesh sweet; seeds rather hot.

124407. No. 2803. Mirch. From Hyderabad, Sind State, April 28, 1937. Fruit red, top-shaped, 1 inch long, hot.

124408. No. 2805. Mirch. From Hyderabad, Sind State, April 28, 1937. Fruit red, hot, 5 by 11/2 inches.

124409 to 124424. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

124409. No. 2800. Fuda. From Hyderabad, Sind State, April 28, 1937. Fruit globose, pale green, 4 inches across. esteemed as a vegetable.

Nos. 124410 to 124413. From Udaipur, Mewar State, April 20 and 22, 1937.

124410. No. 2723. Fruit globose, 1 foot in diameter, medium green with broken, thin rib lines; rind varies from 1 to 2 inches in thickness; flesh bright pink, slightly stringy, sweet; seeds in large air pockets.

124411. No. 2725. Fruit subglobose, 10 inches in diameter, mottled dark and pale green without pattern; rind 1 inch thick; flesh pink, fair.

124412. No. 2754. Fruit elongate, 14 inches long, deep green; rind thick; flesh red, stringy, sweet.

124413. No. 2755. Fruit globose, 12 inches in diameter, medium green with

traces of darker green, fine rib lines; flesh red, good, crisp; seeds in large air pockets.

- 124414. No. 2759. Tarbuza. From Chitorgarh, Mewar State, April 23, 1937. Fruit globose, 14 inches in diameter, deep green, unmarked; rind 1½ inches thick; flesh red, good texture, sweet; seeds in large air pockets.
- 124415. No. 2760. Tarbuza. From Chitorgarh, Mewar State, April 23, 1937. Fruit globose, 1 foot in diameter, light green with broad blotched stripes of darker green; rind 1½ inches thick; flesh deep rose, sweet but slightly stringy.
- 124416. No. 2761. Tarbuza. From Udaipur, Mewar State, April 23, 1937. Fruit globose, 10 inches in diameter, deep green with clouding of paler green; rind 1½ inches thick; flesh pink, fair texture, somewhat sweet.

Nos. 124417 to 124420. From Ajmer, Rajputana State, April 24, 1937. Tarbuza.

- 124417. No. 2768. Fruit elongate, 15 inches long, deep green, unmarked.
- 124418. No. 2769. Fruit globose, 14 inches in diameter, medium green with narrow ribs and clouding of darker green; rind 1½ inches thick; flesh deep rose, of good texture, rather sweet.
- 124419. No. 2774. A local mixture that may have something different.
- 124420. No. 2778. Fruit elongate, 18 by 12 inches, deep green with narrow rib lines and clouding of darker green; rind 1 inch thick; flesh solid, of good texture, deep rose, fairly sweet; many seeds undeveloped.

Nos. 124421 and 124422. From Marwar Junction, Jodhpur State, April 25, 1937. Tarbuza.

- 124421. No. 2779. Fruit subglobose, 10 inches in diameter, greenish white with traces of narrow rib lines of darker green; flesh sweet, deep rose, fibrous; rind ¾ of an inch thick.
- 124422. No. 2780. Fruit subglobose, 6 inches in diameter, greenish white with traces of narrow rib lines of darker green; flesh of good quality and sweet.
- 124423. No. 2818. From Hyderabad, Sind State, April 28, 1937. A local mixture.
- 124424. No. 2721. From Udaipur, Mewar State, April 20, 1937. The young fruits make a highly esteemed stewed vegetable.

124398 to 124501-Continued.

124425. CORDIA sp. Boraginaceae.

No. 2786. Gundi. From Jodhpur, Jodhpur State. A small tree or large shrub, growing in hot dry places. The fruits, about the size of cherries, are sweet, viscous, and slightly astringent and are in compound racemes.

124426 to 124451. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

Nos. 124426 and 124427, Kharbuza. From Ujjain, Gwalior State, April 18, 1937.

- 124426. No. 2692. Fruit fusiform, strongly tapered to the stem and with a huge navel at the blossom end, pale lemon yellow with rib lines of brownish yellow, 8 inches in diameter, and smooth; flesh white, very juicy with low sugar content.
- 124427. No. 2694. Fruit smooth, elongate, 10 by 6 inches, pale lemon yellow with traces of ribs, fragrant; flesh 2 inches thick, pale salmon, very juicy, no sugar.

Nos. 124428 to 124430. From Rutlam, Rajputana State, April 18, 1937. *Kharbuza*.

- 124428. No. 2712. Fruit bottle-shaped, 8 inches long, with a trace of netting, lemon yellow with green rib lines; flesh salmon, rather insipid.
- 124429. No. 2713. Fruit flattened, 8 by 4 inches with a conspicuous navel, golden brown, more or less blotched with green, strongly netted, smooth green rib lines; flesh watery, slightly musky, salmon-colored, but no sugar.
- 124430. No. 2714. Fruit oval, 8 inches long, lemon yellow, faintly ribbed and rib lined green, obscurely netted; flesh salmon, 1½ inches thick, watery, rather insipid.

Nos. 124431 and 124432, Kharbuza. From Jaora, Rajputana State, April 19, 1937.

- 124431. No. 2715. Fruit oval, 1 foot long, smooth, yellow; flesh salmon, rather insipid, juicy.
- 124432. No. 2716. Fruit subglobose, 8 inches in diameter, faintly ribbed and obscurely netted, blotched brown, gold, and green with green rib lines; flesh salmon, firm, rather insipid.

Nos. 124433 to 124439, *Kharbuza*. From Udaipur, Mewar State, April 20 to 22, 1937.

- 124433. No. 2724. A miniature melon, which may be a local variety.
- 124434. No. 2726. Fruit elongate, 1 foot long, faintly ribbed, obscurely netted,

pale yellow with broad brownish rib lines, fragrant; flesh 2 inches thick, pale salmon, juicy, rather insipid.

- 124435. No. 2727. Fruit 12 by 6 inches, netted, with netted rib lines, yellow, fragrant; flesh white, very firm, 2 inches thick, insipid.
- 124436. No. 2728. Fruit flattened, 8 by 10 inches, faintly ribbed, obscurely netted, stronger in ribs, clear yellow; flesh white, 2 inches thick, juicy, insipid.
- 124437. No. 2749. Fruit not seen.
- 124438. No. 2752. Fruit subglobose, 6 inches in diameter with a knob at the blossom end, heavily netted, yellow, more or less blotched with golden brown; flesh very pale salmon, 1½ inches thick, sweet.
- 124439. No. 2753. Fruit elongate, 14 inches long and tapering to the stem, heavily netted, golden brown with smooth yellow rib lines; fiesh white, 2 inches thick, juicy, acid, uninteresting. Nos. 124440 and 124441, Kharbuza.
- From Chitorgarh, Mewar, April 23, 1937.
- 124440. No. 2756. Fruit elongate, 10 inches long, obscurely netted, blotched yellow and green with green rib lines; flesh orange, rather firm, insipid.
- 124441. No. 2758. Fruit elongate, 14 inches long, heavily netted, yellow; flesh 2 inches thick, salmon, slightly fragrant, rather firm, juicy.

Nos. 124442 to 124448, Kharbuza. From Ajmer, Rajputana State, April 24, 1937.

- 124442. No. 2762. Fruit subglobose, 6 inches in diameter, nearly smooth with large blossom scar, pinkish yellow with broad dark-green rib lines; flesh green, 1½ inches thick, sweet.
- 124443. No. 2763. Fruit subglobose, somewhat flattened, 6 inches in diameter, pinkish yellow with broad darkgreen rib lines; flesh 1½ inches thick, insipid.
- 124444. No. 2764. Fruit globose, 6 inches in diameter, pale yellow, coarsely and heavily netted; flesh 2 inches thick, pale salmon, juicy, acid.
- 124445. No. 2765. Fruit subglobose, 8 inches in diameter, inclined to be flattened, white, obscurely netted, with broad greenish-white smooth rib lines; flesh 2 inches thick, white, with a peculiar sweet-acid taste.
- 124446. No. 2766. Fruit elongate, 1 foot long, tapering strongly to stem, faintly ribbed, yellow, netted; flesh white, rather acid.

#### 124398 to 124501—Continued.

- 124447. No. 2767. Fruit flattened, 10 by 6 inches, obscurely ribbed, heavily netted, golden brown with green rib lines; flesh 2 inches thick, salmon, insipid.
- 124448. No. 2777. A local mixture that may contain something different.

Nos. 124449 and 124450. From Hyderabad, Sind State, April 28, 1937.

- 124449. No. 2810. Kharbuza. A local mixture.
- 124450. No. 2809. Sarda. One of the "Persian" melon relatives. Some of them are excellent in flavor and have remarkable keeping qualities.
- 124451. No. 2751. From Udaipur, Mewar State, April 22, 1937.
- 124452 to 124456. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.
  - 124452. No. 2812. Wangus. A small melonlike cucumber, 4 inches long, with a pronounced blossom scar, smooth, green clouded with darker green. The young fruits are peeled and eaten raw. A locally grown variety which has not been seen before on this expedition.
  - 124453. No. 2735. Khira. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A locally grown green variety.
  - 124454. No. 2811. Kakri. From Hyderabad, Sind State, April 28, 1937. Fruit about 6 by 2\% inches, smooth green, of good texture.
  - 124455. No. 2750. From Udaipur, Mewar State, April 22, 1937.
  - 124456. No. 2813. Khira. From Hyderabad, Sind State, April 28, 1937. Probably the long, heavily ridged, palegreen form which is eaten raw while the fruit is young.
- 124457. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae., Cushaw.

No. 2729. Kaddu. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124458. CYAMOPSIS TETRAGONOLOBA (L.)
Taub. Fabaceae. Guar.

No. 2711. Gawar. From Ujjain, Gwalior State, April 18, 1937. These beans are commonly cultivated in some parts of India, and there are many varieties.

124459. DAUCUS CAROTA L. Apiaceae.

Carrot.

No. 2801. *Gajar*. From Hyderabad, Sind State, April 28, 1937. A locally grown orange carrot.

124460. Dolichos Lablas L. Fabaceae. Hyacinth-bean.

No. 2739. Makhan Sem. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. A variety with pale pods which are used as string beans.

124461. Gossypium sp. Malvaceae. Cotton. No. 2717. Rui. From Udaipur, Mewar State, April 20, 1937. A cotton used in this area for making clothing.

124462. INDIGOFERA LINIFOLIA (L. f.) Retz. Fabaceae. Indigo.

No. 2789. From Gaya, Bihar State, April 9, 1937. A prostrate perennial growing in hot dry places. The simple, linear, silvery-hairy leaves are about 1 inch long, and the small salmon-pink flowers, in copious racemes, are borne in abundance over a long period.

124463 to 124466. Lagenaria Leucantha (Duchesne) Rusby. Cucurbitaceae.

Calabash gourd.

Nos. 124463 and 124464. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124463. No. 2736. Alkaddu. A variety 3 feet long, planted in the rainy season.

124464. No. 2743. Gol Lauki. A round variety.

124465. No. 2775. *Lauki*. From Ajmer, Rajputana State, April 24, 1937.

124466, No. 2802. Adu. From Hyderabad, Sind State, April 28, 1937. A long edible variety.

124467 to 124472. LUFFA spp. Cucurbitaceae.

124467 to 124470. LUFFA ACUTANGULA (L.)
Roxb. Singkwa towelgourd.

Turai.

124467. No. 2705. From Ujjain, Gwalior State, April 18, 1937.

124468. No. 2741. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. Used as a vegetable.

124469. No. 2773. From Ajmer, Rajputana State, April 24, 1937.

124470. No. 2806. From Hyderabad, Sind State, April 28, 1937. Esteemed as a vegetable when young.

124471 and 124472. Luffa Cylindrica (L.) Roemer. Suakwa towelgourd.

124471. No. 2706. *Gilti*. From Ujjain, Gwalior State, April 18, 1937.

124472. No. 2740. Ghiya. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937. Used as a vegetable while young. 124398 to 124501-Continued.

124473 and 124474. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

124473. No. 2785. From Jodhpur, Jodhpur State, April 26, 1937. Fruit flattened and elongate (many freaks), about 2½ inches long, red. Possibly disease resistant.

124474. No. 2815. From Hyderabad, Sind State, April 28, 1937. A long red fruit; said to be an acclimatized variety.

124475. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

No. 2804. From Hyderabad, Sind State, April 28, 1937. Used locally as fodder.

124476 and 124477. MOMORDICA CHARANTIA
L. Cucurbitaceae. Balsam-pear.

124476. No. 2742. Karela. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124477. No. 2772. Karela. From Ajmer, Rajputana State, April 24, 1937.

124478 to 124480. PISUM SATIVUM L. Fabaceae. Pea.

124478. No. 2816. Matar. From Hyderabad, Sind State, April 28, 1937.

124479. No. 2817. *Matar*. From Hyderabad, Sind State, April 28, 1937.

124480. No. 2718. Matar. From Udaipur, Mewar State, April 20, 1937, but said to have come from Nagpur, Central Provinces, and to be free from mildew there.

124481. RAPHANUS SATIVUS L. Brassicaceae. Radish.

No. 2788. Muli. From Jodhpur, Jodhpur State, April 26, 1937. A long white variety; possibly a hot-weather radish for the United States.

124482 to 124490. Solanum spp. Solanaceae.

124482 to 124489. Solanum melongena L. Eggplant.

Nos. 124482 and 124483, Bengan. From Ujjain, Gwalior State, April 18, 1937.

124482. No. 2709. A long black fruit.124483. No. 2710. A round black fruit.

Nos. 124484 to 124487, Bengan. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124484. No. 2731. A mixture of local varieties.

124485. No. 2732. A locally grown, long purple variety.

124486. No. 2733. A native, long white variety.

124487. No. 2734. A native, round white variety.

124488. No. 2746. From Udaipur, Mewar State, April 22, 1937. A small, green local variety.

124489. No. 2771. From Ajmer, Rajputana State, April 24, 1937. A small round fruit, 3 inches in diameter.

124490. SOLANUM Sp.

No. 2626. From Gaya, Bihar State, April 9, 1937. A shrubby perennial 7 feet high with white flowers and orange-yellow fruits ½ inch in diameter.

124491. SPINACIA OLERACEA L. Chenopodiaceae. Common spinach.

No. 2747. Palag. From Udaipur, Mewar State, April 22, 1937. A winter potherb.

124492 and 124493. TRICHOSANTHES ANGUINA L. Cucurbitaceae. Snakegourd.

Chachinda. Presented by the Superintendent of the State gardens, Udaipur, Mewar State, April 21, 1937.

124492. No. 2730. Green or white, a small race.

124493. No. 2737. Fruits 3 feet long, a good vegetable.

124494 to 124498. TRITICUM AESTIVUM L. Poaceae. Common wheat.

Gehun.

Nos. 124494 and 124495. From the Government Farm at Udaipur, Mewar State, April 20, 1937.

124494. No. 2719. Govt. No. 13. Origin unknown.

124495. No. 2720. Pusa 52. An imported strain from Pusa, said to be rust free and to tolerate frost at fruiting time. Nos. 124496 to 124498. From Gaya, Bihar State, April 9, 1937. Hard wheat collected near the southern limit of wheat production in India.

124496. No. 2627. Heads pale, bearded; makes good pastry flour; a short-season hard wheat.

124497. No. 2628. Heads reddish, beardless.

124498. No. 2629. Heads reddish, bearded.

124499. VICIA FABA L. Fabaceae.

Broadbean.

No. 2708. Ramphal. From Ujjain, Gwalior State, April 18, 1937.

124500 and 124501. ZEA MAYS L. Poaceae.

Makki. From Udaipur, Mewar State, April 22, 1937. Said to mature in 75 days. 124500. No. 2744.

124501. No. 2745.

124502 and 124503. Gesneria spp. Gesneriaceae.

From Brazil. Seeds presented by Mrs. V. E. Schilling, Nova Friburgo, Rio de Janeiro, through Dr. Doris M. Cochran, United States National Museum, Washington, D. C. Received June 18, 1937.

124502. GESNERIA Sp.

A bulbous plant with creamy-flesh-spotted, narrow-pointed leaves. The solitary tubular flowers are produced in the leaf axils.

124503. GESNERIA SP.

A bulbous plant with velvety green leaves and showy coral-scarlet tubular flowers produced in a terminal umbel.

124504. Dendrocalamus strictus (Roxb.) Nees. Poaceae.

From Florida. Seeds presented by Julian Nally, Gotha. Received June 23, 1937.

A giant tropical clump bamboo, native to India, under favorable conditions growing to a height of 60 feet or more. The culms are thick walled and sometimes are practically solid. The plant is injured at 28° F. and is killed at 26°. The entire clump, growing at Gotha, Fla., from which these seeds were collected, seeded heavily from late winter to early summer, producing no leaves, and all the culms died.

For previous introduction see 77061.

124505 to 124510. Medicago sativa L. Fabaceae. Alfalfa.

From Peru. Seeds presented by Pedro Recavarren C., Dirección de Agricultura, Ganadería, y Colonización, Ministerio de Fomento, Lima. Received June 24, 1937.

124505. A. 124508. D. 124506. B. 124509. E. 124507. C. 124510. F.

124511. ALEURITES TRISPERMA Blanco. Euphorbiaceae. Banucalag.

From the Philippine Islands. Seeds presented by José S. Camus, Director of Plant Industry and Commerce, Manila. Received June 19, 1937.

This Philippine relative of the tung-oil tree (Aleurites fordii) is a tree 30 to 50 feet high, with heart-shaped leaves and rounded, three-angled fruits about 2 inches in diameter. It is a tropical tree and withstands only a few degrees of frost. The oil obtained from the seeds resembles tung oil, but is somewhat slower in drying.

For previous introduction see 112679.

124512 to 124522. Gossypium spp. Malvaceae. Cotton.

From Brazil. Seeds presented by Prof. J. B. Griffing, Escola Superior de Agricultura e

#### 124512 to 124522-Continued.

Veterinaria, Viçosa, Minas Geraes. Received June 1, 1937.

124512. African Punctatum, unselfed.

124513. South African, 37-38, selected strain selfed for several years.

124514. South African, 37-80. A selected strain, selfed for several generations.

124515. Cambodian cotton, a selfed strain.

124516. Carolina, No. 1.

124517. Carolina. No. 2.

124518. Carolina, No. 3.

124519. Express, No. 1.

124520. Express, No. 2. 124521. Express, No. 3.

124522. Meade. A strain selfed for several generations.

#### 124523 to 124611.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 12, 1937.

124523. ABELMOSCHUS ESCULENTUS (L.)
Moench. Malvaceae. Okra.

No. 2865. From Godaneri, Madras Presidency, April 30, 1937.

124524. ALLIUM CEPA L. Liliaceae. Onion.
No. 2828. Basar. From Hyderabad,
Sind State, April 30, 1937. A red globe
onion which stands extreme heat.

124525. ALLIUM CEPA L. Liliaceae. Onion.

No. 2839. From Bangalore, Mysore State, April 30, 1937. A locally grown onion.

124526. Amaranthus sp. Amaranthaceae. No. 2867. From Godaneri, Madras Presi-

dency, April 30, 1937. A potherb.

124527. Benincasa Hispida (Thunb.) Cogn.
Cucurbitaceae. Waxgourd.

No. 2847. From Anakapalle, Madras Presidency, April 20, 1937.

124528. BETA VULGARIS L. Chenopodiaceae.
Common beet.

No. 2822. Chakunda. From Hyderabad, Sind State, April 20, 1937. A round beet up to 7 inches in diameter, of good quality, not stringy; grown in extreme heat.

124529 to 124532. Brassica spp. Brassicaceae.

From Hyderabad, Sind State, April 30, 1937.

124529 and 124530, BRASSICA OLERACEA
var. BOTRYTIS L. Cauliflower,

124529. No. 2825. Phulyoba. An early native variety.

124530. No. 2827. Phulgoba. A late native variety.

124523 to 124611—Continued.

124531 and 124532. Brassica Rapa L. Turnip.

124531. No. 2853. Goguru. A purplered globe turnip.

124532. No. 2826. Shelgum. A flat white winter turnip.

124533. Bursera sp. Balsameaceae.

No. 2881. From Lahore, Punjab State, May 4, 1937. A small ornamental tree.

124534. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae. Jackbean.

No. 2895. From Peshawar, North West Frontier Province. Bush form.

124535. CAPPARIS sp. Capparidaceae.

No. 2873. From Hyderabad, Sind State, April 20, 1937. A common shrub or small tree on the north Indian plains, blooming in spring with yellow to orange to pink-red blooms. The tree is leafless with green twigs, dense, well-formed, and beautiful when covered with bloom.

124536 to 124540. Capsicum annuum L. Solanaceae. Common redpepper.

124536. No. 2846. From Anakapalle, Madras Presidency, April 30, 1937. A mixture of pointed fruits, red and yellow, 2 to 3 inches long.

124537. No. 2856. From Coimbatore, Madras Presidency, April 30, 1937. A small red fruit about 1 inch long, sharp.

124538. No. 2861. From Godaneri, Madras Presidency, April 30, 1937.

124539. No. 2901. From Peshawar, North West Frontier Province, May 8, 1937. Fruit red, round, 1 inch in diameter, mild.

124540. No. 2902. From Peshawar, North West Frontier Province. Fruit red, pointed, 1½ inches long, pungent.

124541. CARICA PAPAYA L. Papayaceae.

No. 2868. From Ujjain, Gwalior State, April 18, 1937. Fruit about 1 foot long, thick walled, small seed cavity, few seeds, good flavor. One of the best found in India.

124542. Cassia Didymobotrya Fres, Caesalpiniaceae.

No. 2886. From Lahore, Punjab State, May 4, 1937. A large dense shrub or small tree with pinnate leaves 6 to 16 inches long. It is covered with large erect racemes of yellow flowers over a long blooming period. Native to tropical Africa.

124543 to 124547. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

124543. No. 2799. Kalinga. From Hyderabad, Sind State, April 28, 1937. Fruit globose, 1 foot in diameter, green

#### 124523 to 124611-Continued.

with narrow blotched lines of darker green; rind ½ to ¾ of an inch thick; flesh rose, inclined to purplish, watery, of good texture, but no sugar.

124544. No. 2870. From Karachi, Sind State, April 30, 1937. Fruit subglobose, 1 foot in diameter, pale green with stripes of darker green; flesh rose, tinged purple, insipid, very seedy.

124545. No. 2871. From Karachi, Sind State, April 30, 1937. Fruit subglobose, 1 foot in diameter, pale green, unmarked; rind ½ inch thick; flesh rose, insipid, very seedy.

124546. No. 2872. From Karachi, Sind State, April 20, 1937. Fruit globose, 1 foot in diameter, pale green, finely reticulated with darker green; flesh rose, tinged purple, watery, insipid, very seedy.

124547. Tarbuza. From Lahore, Punjab State, May 1, 1937. Fruit globose, 20 inches in diameter, deep green with faint cloudings of lighter green; rind 1 inch thick; flesh deep rose, fair quality, rather sweet, relatively few seeds.

124548 to 124554. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

124548. No. 2781. Kharbuza. From Jodhpur, Jodhpur State, April 26, 1937. Fruit oblong, 14 inches long, smooth, golden brown; flesh 2 inches thick, pale salmon, insipid, though (as is often the case) the melon is fragrant.

124549. No. 2782. Kharbuza. From Jodhpur, Jodhpur State, April 26, 1937. Fruit elongate, 15 inches long, tapered to the stem end, coarsely and heavily netted, golden brown blotched with dark green; flesh 2 inches thick, pale salmon, mealy, insipid.

124550. No. 2783. Kharbuza. From Jodhpur, Jodhpur State, April 26, 1937. Fruit football-shaped, 10 inches long, ribbed, mostly smooth except for strong netting on the rib, golden brown, clouded with greenish black; fiesh 2 inches thick, pale salmon, insipid.

124551. No. 2784. Kharbuza. From Jodhpur, Jodhpur State, April 26, 1937. Fruit flattened 1 by 6 inches, smooth with scattered strong netlines, gold, blotched more or less with deeper gold; flesh 2 inches thick, salmon, insipid.

124552. No. 2795. Kharbuza. From Hyderabad, Sind State, April 28, 1937. Fruit more or less flattened, 8 by 4 to 6 inches, sometimes with traces of ribs, smooth, usually golden brown with a trace of red shading to deep mahogany; flesh rather thin, yellow green, fragrant, sweet.

124523 to 124611-Continued.

124553. No. 2869. From Jungshalis, Sind State, April 30, 1937. Fruit smooth, yellow, elongate, 10 by 8 inches, exceedingly fragrant; flesh salmon, rather flavorless.

124554. No. 2876. From Amritsar, Punjab State, May 4, 1937. Fruit flattened, 6 by 3 or 4 inches, smooth with large blossom scar, lemon yellow often attractively flecked with green, fragrant; flesh thin, white, insipid.

124555. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.

No. 2845. From Anakapalle, Madras Presidency, April 30, 1937.

124556. CUCUMIS sp. Cucurbitaceae.

No. 2849. Velerika. From Coimbatore, Madras Presidency, April 30, 1937.

124557. Cucumis sp. Cucurbitaceae.

No. 2854. From Hyderabad, Sind State, April 30, 1937. A very small variety.

124558 to 124560. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.

124558. No. 2798. Kadu. From Hyderabad, Sind State, April 28, 1937. Fruit football-shaped, 14 inches long, deeply ribbed, pink brown, smooth. Used like summer squash when green and for pies when ripe.

124559. No. 2835. Kadu. From Hyderabad, Sind State, April 30, 1937. A mixture of local varieties, all good keepers and good vegetables when green.

124560. No. 2859. From Godaneri, Madras Presidency, April 30, 1937.

124561. CUPANIA sp. Sapindaceae.

No. 2888. From Lahore, Punjab, May 4, 1937. A small ornamental evergreen tree.

124562. CYAMOPSIS TETRAGONOLOBA (L.)
Taub. Fabaceae. Guar.

No. 2829. From Hyderabad, Sind State, April 30, 1937.

For previous introduction and description see 124458.

124563. Daucus carota L. Apiaceae.

Carrot.

No. 2814. From Hyderabad, Sind State, April 28, 1937.

124564. DELONIX REGIA (Boj.) Raf. Caesalpiniaceae. Royal poinciana.

No. 2821. From Karachi, Sind State, April 30, 1937. There are many forms of this tree, varying in flower color and tree-habit. This form is dwarf, blooming at the height of 5 feet. The tree from which these fruits were taken had a trunk 16 inches in diameter, a spreading top 15 feet high, and lovely orange-maroon flowers.

For previous introduction see 114938.

124523 to 124611—Continued.

124565. DIOSPYROS MONTANA ROXD. Diospyraceae. Mountain persimmon. No. 2878. From Labore, Punjab, May

4, 1937. An attractive small tree.

For previous introduction and description see 124229.

124566. DIOSPYROS PEREGRINA (Gaertn.)
Guerke. Diospyraceae. Persimmon.
No. 2885. From Lahore, Punjab, May
4, 1937. A handsome, medium-sized tree

whose fruits are used medicinally and for tanning. The seeds yield an oil.

For previous introduction see 98844.

124567 and 124568. DOLICHOS LABLAB L.
Fabaceae. Hyacinth-bean.

124567. No. 2850. From Coimbatore, Madras Presidency, April 30, 1937.

124568. No. 2851. From Dumugudam, Madras Presidency, said to be grown by the Kayas, an aboriginal tribe of the Godaneri District.

124569. ELEUSINE CORACANA (L.) Gaertn.
Poaceae. African millet.

No. 2857. From Coimbatore, Madre Presidency, April 30, 1937.

124570. FIRMIANA COLORATA (Roxb.) R. Br. Sterculiaceae.

No. 2877. From Lahore, Punjab, May 4, 1937. An ornamental tree with handsome brilliant-orange flowers which appear before the leaves.

For previous introduction see 59678.

124571 to 124575. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae.

Calabash gourd.

124571. No. 2820. From Hyderabad, Sind State, April 29, 1937.

124572. No. 2841. From Anakapalle, Madras Presidency, April 30, 1937.

dras Presidency, April 30, 1937. 124573. No. 2855. Said to be an Assam variety with fruits about 3 feet long.

124574. No. 2864. From Godaneri, Madras Presidency, April 30, 1937.

124575. No. 2896. From Peshawar, North West Frontier Province, May 5, 1937. Fruit bitter and of interest only to gourd growers.

124576 to 124579 LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae.

Singkwa towelgourd.

124576. No. 2837. From Udaipur, Mewar State, April 26, 1937, but said to have come from the nearby village of Salumbar; fruits over 5 feet long.

124577. No. 2843. From Anakapalle, Madras Presidency, April 30, 1937.

124578. No. 2860. From Godaneri, Madras Presidency, April 30, 1937.

124523 to 124611—Continued.

124579. No. 2891. Presented by the Superintendent of the State gardens, Salumbar, Mewar State, May 4, 1937. Fruits said to be over 5 feet long.

124580. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 2863. From Godaneri, Madras Presidency, April 30, 1937. Said to be a wild edible variety.

124581 and 124582. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato. From Hyderabad, Sind State, April 28, 1937.

124581. No. 2796. Fruit red, subglobose, flattened or elongate, 1½ inches long. Grown in extreme heat.

124582. No. 2797. Fruit red, flattened, 4 inches across, much ribbed. Grown in extreme heat.

124583. MILLETTIA OVALIFOLIA (Wight and Arn.) Kurz. Fabaceae.

No. 2884. From Lahore, Punjab, May 4, 1937. A medium-sized tree with odd-pinnate leaves from 4 to 18 inches long and slender axillary racemes of small blue fragrant flowers. Native to Burma.

For previous introduction see 123224.

124584 to 124587. Momordica Charantia L. Cucurbitaceae. Balsam-pear.

124584. No. 2831. Karela. From Hyderabad, Sind State, April 30, 1937.
A long variety.

124585. No. 2832. Karela. From Hyderabad, Sind State, April 30, 1937. A small round variety.

124586. No. 2844. From Anakapalle, Madras Presidency, April 30, 1937.

124587. No. 2890. Presented by the Superintendent of the State gardens, Salumbar, Mewar State, May 5, 1937. Fruits said to be 18 inches long or about double the length of any other known Indian race.

124588. NICOTIANA TABACUM L. Solanaceae. Common tobacco.

No. 2842. From Anakapalle, Madras Presidency, April 30, 1937.

124589. ORYZA SATIVA L. Poaceae. Rice. No. 2900. From Peshawar, North West Frontier Province, May 8, 1937.

124590 to 124593. Phaseolus spp. Fabacceae.

124590 to 124592. Phaseolus lunatus L. Lima bean.

124590. No. 2897. From Peshawar, North West Frontier Province, May 5, 1937.

124591. No. 2824. From Hyderabad, Sind State, April 30, 1937.

124523 to 124611-Continued.

124592. No. 2898. From Peshawar, North West Frontier Province, May 5, 1937.

124593. PHASEOLUS VULGARIS L.

Common bean.

No. 2892. From Peshawar, North West Frontier Province, May 5, 1937.

124594. PHOENIX RUPICOLA T. Anders.
Phoenicaceae. Cliff date palm.

No. 2882. From Lahore, Punjab State, May 4, 1937. A Himalayan palm with a solitary, slender, naked stem 15 to 20 feet high, bright-green leaves 10 feet long, and shining yellow oblong fruits.

For previous introduction see 116530.

124595. PISUM SATIVUM L. Fabaceae.

No. 2894. From Peshawar, North West Frontier Province, May 5, 1937.

124596. PUTRANJIVA ROXBURGHII Wall. Euphorbiaceae. Indian amuletplant.

No. 2883. From Lahore, Punjab State, May 4, 1937. A spreading evergreen tree of attractive form, with small whitish bitter fruits the size of a cherry. From the seeds is obtained an oil used by the natives of India for burning. The polished seeds are strung and used as amulets. The hard gray wood is used for making tools.

For previous introduction see 116578.

124597. RAPHANUS SATIVUS L. Brassicaceae. Radish.

No. 2823. Muli. From Hyderabad, Sind State, April 30, 1937. A long white hotweather radish.

124598 to 124601. SOLANUM MELONGENA L. Solanaceae. Eggplant.

124598. No. 2830. Bengan or Vangan. From Hyderabad, Sind State, April 30, 1937. A long purple variety.

124599. No. 2836. Vangan. From Hyderabad, Sind State, April 30, 1937. A round purple fruit.

124600. No. 2848. From Mysore State, April 30, 1937.

124601. No. 2862. From Godaneri, Madras Presidency, April 30, 1937.

124602. STERCULIA sp. Sterculiaceae.

No. 2903. From Peshawar, North West Frontier Province, May 8, 1937. An ornamental tree with narrow, three-lobed leaves 4 inches long.

124603. TRICHOSANTHES ANGUINA L. Cucurbitaceae. Snakegourd.

No. 2840. From Anakapalle, Madras Presidency, April 30, 1937.

124523 to 124611-Continued.

124604. TRIGONELLA FOENUM-GRAECUM L. Fabaceae. Fenugreek.

No. 2838. *Methi*. From Hyderabad, Sind State, April 30, 1937. A popular winter potherb; seeds also used for flavoring. 124605. Toona CILIATA Roemer. Meliaceae.

No. 2880. Toon. From Lahore, Punjab, May 4, 1937. A large tropical tree with nearly evergreen foliage and white, honeyscented flowers. The fine red wood, which is used for furniture, carving, and for making cigar boxes, is very durable and is not attacked by termites. Native to India.

For previous introduction see 116795.

124606 to 124609. Vigna spp. Fabaceae.

124606. VIGNA CYLINDRICA (Stickm.) Skeels. Catjang.

No. 2853. From Coimbatore, Madras Presidency, April 30, 1937.

124607 to 124609. VIGNA SINENSIS (Torner) Savi. Cowpea.

124607. No. 2852. From Madras, April 30, 1937.

124608. No. 2834. Goar. From Hyderabad, Sind State, April 30, 1937. Eaten dry.

124609. No. 2893. From Peshawar, North West Frontier Province, May 5, 1937.

124610. XYLOSMA LONGIFOLIA Clos. Flacourtiaceae.

No. 2889. From Lahore, Punjab State, May 4, 1937. An evergreen shrub with rather long, slender branches and linear to oblong-lanceolate leathery leaves 4 to 9 inches long. Native to the Himalayan region at altitudes up to 5,000 feet.

124611. (Undetermined.)

No. 2858. From Udaipur, Mewar State, April 22, 1937. An evergreen shrub or small tree, growing in the desert and bearing an abundance of small white fruits which are eaten by birds. An ornamental for use in warm desert sections.

124612 to 124614. FORTUNELLA Spp. Rutaceae.

Plants growing at the United States Plant Introduction Garden, Glenn Dale, Md.; originally grown by the former Office of Crop Physiology and Breeding Investigations. Numbered in June 1937.

124612. FORTUNELLA CRASSIFOLIA Swingle.

Meiwa kumquat.

C. P. B. No. 7946. An evergreen shrub or dwarf tree with very thick leaves and numerous yellowish fruits over an inch in diameter, broadly oval or ovate in outline. Probably native to China. 124612 to 124614—Continued.

124613. FORTUNELLA JAPONICA (Thunb.) Swingle. Kumquat.

C. P. B. No. 7335.

For previous introduction see 30429.

124614. FORTUNELLA MARGARITA (Lour.) Swingle. Oval kumquat.

C. P. B. 11315.

124615. Passiflora purpusii Killip. Passifloraceae. Passiflora.

From Mexico. Plants purchased from Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received May 29, 1937.

A passifiora with ovate, cordate leaves about 6 inches long and flowers about 2 inches wide. Native to Veracruz, Mexico.

124616. SACCHARUM OFFICINARUM L. Poaceae. Sugarcane.

From the Union of South Africa. Cuttings presented by the Natal Herbarium, Durban. Received June 29, 1937.

124617. Cucumis melo L. Cucurbitaceae. Muskmelon.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 12, 1937.

No. 2874. Kharbuza. From Lahore, Punjab, May 1, 1937. Fruit flattened, 6 by 4 inches, yellow with deep-green rib lines, coarsely and strongly netted, fragrant; flesh salmon, thick, flavorless.

124618. Asparagus officinalis L. Convallariaceae. Garden asparagus.

From Rumania. Seeds presented by Dr. Al. Borza, Jardin Botanique de l'Université, Cluj. Received June 30, 1937.

From hay meadows.

124619 to 124621.

From French Equatorial Africa. Seeds presented by Miss Margaret Haines, Bangassou, Oubangui-Chari. Received June 21, 1937. 124619 to 124621-Continued.

124619. Annona senegalensis Pers. Annonaceae.

A shrub or small tree, sometimes 20 feet high, native to both eastern and western tropical Africa. The oval, blue-green, leathery leaves are up to 5 inches long, and the orange-yellow, edible fruits, over 1 inch in diameter, contain an aromatic darkred pulp which suggests that of the cherimoya of tropical America.

For previous introduction see 55554.

124620. Brazzeia sp. Scytopetalaceae.

The members of this genus are tropical African trees or shrubs with alternate, gray-green, entire leaves and rather large flowers borne on the trunk in corymblike clusters.

124621. SOLANUM sp. Solanaceae.

124622 to 124624. Gossypium. Malvaceae. Cotton.

From Cyprus. Seeds presented by the Director of Agriculture, Nicosia, at the request of the Empire Cotton Growing Corporation, London, England. Received June 30, 1937.

124622. Lapithos.

124623. Mesowhite.

124624. Titsiros.

124625. CERCIDIUM PRAECOX (Ruiz and Pav.) Harms. Caesalpiniaceae.

From Venezuela. Seeds collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received May 3, 1935. Numbered in June 1937.

No. 3139. Yabo. From near Barquisemeto, March 5, 1935. A spiny shrub or small tree about 25 feet high, with pale-green bark, ascending branches, bipinnate leaves, and small yellow flowers. Found growing in dry semidesert lands among cacti and spiny shrubs. Native to northwestern South America.

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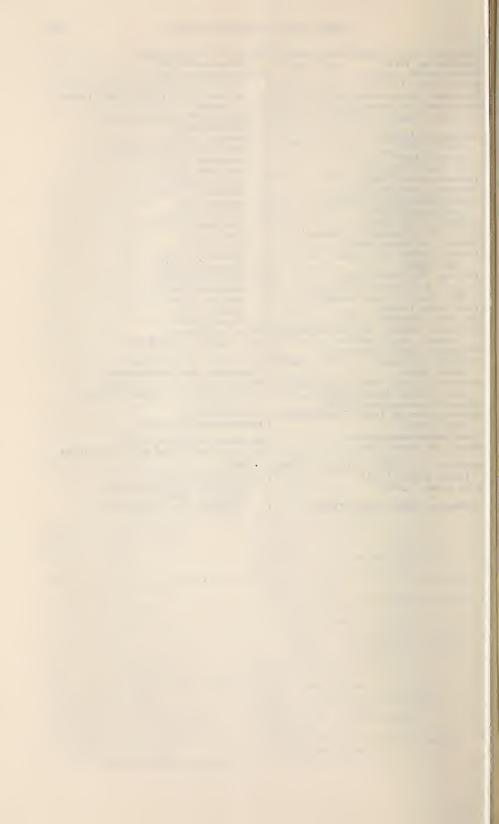
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# UNITED STATES DEPARTMENT OF AGRICULTURE



# **INVENTORY No. 132**



Washington, D. C.

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**Issued August 1942** 

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1937 (Nos. 124626 to 124968)

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# INTRODUCTORY STATEMENT

This inventory, No. 132, records the plant material received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1937 (Nos. 124626 to 124968).

The botanical determinations of seeds have been made and the nomenclature determined by Paul Russell, who has had general

supervision of this inventory.

B. Y. Morrison,
Principal Horticulturist, in Charge.

Division of Plant Exploration and Introduction, Washington, D. C., December 9, 1941.

# INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

### 124626 to 124628.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received July 3, 1937.

124626. STREPTANTHERA CUPREA Sweet. Iridaceae.

A herbaceous perennial with several sword-shaped leaves, a stem about 6 inches high, and 2 to 4 yellow-copper-colored, short-tubed, campanulate flowers. Native to southern Africa.

124627. HAEMANTHUS MULTIFLORUS Martyn. Amaryllidaceae. Bloodlily.

A tropical African species with 3 to 4 oblong leaves, 6 to 10 inches long, on a short separate stem, and a straight scape, 1 to 3 feet high, bearing a large umbel of 30 to 100, usually blood-red flowers with long exserted red filaments and prominent yellow anthers.

For previous introduction see 118421. 124628. Homeria sp. Iridaceae.

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#### 124629 and 124630. Prunus Armeniaca | 124633 to 124637—Continued. Amygdalaceae. Apricot.

From Mexico. Seeds presented by E. O. Matthews, Parral, Chihuahua. Received July 2, 1937.

124629. An orange apricot, very sweet when ripe, with no fiber. Fruit 1½ inches long by 1 inch wide, slightly acid.

124630. A white apricot. Fruit small, round, 1 inch in diameter, of excellent quality, not at all acid, no fiber.

#### 124631 124632. Pyrolinion spp. and Amaryllidaceae.

From Peru. Bulbs presented by the Director, Jardín Botánico de las Escuela de Agricul-tura, Lima. Received July 9, 1937.

124631. Pyrolirion Aureum (Ruiz and Pav.) Herb. (Zephyranthes aurea Benth. and Hook. f.).

A Peruvian pyrolirion with several narrow-linear leaves about 1 foot long and erect, bright-yellow, funnel-shaped flowers.

Pyrolinion flavum Herb. yranthes flava Nichols.).

A pyrolirion with scapes 4 to 12 inches high or higher, exceeding the leaves, and a large, bright-yellow flower. Apparently known only in cultivation through introduction from Peru.

#### 124633 to 124637. Hibiscus. Malvaceae.

om Florida. A collection of seedlings growing at the United States Plant Intro-duction Garden, Coconut Grove. Numbered From Florida. in July 1937.

124633. Variety Painted Lady. A seedling of an unnamed Hawaiian variety, raised at the Plant Introduction Garden. It is vigorous in growth with some branches tending to droop. The flower is 4½ to 5 inches across, thulite pink merging into a white center. The narrow petals are touched with earmine on margins at base, and the stigmas are grenadine red. The flower with its light center is a striking contrast to most other hibiscus varieties.

124634. Variety Aldebaran. A seedling of an unnamed Hawaiian variety raised at the Plant Introduction Garden. This the Plant Introduction Garden. This plant is vigorous in growth and of upright habit, with the new stems dark brownish red and foliage a rich dark green. The flower, about 4½ inches across, is spectrum red, merging into an indefinitely marked carmine eye at the center. The petals are broad. This is one of the most intensely red varieties. center. The petals are broad. This is one of the most intensely red varieties, and the brilliant flowers make a pleasing contrast with the very deep-green foliage.

124635. Variety Jupiter. A seedling of an unnamed Hawaiian variety. It is a vigorous grower. The flowers, 5½ to 6½ inches across, are apricot yellow, motited with light coral. The coral fades as the day advances, leaving the color a fairly clear yellow. The eye is flesh ocher and the stigmas scarlet. This is one of the most admired of the yellow hibisus hibiscus.

124636. Variety Gerrit Wilder. This variety is vigorous, bushy, somewhat recumbent in habit, and free flowering. The flower color is particularly pleasing; it shades from rhodonite pink at the petal apex to a carmine center. The stigmas are buff yellow. Flowers measure 4½ to 5 inches in diameter. Cuttings root easily.

124637. Variety Golden Bell. History unknown, but the variety is believed to have originated as a seedling (probably of a Hawaiian variety) at the United States Plant Introduction Garden at Coconut Grove. The color is apricot yellow with an eye of English red, the eye touched around its margin with grenadine red. The stigmas are spectrum red. This flower is somewhat more campanulate in form than the average hibiscus and is rather stiff in anpearance. and is rather stiff in appearance.

#### 124638 to 124640. EUCALYPTUS SDD. Myrtaceae.

From California. Seeds presented by John rintendent, Golden Gate McLaren, Superintendent, Golden Gate Park, San Francisco. Received July 12, 1937.

# 124638. EUCALYPTUS COCCIFERA Hook. f.

A handsome Tasmanian eucalypt up to 30 feet high, with leaves of two forms; in young trees these are opposite and erect and in full-grown trees they are alternate, stalked, and very narrow. The small flowers are white.

#### 124639. EUCALYPTUS GUNNII Hook. f. Cider gum.

A small, often scrubby alpine eucalypt, growing at altitudes of 2,000 to 5,000 feet in Australia and Tasmania. The linear-lanceolate leaves, 2 to 3 inches long, are eaten readily by cattle. The small white flowers are in axillary clusters. The sugary sap is sometimes used to make a sweet cider. In Florida the tree thrives in deep cider. sandy soil.

For previous introduction see 54469.

# 124640. EUCALYPTUS PAUCIFLORA Sieber. White gum.

An Australian tree 100 feet in height and about 4 feet in diameter. It grows well in swampy lowlands and the timber is used for general building purposes.

For previous introduction see 75644,

# 124641 and 124642.

From Tasmania. Seeds presented by L. A. Evans, Sandy Bay, Hobart. Received July 12, 1937.

124641. Coprosma nytida Hook. f. Rubiaceae.

124642. SOLANUM AVICULARE FORST. lanaceae. Nightshade.

A bushy shrub 6 to 8 feet high, with laciniate leaves 10 inches long, small cymes of large dark-purple flowers, and yellowish fruits 1 inch in diameter which are used for making marmalade.

For previous introduction see 115531.

# 124643 to 124645. Gossypium. Malva-

om Africa. Seeds presented by the Domira Bay Experimental Station, Salima, Nyasa-land, through the Empire Cotton Growing Corporation, London, England. Received From Africa. July 9, 1937.

124643. S. G. 27. A selection fro original Nyasaland Upland cotton. selection from the

124644. S. G. 29. A selection fro original Nyasaland Upland cotton. selection from the

124645. Over-the-Top.

#### 1124646 to 124671.

.From the British West Indies. Seeds presented by J. B. Hutchinson, Cotton Research Station, Trinidad, through the Empire Cotton Growing Corporation. Received July 12, 1937.

124646 to 124661. Gossypium. Malvaceae. Cotton.

124646. A-8.

124647. T-3, Ariatie.

124648. T-4, Ariatie.

124649, H-9.

124650. H-10.

124651. N-9.

124652. Type 12.

3124653. N-19.

124654, N-21,

124655. Type 24.

124656. Type 26.

124657. Type 256-G-7498.

124658. Na. 185-G-10570.

124659. Type 268-35-22191.

124660. F-2190.

124661. Type 4-G-7576, New World.

124662. Gossypium stocksii Masters. Cotton.

A shrubby tropical Indian cotton, with small yellow flowers, which is native to the Sind District; it is of the 13-haploid-chromosome group and therefore will not cross with the American types. The seed is difficult to germinate because of the hard coat.

For previous introduction see 101307.

124663. STURTIA GOSSYPIOIDES R. Br. Malvaceae.

A large shrub, closely related to cotton, with broadly oval, stiff leaves up to 2 inches long, and large purple flowers. Native to Australia.

For previous introduction see 106722.

124664 to 124671, Gossypium. Malvaceae. Cotton.

124664. Type 14-S. Grenadine White Pollen.

124665. Type 9-G-10473-S. Meade.

124666. Type 261-G-7519-S. Moco.

**124667.** Type 279-35-22377-S. *Red Ta-baquite*, a semiwild type.

124668. Type 18-G-1563-S. Sea Island (V. 135). The standard superfine cotton of St. Vincent.

124669. Type 15-G-10465-S. Sea Island White Flower.

124670. Type 285-G-10740-S. Mont. Sea Island.

124671. HA. 259-G-10599-S. Red Sea Island.

124672. FIRMIANA BARTERI (Masters) Schum. (Sterculia barteri Masters). Sterculiaceae.

From Gold Coast, Africa. Seeds presented by S. C. Vegire, Koforidua, at the request of L. A. King-Church, Conservator of Forests. Received June 9, 1937.

#### 124672—Continued.

An ornamental tree, native to tropical Africa, with rounded cordate leaves and loose panicles of small coral-pink flowers. The wood is light and used as floats for fish nets, and the fiber is used for making rope.

For previous introduction see 80659.

#### 124673 and 124674.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received July 17, 1937.

124673. HARDWICKIA BINATA Roxb. Caesalpiniaceae.

Presented by the Forest Research Institute, Dehra Dun, India. A large gregarious leguminous tree up to 100 feet high, with leaves composed of 2 oblique-ovate leathery leaflets resembling those of a bauhinia. The small greenish-yellow flowers are in large axillary and terminal panicles. Native to southern India.

124674. Tabebuia Lucida Britton. Bignoniaceae.

Presented by the Experiment Station, Mayaguez, Puerto Rico. A small tree with shining, leathery, 2- to 5-foliolate leaves and pink flowers about 2 inches long in clusters. Native to the West Indies.

124675. BAMBUSA MULTIPLEX (Lour.) Raeusch. Poaceae, Hedge bamboo.

From China. Seeds presented by Dr. F. A. McClure, Lingman University, Canton. Received July 21, 1937.

No. 1240. From the Lingnan University Bamboo Garden.

For previous introduction see 101503.

**124676.** Caesalpinia sp. Caesalpiniaceae.

From the Belgian Congo. Seeds received through the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture. Received July 22, 1937.

124677. SICANA ODORIFERA (Vell.) Naud. Cucurbitaceae. Casabanana.

From Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Huatusco. Received July 15, 1937.

A subtropical ornamental vine with cylindrical fruits over a foot long, which have finely mottled dark-reddish rind and yellow flesh with a pleasing odor somewhat like that of the muskmelon. The fruit is used for preserves or dulces.

For previous introduction see 109872.

124678 and 124679. TRIFOLIUM PRATENSE L. Fabaceae. Red clover.

From New Zealand. Seeds presented by the Grasslands Division, Plant Research Bureau, Palmerston North. Received July 20, 1937.

124678. Sta. No. As. 442. Montgomery Extra Late Flowering.

124679. Sta. No. As. 446. New Zealand Broad. 124680 to 124682. Arachis hypogaea L. | 124690 to 124694—Continued. Fabaceae. Peanut.

From Costa Rica. Seeds presented by J. M. Orozco C., Jefe de la Sección de Botánica, Centro Nacional de Agricultura, San Pedro de Oca. Received July 27, 1937.

124680. No. 1.

124681, No. 2.

124682. No. 3.

Ruta-124683 to 124689. CITRUS spp.

From Brazil. Seeds presented by P. H. Rolfs, Escola Superior de Agricultura e Veteri-naria, Viçosa, Minas Geraes, at the request of L. C. Corbett, Bureau of Plant Industry, Received July 24, 1937.

124683. CITRUS GRANDIS (L.) Osbeck. Grapefruit.

Zambôa pummelo. Fruits smaller than the average for grapefruit; pyriform; color darker yellow than grapefruit to almost as dark as a Dancy tangerine when fully ripe.

124684 and 124685. CITRUS LIMONIA OSbeck. Lemon.

124684. Limão Rosa (Rose lemon). A very productive variety that is being planted in most of the Brazilian States and as far south as Argentina.

124685. Limão Marfin (Ivory lemon). Tree very weak grower, erect, leaves small, ovate, up to 2 inches long; fruit oblong, 2½ by 1¾ inches, ivory yellow, tinged with orange.

124686. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Mandarin orange.

Fruit about as heavy as the Dancy, but more nearly spherical; color lemon to orange; some seedling trees very seedy; leaves small, about one-half the length of those of Dancy. The tree fruits later than the Salsuma but earlier than the Dancy.

124687 to 124689. CITRUS SINENSIS Orange. Osbeck.

**4687.** Selecta de Viçosa. The parent variety from which the Washington Navel is doubtless a bud or a seed mutant.

124688. Laranja Cipó, "trailing or vining orange," so called on account of the long trailing habit of the limbs. Fruit equal to the Washington Navel, size 150 and larger, very uniform in size; matures about the same date and retains its excellent qualities much longer. Its spreading habits and dense foliage make it especially attractive. longer. Its spreading habits and dense foliage make it especially attractive as an arbor. Planted close (12 feet) it forms a low dense screen.

4689. Pera Camargo. "Camargo's pear-shaped orange." A new variety, later and smaller than the Valencia, which is rapidly taking first place as a commercial variety. 124689. Pera

124690 to 124694. ORYZA SATIVA L. Poa-

From India. Seeds presented by G. R. Srinivasa Ayyangar, Agricultural Research Institute. Coimbatore, Madras Presidency, at the request of Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received July 28, 1937.

124690. Adt. 9. Strain from Poonkar.

124691. Ptb. 5. Velutharikayama.

124692. Ptb. 8. Thavalakanna-red rice.

124693. No. 10. Thekkancheera.

4694. T. 699. A long type of grain which matures in 102 days. 124694. T. 699.

124695 to 124722.

From China. Seeds presented by the Director, Lu-shan Arboretum and Botanical Garden, Kuling, Kuikiang. Received July 21,

124695 to 124697. ACER spp. Aceraceae. Maple.

124695. ACER BUERGERIANUM Miquel.
Trident maple.

small tree with glabrous branches, 3-lobed, bright-green, papery leaves with entire margins, inconspicuous greenish flowers appearing at the same time as the leaves, and glabrous fruits about four-fifths of an inch long. Native to eastern China and Japan.

For previous introduction see 44660.

124696. ACER DAVIDI Franch.

A native Chinese maple, 50 to 60 feet high, with large, oval, heart-shaped, coarsely toothed leaves and long pendent clusters of fruits.

For previous introduction see 103112. 124697. ACER OLIVERIANUM Pax.

124698 to 124702. LINDERA spp. Lauraceae.

124698. LINDERA GLAUCA (Sieb. and Zucc.) Blume (Benzoin glaucum (Sieb. and Zucc.) Blume).

A deciduous shrub up to 12 feet high, with oblong-elliptic leaves, pubescent be-neath, 1 to 2 inches long, and small yel-low flowers followed by round black drupes.

For previous introduction see 116858,

124699. LINDERA UMBELLATA SERICEA (Sieb. and Zucc.) Makino (Benzoin sericeum Sieb. and Zucc.).

A variety with somewhat narrower leaves acute at both ends, globose berries the size of peas. Native to Japan. somewhat narrower

124700. LINDERA RUBRONERVIA Gamble (Benzoin rubronervium (Gamble) Rehder).

A shrub 6 to 18 feet high, growing in thickets, with thin-elliptic leaves about 3 inches long, dark shining green above, and small globose black fruits. Native to China at altitudes of about 4,000 feet.

124701. LINDERA STRYCHNIFOLIA (Blume) Villar (Benzoin strychnifolium Blume).

A small evergreen tree up to 20 feet high, with shining elliptic leaves, dark green above, and small greenish, ellip-soid berries. Native to Japan.

124702. LINDERA UMBELLATA Thunb.

A shrub up to 9 feet high, with elliptic to obovate-oblong entire leaves and umbels of small yellow flowers appearing with the leaves and followed by small, subglobose, black fruits. Native to Japan. Japan.

124695 to 124722—Continued.

124703. Berberis Virgetorum Schneid. Berberidaceae.

A shrub up to 5 feet high, with fascicled, oblong-rhomboid leaves 2 to 5 inches long and clusters of several small yellow flowers. Native to Kiangsi Province, central China.

124704. CELASTRUS GEMMATA LOES. Celastraceae.

A woody climber up to 18 feet long, with ovate-elliptic leaves 2 to 4 inches long and cymes of large golden-yellow fruits. Native to central and western China.

For previous introduction see 116124.

124705. Evodia glauca Miquel. Rutaceae.

A shrub or medium-sized tree with pinnate leaves and small white flowers. Native to eastern and central China.

124706. EVODIA OFFICINALIS Dode. Rutaceae.

A shrub or small tree up to about 15 feet high, with pinnate leaves having 7 to 15 ovate or elliptic-ovate leaflets and corymbs of small greenish-yellow or greenish-white flowers, followed by small red pods containing black seeds. Native to central and western China.

For previous introduction see 116871.

124707. HOSTA VENTRICOSA (Salisb.) Stearn. Liliaceae.

A plantain-lily with broad cordate-ovate leaf blades about 10 inches in length and lavender-purple flowers about 2 inches long in elongated racemes on scapes up to 3 feet tall. Native to China.

For previous introduction see 117058.

124708. ILEX PEDUNCULOSA Miquel. Aquifoliaceae. Longstalk holly.

An evergreen shrub or small tree up to 30 feet high, native to Japan. The ovate, entire leaves, 1 to 3 inches long, are lustrous green above, and the small flowers, in slender-stemmed cymes, on growth of the current season, are followed by brightred fruits one-fourth of an inch in diameter, on slender pedicels 1 inch long.

For previous introduction see 102299.

124709 to 124713. LILIUM spp. Liliaceae. Lily.

124709. LILIUM BROWNII VAR. COLCHESTERI Wilson.

A trumpet-flowered lily, native throughout China from sea level to 5,000 feet altitude, often cultivated for the bulbs, which are considered a table delicacy. The stems are about 3 feet tall, and the fragrant flowers, 4 to 6 inches long, are rosy purple outside, creamy white Inside, with the reflexed ends of the segments pure white.

For previous introduction see 99888.

124710. LILIUM CATHAYANUM Wilson.

A lily with erect, moderately stout stems 2 to 4 feet high and about 6 shining, dark-green, oblong-ovate stem leaves. The flowers are creamy or greenish white on the outside, reddish-brown striped within, with perianth segments about 5 inches long. Native to the mountains of eastern and central China.

124695 to 124722—Continued.

124711. LILIUM SARGENTIAE Wilson. Sargent lily.

This lily, native to western China, has a stout stem 4 to 8 feet high, green tinged with purple, and a hundred or more thickly scattered horizontal leaves 2 to 4 inches long. The fragrant flowers are waxy white inside, tinged with yellow near the throat and reddish purple outside.

For previous introduction see 66098.

124712. LILIUM SPECIOSUM GLORIOSOIDES Baker

A variety native to the mountains of central China and differing from the type by its narrower leaves and much reflexed, crisped perianth segments with scarlet rather than crimson spots.

124713. LILIUM TSINGTAUENSE Gilg.

A lily of the Pseudolirion group, up to 3 feet high, with scattered and whorled oblong-oblanceolate leaves and 1 to 6 erect, inodorous orange flowers, the segments about 2 inches long. Native to Shantung, China, and Chosen.

For previous introduction see 112857.

124714. LIRIODENDRON CHINENSE (Hemsl.) Sargent. Magnoliaceae.

An ornamental deciduous tree up to 50 feet high, native to central China. The leaves, 5 to 6 inches long, have 4 acute or acuminate lobes, rounded or slightly cordate at the base; the tuliplike flower is about 2 inches long. This species is somewhat more tender than our native species, Liriodendron tulipifera.

For previous introduction see 111362.

124715. NYSSA SINENSIS Oliv. Cornaceae.

A deciduous shrub or small tree about 20 feet high, with oblong-elliptic, membranous leaves 4 to 6 inches long, inconspicuous flowers, and ovoid blue fruits about one-half inch long. The leaves become brilliant red in the autumn. It is native to western China.

For previous introduction see 105651.

124716. REHDERODENDRON MACROCARPUM Hu. Styracaceae,

A tree about 20 feet high, native to Szechwan Province, China. The papery, reddish-green, oval-elliptic leaves are about 4 inches long, and the racemes of showy white flowers are followed by ribbed, woody, oblong fruits, 2 inches in length.

For previous introduction see 104705.

124717 to 124720. RHODODENDRON spp. Ericaceae.

124717. RHODODENDRON FORTUNEI Lindl.

A shrub 10 to 12 feet high, native to Chekiang, China. The oblong-elliptic leaves, 3 to 10 inches long, are dark green above and pale glaucous green beneath. The inflorescence is a loosely racemose umbel of 6 to 12 funnel-campanulate, pale-rose flowers 3 to 4 inches across

For previous introduction see 97393.

#### 124695 to 124722—Continued.

124718. RHODODENDRON MARIESII Hemsl. and Wilson.

A deciduous shrub up to 8 feet high, native to central China, and related to Rhododendron rhombicum. The ovate leaves, 2 to 3 inches long, are silky pubescent on the midrib beneath, and the 1 to 3 rose-pink, broadly campanulate flowers are 1 to 2 inches across.

For previous introduction see 87476.

124719. RHODODENDRON OVATUM (Lindl.) Planch.

An evergreen shrub up to 12 feet high, with broad-ovate leaves about 2 inches long and solitary pale-purple to whitish flowers about  $1\frac{1}{2}$  inches across. Native to central China.

124720. RHODODENDRON SIMSII Planch.

A much-branched shrub usually up to 5 feet high, with persistent or partly persistent, papery leaves and rose-red to dark-red, broad funnelform flowers 2 inches across and 2-to 6-flowered clusters. Native to China.

124721. Styrax dasyantha Perkins. Styracaceae. Snowbell.

An ornamental Chinese shrub or small tree up to 25 feet high, with oblong-elliptic leaves about 3 inches long, and showy white fragrant flowers in slender racemes.

For previous introduction see 118808.

124722. STYRAX PHILADELPHOIDES Perkins. Styracaceae.

A large shrub 5 to 6 feet high, with thin narrowly oblong, hairy leaves 1 to 3 inches long and white flowers one-half inch long in small axillary and terminal racemes. Native to eastern China.

For previous introduction see 116157.

# 124723. Acacia sp. Mimosaceae.

From Ankara, Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry, United States Department of Agriculture. Received July 10, 1936. Numbered in July 1937.

No. 93. From the Ankara bazar, April 15, 1936.

# 124724. Echeveria sp. Crassulaceae.

From Mexico. Seeds presented by E. O. Matthews, Parral, Chihuahua. Received July 27, 1937.

A plant with fleshy light-green leaves and a flower stalk 10 to 15 inches high. The flowers, bright orange to red, tipped with lighter yellow, are very showy and are borne profusely. Found growing on the walls of the mountains west of Parral at 6,500 feet altitude.

# 124725 and 124726. WISTERIA FLORIBUNDA (Willd.) DC. Fabaceae.

From Japan. Plants and cuttings presented by N. Suyetake, Tokyo. Received June 24, 1934. Numbered in August 1937.

A tall woody climber with leaves composed of ovate-elliptic to ovate-oblong leaflets 2 to 4 inches long and long slender racemes of fragrant violet or violet-blue flowers about 1 inch long. Native to Japan.

124725. Variety Koshigaya. From Saitama-ken.

124726. Variety *Ushijima*. From Saitama-ken.

#### 124727 to 124731.

From China. Seeds collected by Capt. F. Kingdon Ward in Yunnan Province and I presented by Sir Lionel de Rothschild, London, England. Received July 23, 1937.

124727. Dysoxylum sp. Meliaceae.

K. W. No. 12746. A large handsome evergreen tree whose fruit is used by the natives as soap. Found at 5,000 feet altitude.

124728. MADHUCA INDICA Gmel. (Bassia latifolia Roxb.). Sapotaceae. Mahwa.

A large tree, native to India, with a short trunk and many spreading branches, forming a dense rounded crown 40 to 50 feet high; the oblong-elliptic leaves are 3 to 5 inches long. The flowers have a velvety chocolate-colored calyx and a palegreen colored corolla with thick juicy petals, which are used in India as food. The ovoid green fruit, 1 to 2 inches long, has a rather granular pulp, not very attractive to western taste, but it is sold in the markets of Yunnan.

For previous introduction see 101089.

124729. Myrica Rubra Sieb. and Zucc. Myricaceae. Yang mei.

K. W. No. 12710. A handsome evergreen tree about 20 feet high, with dark-green-glossy foliage, found in forests of Yunnan at 5.000 feet altitude. The globular fruits, about the size of an apricot, are quite acid, and, owing to their fragility and peculiar structure, do not ship well. The fruits are salted and dried, because the fresh fruits are too soft to appeal to the Chinese-palate.

For previous introduction see 93335.

124730. PORANA sp. Convolvulaceae.

A perennial with annual climbing stems and ovate, entire leaves; flowers not seen. Collected at 4,000 feet altitude.

124731. FIRMIANA COLORATA (ROXD.) R. Br. (Sterculia colorata Roxb.). Sterculiaceae.

A small decidous tree with large roundish 3-lobed leaves and small, very numerous, vivid scarlet flowers, which appear in deuse terminal panicles before the leaves. The tree is quick growing, probably flowers very young. Found in a forest that was mainly evergreen at 5,000 feet altitude.

For previous introduction see 124570.

### 124732 and 124733.

From Cuba. Seeds presented through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received July 28, 1937.

124732. JACARANDA CAUCANA Pittier. Bignoniaceae. Gualanday.

From Barranquilla, Colombia. An erect deciduous tree, native to the Cauca Valley, Colombia, where it is a favorite with the inhabitants because of its blue flowers. These are 1½ inches long, borne in large terminal panicles in summer just after the large pinnate leaves have fallen.

124733. STROPHANTHUS GRATUS (Wall. and Hook.) Baill. Apocynaceae.

Presented by the Department of Agriculture. Gold Coast, West Africa. A rank-growing woody creeper with leathery oblong, acuminate leaves 3 to 6 inches long and large pinkish-white flowers in terminal clusters, followed by enormous fruits nearly 3 feet long. Native to tropical Africa.

For previous introduction see 118001:

124734. BAMBUSA MULTIPLEX (Lour.) Raeusch. Poaceae. Hedge bamboo.

From Florida. Seedlings presented by Julian Nally, Gotha. Received July 16, 1937.

Variety Alphonse Karr. Seedlings collected under a fruiting clump of this variety on the estate of the late Dr. Theo. L. Mead, Oviedo, Fla., and grown to determine whether the characteristic yellow-and-green striping of the culm of the variety is transmitted by seed.

124735. Musa paradisiaca sapientum (L.) Kuntze. Musaceae. Banana.

Plants growing at the United States Plant Introduction Garden, Coconut Grove, Fla. Numbered in July 1937.

P. I. G. 7809. Variety *Gros Michel*. The common banana sold on the market in the United States. The origin of this introduction is at present unknown, but the original plant was grown for many years in the Department greenhouse at Washington, D. C.

124736 to 124745. Triticum Aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by the New England Experiment Farm, Glenn Innes, at the request of Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 6, 1937.

A collection of Kenya wheats that have a very high degree of resistance to stem rust.

124736. Kenya C. 6040.

124737. Kenya C. 6041.

124738. Kenya C. 6042.

124739. Kenya C. 10854.

124740. Kenya C. 10857.

124741. Kenya C. 10858.

124742. Kenya C. 10861.

124743. Kenya C. 10862.

124744. Kenya C. 10864.

124745. Kenya C. 10865.

#### 124746 to 124757.

From India. Seeds purchased from G. Ghose & Co., Town-End, Darjeeling. Received August 3, 1937.

124746. IRIS KUMAONENSIS Wall. Irida ceae.

For previous introduction see 122870.

124747. IRIS sp. Iridaceae.

No. 54.

124748. IRIS sp. Iridaceae.

No. 54-A.

124749. LILIUM POLYPHYLLUM D. Don. Liliaceae. Lily.

For previous introduction see 119261.

124750. LILIUM WALLICHIANUM Schultz. f. Liliaceae. Wallich lily.

For previous introduction see 115983.

124751. Nomocharis sp. Liliaceae.

Received under the name "campanulata," for which a place of publication has not been found.

124752. Nomocharis sp. Liliaceae.

No. 7.

124746 to 124757—Continued.

124753. Paraquilegia sp. Ranunculaceae.

124754. PARAQUILEGIA sp. Ranunculaceae.

Native to the Himalayan region at 13,000 feet altitude.

124755 to 124757. PRUNUS spp. Amygdalaceae.

124755. PRUNUS ACUMINATA (Wall.)
Hook. f. (Laurocerasus acuminata
(Wall.) Roemer). Laurel cherry.

A slender-branched tree 30 to 40 feet in height, with narrow leaves up to 7 inches long and many-flowered racemes of yellowish-white flowers. The fruit is a small oval drupe. The tree is found in the central and eastern Himalayas at altitudes ranging from 5,000 to 7,000 feet.

For previous introduction see 122124.

124756. PRUNUS CERASOIDES D. Don (P. puddum Roxb.). Sikkim cherry.

An Indian cherry, native to the temperate slopes of the Himalayas, with sharply serrate, lanceolate leaves 3 to 5 inches long, umbels of pendulous campanulate rosy-red to white flowers, and red fruits, one-half inch long, having scanty red or yellowish acid flesh.

For previous introduction see 77594. 124757. Prunus Rufa Hook. f.

A wild cherry tree 15 to 20 feet high, with elliptic lanceolate, long-pointed leaves 1 to 4 inches long and small pink flowers one-half inch across followed by ellipsoid fleshy fruits. Native to Sikkim and Nepal at about 13,000 feet altitude.

For previous introduction see 58493.

# 124758 to 125761.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in August 1937.

124758. CASTILLA ELASTICA Cerv. Moraceae. Mexican rubbertree.

P. I. G. 9292. Originally from Nicaragua; the seeds were planted in the Department greenhouse at Washington, D. C., and seedlings were sent to the Coconut Grove Garden in January 1934. A large deciduous tropical American forest tree from which rubber is obtained.

For previous introduction see 77387.

124759. SABAL sp. Phoenicaceae. Palm

P. I. G. 7855. Seeds were received at the garden December 14, 1925, from George Y. Blair, United States San Antonio Field Station. The palm is low-growing and is suitable for planting in front of buildings or wherever low greenery is desired. Received as "Sabal masonii," an unpublished name.

124760. SCHEFFLERA ACTINOPHYLLA (Endl.) Harms (Brassica actinophylla Endl.). Araliaceae.

P. I. G. 3537. Originally from the Botanic Gardens, Brisbane, Australia; received at the garden January 8, 1929. An evergreen tree up to 40 feet high, native to Queensland, Australia, with digitately compound leaves made up of 6 to 16 oblong leaflets a foot long and racemes several feet long of small fragrant flower heads. The

#### 124758 to 124761—Continued.

inflorescence has a decided reddish color because of the unopened buds, which are Eugenia Red,2 and the immature fruits, which are Nopal Red,2 both of which are present at one time. A good honey tree, which does best in moist situations. The mature plant is made up of several unbranched stems of varying lengths, each with terminal whorls of large leaves.

For previous introduction see 108756.

124761. Peltophorum inerme (Roxb.) Llanos. Caesalpiniaceae.

P. I. G. No. 3561. Originally from the Botanic Gardens, Buitenzorg, Java. A tall handsome leguminous tree sometimes 100 feet high, with bipinnate leaves and large terminal panicles of bright-yellow flowers. A good shade tree; native from the Philippines to Australia.

For previous introduction see 122795.

124762 to 124770. ORYZA SATIVA L. Poaceae. Rice.

From Java. Seeds presented by the Landbouwkundig Institut. Buitenzorg. Received August 11, 1937.

124762. Baok 3.

124763. Bali Kambang 37. A pure-line rice.

124764. solo 3. A pure line.

124765. Djalen 2. A pure line.

124766. Major. An unselected variety.

124767, Brondol Poetih 277. A pure line.

124768. Tjina 1. A pure line.

124769. Lati Sail 509.

124770. Chingfow.

124771 to 124801. Phoenix spp. Phoenicaceae. Palm.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale; originally grown by the former Office of Crop Physiology and Breeding Investigations. Numbered in August 1937.

124771 to 124775. PHOENIX CANARIENSIS Chabaud. Canary date palm.

124771. C. P. B. 7396. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received August 30, 1911.

124772. C. P. B. 12553. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received October 22, 1927.

124773. C. P. B. 12557. Seeds presented by Vilmorin-Andrieux & Cie., Paris, Received October 22, 1927.

124774. C. P. B. 12570. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received November 28, 1927. Origin of seeds not known.

124775. C. P. B. 12575. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received November 28, 1927.

124776 to 124792. PHOENIX DACTYLIFERA L. Date palm.

124776. C. P. B. 12681. Amir Hadj. From Baghdad, Mandeli Oasis, Iraq. near the Iranian border. Seeds purchased by R. W. Nixon, Bureau of

### 124771 to 124801-Continued.

Plant Industry, United States Department of Agriculture. Received December 6, 1928. This is perhaps the most famous variety in Iraq. The fruit is medium-sized, oblong, deep amber, with thin red skin and very translucent flesh of rich flavor. The palms are vigorous with heavy trunks and occur only in this oasis.

124777. C. P. B. 12104. Awadi. From Barra, Iraq. Offshoot presented by Mills Bros., through Eugene May, Bureau of Plant Industry, United States Department of Agriculture. Received January 7, 1924.

124778. C. P. B. 11577. Biskri. From Indio, California. Offshoots presented by Bruce Drummond. Received December 27, 1920.

124779 and 124780. Bronsi. From Tripoli, Libya. Seeds presented by Dr. E. I. Fenzi. This variety is not very common; the trees are short with large bunches of large, oblong, brighterimson, very sweet fruits that turn black when ripe.

124779. C. P. B. 11833. Received January 22, 1922.

124780. C. P. B. 12176. Received December 26, 1924.

124781. C. P. B. 12222. Condelia. From Sukkot, Halfa Province, Anglo-Egyptian Sudan. Seeds presented by Gov. T. Leach, Wady, Halfa, through S. C. Mason. Bureau of Plant Industry, United States Department of Agriculture. Received June 12, 1925. An oblong to oval date, which is chestnut brown when ripe.

For previous introduction see 36827.

124782. C. P. B. 12246. Kulma. From the Department of Agriculture, Anglo-Egyptian Sudan. Presented through S. C. Mason. Bureau of Plant Industry, United States Department of Agriculture. Received August 11, 1925. A large brown date over 2 inches long, which is soft and sticky when first ripe but becomes firmer when cured in the sun.

124783. C. P. B. 12540. Medihool. Seeds purchased by W. T. Swingle, Bureau of Plant Industry, United States Department of Agriculture, in Fez, Morocco, May 10, 1927.

124784 and 124785. Saidy. Seeds collected in Khara, Egypt, by S. C. Mason, Bureau of Plant Industry. United States Department of Agriculture.

124784. C. P. B. 11967. Received in July 1922.

124785. C. P. B. 11965. Received September 13, 1922.

124786 and 124787. Tabuni. From Tripoli, Libya; seeds presented by Dr. E. O. Fenzi. The most popular date in Tripoli; the olive-shaped fruit is small to medium, very sweet with no fiber, but will keep only a short time.

124786. C. P. B. 11831. Received January 30, 1922.

124787. C. P. B. 12177. Received December 26, 1924.

124788. C. P. B. 11832. *Uareq*. From Tripoli, Libya. Seeds presented by Dr. E. O. Fenzi. The fruits are said to be left to ripen on the palms and then buried under ground, where they keep perfectly for 5 or more years.

<sup>&</sup>lt;sup>2</sup> Names of colors taken from: RIDGWAY, ROBERT. COLOR STANDARDS AND COLOR NOMEN-CLATURE, Washington, D. C. 1912.

124789 to 124791. From Lima, Peru. Seeds collected by Wilson Popenoe, Bureau of Plant Industry. United States Department of Agriculture. Received September 6, 1921.

124789. C. P. B. 11545-A. A long date.

124790. C. P. B. 11545-B. A large plump date.

124791. C. P. B. 11545-C. A small round date.

124792. C. P. B. 12744. From the Mandeli Oasis, Iraq. Offshoots purchased by R. W. Nixon, Bureau of Plant Industry, United States Department of Agriculture. Received in February 1929.

### 124793. PHOENIX OUSELEYANA Griff.

C. P. B. 13119. From Hassenur Kottendai, Coimbatore, India. Seeds collected by the systematic botanist at Madras, India, and presented by H. L. Sampson, Economic Botanist, Royal Botanic Gardens. Received September 13, 1933.

124794 to 124799. PHOENIX RECLINATA Jacq. Senegal date palm.

124794. C. P. B. 12160. From Uganda, Africa. Seeds collected by H. L. Shantz, Bureau of Plant Industry. United States Department of Agriculture. Received August 1, 1924.

124795. C. P. B. 12904. From the College of Agriculture. Stellenbosch, South Africa. Received July 30, 1930.

124796. C. P. B. 12975. Seeds collected near Victoria Falls, Southern Rhodesia, Africa, and presented by Dr. A. W. Hill, Royal Botanic Gardens, Kew, England. Received May 16, 1920.

124797. C. P. B. 12993. From Santa Barbara Mission, California. Seeds collected by E. S. Kellot and presented through R. W. Nixon, Bureau of Plant Industry, United States Department of Agriculture. Received November 23,

124798, C. P. B. 13021. Seeds collected in Kampala, Uganda, by the assistant botanist and presented by the Royal Botanic Gardens, Kew. England. Received September 20, 1932.

in Nyasaland, Africa, and presented by the Royal Botanic Gardens, Kew. England. Received October 27, 1932.

### 124800. Phoenix Roebelenii O'Brien.

C. P. B. 12630. Seeds presented by Vilmorin-Andrieux & Cie., Paris, France. Received May 23, 1928.

124801. PHOENIX SYLVESTRIS (L.) Roxb.

C. P. B. 11891. From Sind. India. Seeds presented by Prof. T. F. Main. Deputy Director of Agriculture. Received June 22, 1922.

#### 124802 and 124803.

From New York. Seeds presented through Sister M. Juliana, of the Foreign Mission Sisters of St. Dominik, Maryknoll. Received August 16, 1937.

124802. Brassica OLERACEA CAPITATA L. Brassicaceae. Cabbage.

Originally from Japan. Japanese Rainbow cabbage, a variety with green, yellow, and purple leaves mixed in the head.

435769-42-2

#### 124802 and 124803-Continued.

124803, VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae. Asparagus-bean.

Originally from China. Chinese Long bean, a variety with long slender pods, very good as "string beans."

#### 124804 and 124805.

From Florida. Plants growing at the United States Plant Introduction Garden. Coconut Grove. Numbered in August 1937.

124804. CONGEA TOMENTOSA Roxb. Verbenaceae.

A large deciduous climbing shrub with ovate leaves about 3 inches long, heads of 3 to 9 small white flowers in immense terminal panicles, and snowy white to violet velvetlike involucral bracts. Native to India and Burma.

124805. MANIHOT GLAZIOVII Muell. Arg. Euphorbiaceae. Ceara rubbertree.

A medium-sized tree, native to southern Brazil, with a rather dense crown of large 5-lobed peltate leaves, the lobes of which are 3 to 4 inches long. The bark is smooth, shiny brown, with a tendency to peel loose around the trunk, strongly resembling cherry-tree bark. The fruits are round smooth capsules.

For previous introduction see 88372.

# 124806 to 124815. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Argentina. Tubers presented by the Ministry of Agriculture. Buenos Aires. Received August 18, 1937.

124806. Runa. From Tilcara, Jujuy Province.

124807. Morada. From Tilcara, Jujuy Province.

124808. Runa. From La Banda, Tilcara, Jujuy Province.

124809. Collareja. From Tilcara, Jujuy Province.

124810. Collareja. From Tilcara, Jujuy Province.

124811. Criolla. From Potrero de Diaz, Salta Province.

124812. Silvestre. From Lago Pule, Chubut Territory.

124813. Silvestre. From La Pampa.

124814. Collareja. From Tilcara, Jujuy Province.

124815. Collareja. From Tilcara, Jujuy Province.

# 124816 to 124821. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From Australia. Seeds from the New England Experiment Farm, Glen Innes, presented by Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 16, 1937.

124816. Svalofs Extra Kolben II C. 10258.

124817. Svalofs Fylgia C. 10261.

124818. Cross No. 7 C. 10849.

124819. Eng. 3 C. 5261.

124820. Ghurhia C. 6538.

124821. Vencedor C. 8682.

124822 and 124823. ORYZA SATIVA L. | 124825 to 124859—Continued. Rice. Poaceae.

rom the Philippine Islands. Seeds pre-sented by the Director, Bureau of Plant Industry, Manila. Received August 16,

A collection of rice, reported to be resistant to stem rot.

124822. Eloninad, Strain 3.

124823. Raminad, Strain 3.

124824. Amygdalus persica var. Necta-RINA Ait. Amygdalaceae. Nectarine.

From Australia. Plants presented by George W. Althofer, Dripstone, New South Wales. Received August 18, 1937.

Masterpiece.

124825 to 124859. TRITICUM AESTIVUM L. Poaceae. Common wheat.

rom Australia. Seeds from the New England Experiment Farm, Glenn Innes, presented by Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received August 18, 1937. From Australia.

124825. (Clarendon  $\times$  Hope)  $\times$  Dundee, G-1-LO.

124826.  $(Clarendon \times Hope) \times Dundee,$ 8-LO.

124827. Dundee  $\times$  (H44 $\times$  Marquis), G-382-2-3-0.

124828. Dundee  $\times$  (H44 $\times$  Marquis), G-54-

124829. (Federation × Hope), C 9545.

124830.  $(Federation \times Hope) \times Bobin,$ 13-LO.

124831. (. 17-LO.  $(Federation \times Hope) \times Bobin,$ G-

124832.  $(Federation \times Hope) \times Bobin,$ G-12-LO.

 $(Federation \times Hope) \times Dundee,$ G-29-LO.

4834. (Federation  $\times$  Hope)  $\times$  Dundee, 33-G-2-LO. E-

124835.  $(Federation \times Hope) \times Dundee$ , E-29-G-1-LO.

124836. (Federation  $\times$  Hope)  $\times$  Dundee, 29-G-3-LO.

4837. (Federation  $\times$  Hope)  $\times$  Dundee, E-22-91-LO. 124837.

124838. (Federation × Hope S. V.), C. 9541.

124839. (Federation × Webster), C. 9458.

124840. (Ford  $\times$  Minturki), G-8-1-0.

124841.  $(Hope \times Clarendon)$ , G-306-0-0-C-3-GO.

124842.  $(Hope \times Currawa)$ , G-240-45-0-C1.

124843. (Hope  $\times$  Currawa), G-240-54-0-1-

124844.  $Hope \times (Currawa \times Dundee)$ , 319-30-1-4-0.

124845.  $Hope \times (Currawa \times Dundee)$ , 319-30-4-6-0. G-

124846.  $Hope \times (Currawa \times Dundee)$ , 319-30-1-1. G-

124847. Hope × Waratah, G-29-14-0-3-1-

124843. Hope × Waratah, G-5-G-3-0-1, 1- $G_{3}-1-0$ .

124849.  $Hope \times Waratah$ , C-5-G-3-0-0-G4-E3-1-GO.

124850. Hope × Yandilla King, C-2-G1-2-0-C4.

124851. 4851.  $Hope \times Yandilla$  King, C-2-G-1-5a-D-1-2-N10-GO.

124852.  $(Kenya \times Reward) \times Dundee, G-26-$ 3-1-0

124853.  $(Kenya \times Reward) \times Dundee$ , 155-2-0. G-

124854. (Kenya × Reward) × Dundee, G-32-1-0.

124855. Nabawa × (H 44× Marquis), G-31-1 - 6 - 0

124856. Nabawa × (H 44×Marquis), 1159-1-2-0.

124857.  $(Pentad \times Marquis) \times Hard Federation, G-4-1-5-1-0.$ 

124353. (Pentad × Marquis) × Hard Federation, G-17-0-1-2-0.

124859.  $(Warchief \times Reward) \times Reward, C.$ 10648.

124860 to 124866. Gossypium. Malva-Cotton. ceae.

From Africa. Seeds presented by E. R. Parnell, Cotton Experiment Station, Barberton. Transvaal, at the request of the Empire Cotton Growing Corporation. Lor land. Received August 25, 1937.

124860. No. 096. A low bushy type, not so early as No. 929 (P. I. 124863), with a longer fruiting period.

124861. No. 294. A rather strong, more upright type, late.

4862. No. 395. A bushy type, later than No. 096 (P. I. 124860), with a very long fruiting period.

124863. No. 929. A very early type of moderate growth.

124864. No. 5149. An early type, rather stronger than No. 929 (P. I. 124863); our best yielder this past season.

124365. Cambodia No. 9363. A selection for earliness and moderate size (when grown here) of the Cambodia of southern India. Very hairy and immune from jassid.

124866. U-4. Bulk unselected.

124867. SACCHARUM SPONTANEUM L. Sugarcane. Poaceae.

om Egypt. Plants presented by O. A. Rosenfelt. Sugar Plant Breeding Station, El Giza. Received August 28, 1937.

Variety Aegylicuna.

For previous introduction see 123840.

124868. Betula alnoides Buch.-Ham. Betulaceae. Birch.

om India. Seeds presented by the Range Officer. Birch Hill Park, Darjeeling Range, Darjeeling. Received September 11, 1937. From India.

Collected in the Bengal forest. A tree up to 60 feet high, with the younger branches bright reddish brown, native to northern India and southwestern China between 3,000 and 10,000 feet altitude. The oblong-ovate leaves, 10,000 feet altitude. The oblong-ovate leaves, 2 to 6 inches long, dull dark green above and

#### 124868—Continued.

paler beneath, have appressed teeth on the margins and are nearly glabrous. The slender pendulous fruiting spikes are 3 to 5 inches long and are borne in fascicles.

124869. ADENIUM HONGHEL A. DC. Apocynaceae.

From Africa. Seeds from the Government Gardens, Khartoum, Anglo-Egyptian Sudan, presented through F. G. Walsingham, Atkins Institution of the Arnold Arboretum. Soledad, Cienfuegos, Cuba. Received August 13, 1937.

A succulent shrub 6 to 10 feet high, with stout branches, rather fleshy, obovate-oblong leaves 3 to 4 inches long, and small crimson flowers in contracted cymes. Native to tropical Africa.

124870. DIPHYSA ROBINIOIDES Benth. Fabaceae.

From Guatemala. Seeds presented by M. Pacheco, Dirección General de Agricultura, Ministerio de Agricultura. Received August 17, 1937.

Guachipilin. A shrub or small tree sometimes over 20 feet high, with pinnate leaves and numerous rather large yellow flowers in racemose clusters. Native to Central America.

124871. Soja Max (L.) Piper. Fabaceae. Soybean.

From Japan. Seeds presented by Yoshime Fujine, through the Hokkaido Agricultural Experiment Station, Sapporo. Received August 19, 1937.

124872. Carica papaya L. Papayaceae. Papaya.

From India. Seeds presented by P. G. Joshi, Modern Nurseries, Bassein, Thana District, Bombay. Received August 23, 1937.

Papaya No. N. No. 1.

124873 to 124882.

From Chile. Seeds presented by the Administrator, Quinta Normal de Agricultura, at the request of L. C. Corbett, Bureau of Plant Industry, United States Department of Agriculture. Received August 26, 1937.

124873. AEXTOXICON PUNCTATUM Ruiz and Pav. Euphorbiaceae.

Tique. A Chilean tree with small colorless scales covering all of its parts and with dense foliage. The stiff, narrowly oblong leaves are very dark green on the upper surface and light green or even whitish below. The small white flowers are borne in short axillary racemes, and the fruits are small, black, olive-shaped drupes.

For previous introduction see 52586.

124874. CELTIS sp. Ulmaceae.

124875. EMBOTHRIUM COCCINEUM Forst. Proteaceae. Notro.

A handsome evergreen shrub or tree, which, under favorable conditions, becomes 40 feet high. The thick, ovate-lanceolate leaves are dark glossy green, 2 to 4 inches long, and the brilliant-scarlet, tubular flowers, about 1 inch long, are in short, dense axillary and terminal racemes.

For previous introduction see 103793.

124873 to 124882—Continued.

124876. LAURELIA SEMPERVIRENS (Ruiz and Pav.) Tulasne. Monimiaceae.

Laurel de Chile. A handsome tree, native to southern Chile, with dark-green, undulate-serrate, aromatic leaves and yellowish inconspicuous flowers. The wood, which is durable and is never injured by boring insects, is much used for flooring.

For previous introduction see 54633.

124877. LOMATIA OBLIQUA (Ruiz and Pav.) R. Br. Proteaceae. Radal.

An evergreen tree up to 35 feet in height, with somewhat grooved branches, alternate leathery leaves with shining upper surfaces, and axillary racemes of white flowers. The leaves are fragrant, reminding one of the European walnut; the bark has medicinal properties. Native to Chile.

For previous introduction see 52597.

124878 to 124880. NothofAgus spp. Fagaceae.

124878. NOTHOFAGUS OBLIQUA (Mirb.) Oerst.

A tall deciduous tree up to 100 feet high, with oval-oblong, serrate, cleargreen leaves, oblique at the base, and three-seeded fruits. In Chile the wood is used as blocks for street paving.

For previous introduction see 93078.

124879. Nothofagus Procera Oerst (Fagus procera Poepp. and Endl.). Rauli,

A tall deciduous tree, native to Chile, once abundant in the Province of Valdivia but now comparatively scarce, owing to the great demand for the wood, which is reddish and compact and much used for parquet flooring. It is very similar to Nothofagus obliqua, but has rounded-oblong, doubly serrate leaves.

For previous introduction see 52594.

124880. NOTHOFAGUS PUMILIO (Poepp. and Endl.) Krasser.

A deciduous shrub or small tree with ovate leaves up to 1½ inches long. Native to Chile.

124881. Persea Lingue (Ruiz and Pav.) Nees. Lauraceae. Lingue.

An evergreen tree, widely distributed in many parts of Chile. The oval-elliptic leaves are entile, and the short-pedicelled, grayish-yellow flowers are followed by small roundish, dark-violet fruits. The reddishyellow wood is orized both for its beauty and its durability.

For previous introduction see 49277.

124882. SOPHORA MACROCARPA J. E. Smith. Fabaceae. Mayo.

An evergreen shrub or small tree, native to Chile, with elliptic leaflets 1 inch long, silky pubescent beneath, and yellow flowers, 1 inch long, in short axillary racemes.

For previous introduction see 34399.

124883 to 124887. Gossypium. Malvaceae. Cotton.

From Africa. Seeds presented by the Acting Director, Agricultural Department, Ibadan, Nigeria, at the request of the Empire Cotton Growing Corporation, London, England. Received September 7, 1937.

## 124883 to 124887-Continued.

- 124883. Allen, Selection D. 31. From a northern province.
- 124884. Allen. Selection E. 31. From a northern province.
- 124885. Ordinary Allen, called "B, C, G, A." From a northern province.
- 124886. Isham "A." A selection of Gossypium vitifolium, from a southern province.
- 124887. Meke. A selection of Gossypium peruvianum, from a southern province.

# 124888. Passiflora sp. Passifloraceae.

- From Hawaii. Seeds presented by W. T. Pope, Senior Horticulturist, Hawaiian Agricultural Experiment Station, Honolulu. Received August 12, 1937.
- 124889 and 124890. Gossypium. Malvaceae. Cotton.
- From Brazil. Seeds presented by Prof. J. B. Griffing, Escola Superior de Agricultura, Viçosa, Minas Geraes. Received September 8, 1937.

124889. Criolo.

124890. Rin de Boi.

- 124891. ASTREBLA PECTINATA (Lindl.) F. Muell. Poaceae. Mitchell grass.
- From Australia. Seeds presented by Arthur Yates & Co., Ltd., Sydney, New South Wales. Received August 16, 1937.

An Australian grass that is said to be very valuable for its drought-resisting qualities, as well as being a valuable forage.

For previous introduction see 76604.

# 124892. SOLANUM MELONGENA L. Solanaceae. Eggplant.

From Puerto Rico. Seeds presented by Dr. Arthur Roque, geneticist, Puerto Rico Agricultural Experiment Station, Rio Piedras, through Victor R. Boswell. Bureau of Plant Industry, United States Department of Agriculture. Received September 3, 1937.

Puerto Rican Beauty. A round to oval, smooth, dark-purple fruit with no streaks. The plant is intermediate in height between Black Beauty and Florida High Bush, with a very strong stem.

# 124893. ZEPHYRANTHES CARINATA Herbert. Amaryllidaceae. Zephyrlily.

From Cuba. Seeds collected at the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, by T. A. Fennell, Bureau of Plant Industry, United States Department of Agriculture. Received in 1936.

Plants were grown at the United States Plant Introduction Garden, Coconut Grove, Fla. under P. I. G. No. 9291; numbered in September 1937. This is one of the showiest of the Zephyranthes, with beautiful rose-pink flowers about 3½ inches in diameter, borne singly on 10- to 12- inch scapes in the summer months. The leaves are long, linear, glossy green, persisting through the summer. Mature clumps flower freely throughout July and August and are among the most charming of the summer-flowering bulbs.

For previous introduction see 118823.

124894 to 124907. TRITICUM AESTIVUM L. Poaceae. Common wheat.

- From Australia. Seeds presented by the New England Experiment Farm, Glenn Innes, at the request of Dr. H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received September 14, 1937.
  - 124894.  $(Clarendon \times Hope) \times Dundee$ , G-1-1-0.
  - 124895.  $(Clarendon \times Hope) \times Dundee$ , G-8-LO.
  - 124896. (Clarendon × Hope) × Bobin, G-12-LO.
  - 124897. (Federation  $\times$  Hope)  $\times$  Bobin, G-13-LO.
  - 124898.  $(Federation \times Hope) \times Bobin$ , G-17-LO.
  - 124899.  $(Federation \times Hope) \times Dundee$ , E-29-G-1-LO.
  - 124900.  $(Federation \times Hope) \times Dundee$ , E-29-G-3-LO.
  - 124901. (Federation  $\times$  Hope)  $\times$  Dundee, E-33-G-2-LO.
  - 124902.  $(Federation \times Hope) \times Dundee$ , G-29-LO.
  - 124903. (Federation  $\times$  Hope)  $\times$  Dundee, E-23-91-LO.
  - 124904.  $(Hope \times Currawa) \times Dundee$ , G-319-30-1-0.
  - 124905.  $(Hope \times Currawa) \times Dundee$ , G-319-30-1-1.
  - 124906.  $(Hope \times Currawa) \times Dundee$ , G-19-30-6-0.
  - 124907. ( $Hope \times Yandilla\ King$ ), C 2–G 1–5a–D 1–2–N 10–GO.

# 124908 and 124909. Gossypium. Malvaceae. Cotton.

- From French Equatorial Africa. Seeds presented by W. J. Lugard, Director, Grimari. Received September 15, 1937.
  - 124908. Lightning Express. Still in the trial stage.
  - 124909. Triumph. This variety was introduced into the Belgian Congo about 15 years ago under the name Mebane Triumph. Imported into French Equatorial Africa about 10 years ago, it has undergone a natural selection and is now well acclimated in the southern part of their cotton belt.

#### 124910 to 124922.

From Madagascar. Seeds presented by Dr. F. Boiteau, Director, Botanic Garden, Tananarive. Received September 1, 1937.

124910. BEGONIA sp. Begoniaceae.

124911. BRYOPHYLLUM MINIATUM (Hilsenb. and Boj.) Berger. Crassulaceae.

An erect slender fleshy plant 1 to 2 feet high, native to Madagascar. The smooth, green, oval, obtuse leaves are up to 3 inches long, with shallow, crenate, sinuous margins and slightly pink petioles. The brightred, pendent flowers are in a lax terminal panicle.

For previous introduction see 101358.

124912. BRYOPHYLLUM PROLIFERUM Bowie. Crassulaceae.

A tall robust succulent, native to South Africa, with stems reaching a height of

#### 124910 to 124922—Continued.

12 feet. The new growth is 4-angled, later becoming cylindrical, and the pinnatifid to pinnate leaves are much contorted and have finely crenate margins. The tubular yellowish flowers are borne in paniculate clusters. clusters.

124913. EPHEDRA Sp. Gnetaceae.

124914. Bryophyllum sp. Crassulaceae.

124915. Brophyllum sp. Crassulaceae.

124916. KALANCHOE BRACTEATA Scott-Elliot (K. nadyae Hamet). Crassulaceae.

A much-branched shrub about 1 m, high, native to Madagascar. The leaves are 20 to 40 mm, long and 15 to 20 mm, wide, ovate to ovate-orbicular, with entire margins, and are variable in appearance, due to the presence or absence of a covering of closely appressed, scalelike hairs; sometimes these hairs are dense enough to give the leaves a silvery white appearance. The hairs are soon shed and the leaf is then a rich dark green, glossy and entirely glabrous. The small ruby-red flowers are borne in an erect paniclelike inflorescense from 3 to 5 cm. long. much-branched shrub about 1 m. high,

124917. KALANCHOE ORGYALIS Baker. Crassulaceae.

An erect succulent perennial with stems 2 to 3 m. long, oblong-spatulate leaves 8 to 13 cm. long, and yellow flowers 2 cm. long, in dense terminal cymes. Native to central Madagascar.

For previous introduction see 101369.

124918. KALANCHOE ROTUNDIFOLIA Crassulaceae.

A succulent perennial 1 to 3 m. high, with a slender stem, which has a few leaves at the base and is naked above. The fleshy leaves, 3 to 5 cm. long, vary in shape from broadly obovate to spatulate and are entire or crenate. The small orange or yellow flowers are borne in flat-topped panicles. Native to South Africa.

For previous introduction see 88752.

124919. KALANCHOE SYNSEPALA Baker. Crassulaceae.

An erect succulent perennial, native to central Madagascar, with large, opposite, sessile, oblong-spatulate leaves, green with a red margin. The small reddish or lavender flowers are in dense, long-stalked, axillary cymes.

For previous introduction see 101370.

124920. Bryophyllum sp. Crassulaceae.

124921. NEODYPSIS BARONII (Becc.) Jumelle Beccari). (Chrysalidocarpus baronii

A medium-sized palm, native to central Madagascar, with a cylindrical stem about 3 inches in diameter and regularly pinnate leaves 1 m. long, which have very narrow pinnae 16 to 18 inches long.

For previous introduction see 78415.

124922. Sabal sp. Phoenicaceae.

124923 and 124924. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

com Mexico. Seeds presented by E. O. Mat-thews, Parral, State of Chihuahua. Re-ceived September 14, 1937. From Mexico.

124923. A seedling yellow clingstone peach of excellent flavor, 3 inches in diameter; collected at 6,000 feet altitude.

124923 and 124924—Continued.

124924. A small white clingstone peach 11/2 inches in diameter, very prolific and very sweet when ripe. The flavor and flesh color are very similar to the White Heath peach of the central United Staes.

124925. SECHIUM EDULE (Jacq.) Swartz (Chayota edulis Jacq.). Cucurbita-

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received September 20, 1937.

124926 and 124927. PRUNUS spp. Amygdalaceae.

Ignaz Schön, Brünn. Received September 14, 1937. From Czechoslovakia.

124926. PRUNUS AVIUM L. Sweet cherry. Variety Sylvestris.

124927. PRUNUS MAHALEB L. Mahaleb cherry.

For previous introduction see 73615.

124928. Phyllostachys nigra (Lodd.) Munro. Poaceae. Blackstem bamboo.

From Indo-China, Plants presented by Miss Genevieve Wimsatt, Haiphong, Received September 23, 1937.

variety reported to have distinctly purplish stems.

For previous introduction see 89717.

124929. CITRUS AURANTIUM L. Ruta-Seville orange.

From Argentina. Seeds presented by G. L. Fawcett, Tucuman Experiment Station, Tucuman. Received September 17, 1937.

124930. CUCUMIS MELO L. Cucurbita-Muskmelon. ceae.

From Libya, Africa. Seeds presented by Miss Carmelo Caparaco, Brooklyn, New York. Received September 24, 1937.

Ananas. Said to be more productive in Libya than the Honeydew and with a better flavor.

124931 to 124951. ALLIUM spp. Liliaceae.

From the Netherlands. Bulbs purchased from C. G. Van Tubergen, Ltd., Zwanenburg Nurseries, Haarlem. Received September 28, 1937.

124931. Allium Albopilosum C. H. Wright.

A trans-Caspian species which has prob-A trans-Caspian species which has probably the largest flower heads of the genus. The bulbs are large, and the strap-shaped leaves, 18 inches long, have longitudinal lines of white hairs beneath the edges. The scape is nearly 2 feet high and bears large heads 8 inches across, each composed of from 60 to 80 dull deep-lilac flowers.

For previous introduction see 95352.

124932. ALLIUM ATROPURPUREUM Waldst. and Kit.

An upright, rather tall onion sometimes over 3 feet high, with 2 to 4 narrow-linear leaves much shorter than the stem. The small dark-purple flowers, sometimes rose-purple with a darker middle stripe, are in dense hemispherical or spherical clusters. Native to meadows in southeastern Europe.

For previous introduction see 95353.

124931 to 124951—Continued.

124933. ALLIUM CAERULEUM Pall.

An onion with slender grassy leaves and 14-inch stalks, bearing compact spherical heads of small deep-blue flowers. Native to

For previous introduction see 110690.

124934. ALLIUM FLAVUM L. Onion.

A wild onion with an upright or ascending stem up to a foot high, narrowly linear leaves about as long as the stem, and small greenish-yellow, bell-shaped flowers in a loose umbel. Native to dry rocky places, especially in chalky soil in south-central Europe.

For previous introduction see 110640.

124935. ALLIUM GIGANTEUM Regel.

One of the largest members of the genus, with large bulbs and broad fleshy leaves about 18 inches long. The bright-lilac flower heads, 4 inches across, are on stalks about 4 feet high.

For previous introduction see 107853.

124936. ALLIUM KARATAVIENSE Regel.

Onion.

An onion, native to Turkistan, with very ornamental broad leaves of a striking bluegreen color and dense umbels of dull-pink flowers.

For previous introduction see 113879.

124937. ALLIUM MOLY L. Lily leek.

An allium with broad glaucous leaves and a scape 10 to 15 inches high, bearing a compact head of bright-yellow flowers. Native to southern Europe.

For previous introduction see 110772.

124938. ALLIUM MULTIBULBOSUM Jacq.

An onion from central Europe, closely resembling Allium nigrum, but differing in the numerous spherical bulblets, its broader and shorter leaves, and in certain floral characters. The flowers, entirely white or with a reddish central stripe in the petals, are in a dense globular cluster. Native to the meadows in central Europe.

For previous introduction see 95357.

124939. ALLIUM sp.

124940. Allium ostrowskianum Regel.

A particularly striking species, native to Turkistan. The deep-rose flowers are produced freely in many-flowered umbels on scapes 12 inches high.

For previous introduction see 91382.

124941. ALLIUM NARCISSIFLORUM VIII.

An onion, native to Italy, about 9 inches high, with large rose-colored flowers in nodding heads.

For previous introduction see 95455.

124942. ALLIUM PENDULINUM Ten.

An alpine, native to Italy, with linear keeled leaves and long-peduncled nodding white flowers.

For previous introduction see 95358.

124943. ALLIUM FLAVUM VAR. PULCHELLUM (Don) Regel (Allium pulchellum Don).

A graceful allium with narrow-linear layers about a foot long and a loose umbel of bell-shaped, pinkish-lavender flowers. Native to Asia Minor.

For previous introduction see 117820.

124931 to 124951—Continued.

124944 and 124945. ALLIUM ROSENBACHI-ANUM Regel.

A bulbous perennial, native to Turkistan, with oblong lanceolate leaves 6 inches high and a large globular umbel of purple flowers on a scape 2 feet high.

For previous introduction see 95359.

124944. The type.

124945. Variety *Album*. A white-flowered form.

124946. Allium Roseum Regel.

Variety Grandiflorum.

124947. ALLIUM SCHUBERTII Zucc.

A large bulbous plant, native to Asia Minor and Persia, with broadly strap-shaped leaves and dull, rose-colored flowers in huge, rather open, subglobose heads, which are at times a foot in diameter.

For previous introduction see 95457.

124948. ALLIUM Sp.

Said to have come originally from Iran [Persia].

124949. ALLIUM SPHAEROCEPHALON L.

A European onion with a scape 1 to 2 feet high, leafy only a third of its length. The half-terete leaves are much shorter than the stem, and the bright or darkpurple flowers are freely borne in globose or ovoid umbels about 1 inch in diameter.

For previous introduction see 110782.

124950. ALLIUM URSINUM L.

A wild European onion that grows in large masses in the open woods. When in flower it is very effective, clothing the ground with its broad green leaves, above which the numerous umbels of white flowers are borne on scapes a foot high.

For previous introduction see 110785.

124951. ALLIUM ZEBDANENSE Boiss. and Noe.

A bulbous plant, 2 feet high, with linearlanceolate leaves and 3 to 5 white flowers in an umbel. Native to Syria.

For previous introduction see 79001.

124952 to 124955. ANACARDIUM OCCIDENTALE L. Anacardiaceae.

Cashew nuts.

From Africa. Seeds presented by Mario da Foontoura, Chief of Service, Technical Repartition of Agricultural Products. Department of Agriculture, Lourenço Marques, Mozambique. Received September 29, 1937.

A collection of ungraded cashew nuts.

124952. No. 1. From Ribaue.

124953. No. 3. From Inhambane.

124954. No. 2. From Porto Amelia.

124955. No. 4. From Quelimane.

124956. ABELIA. Caprifoliaceae.

From Glenn Dale, Md. Plants growing at the United States Plant Introduction Garden. Numbered in September 1937.

Variety Edward Goucher. A variety of Abelia grown from a cross between Abelia grandifora and A. schumannii, made at Glenn Dale, Md., by the late Edward Goucher, Bureau of Plant Industry. The features of both species are effectively combined in this vari-

#### 124956—Continued.

ety. In habit of growth, climatic adaptability, and free-flowering characteristics it resembles A. grandiffora. In the large, tubular, lavender-pink flowers, it resembles A. schumannii.

#### 124957 to 124960.

From Egypt. Seeds presented by the Horticultural Section, Ministry of Agriculture, Giza, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received September 27, 1937.

124957. ARISTOLOCHIA ELEGANS Mart. Aristolochiaceae. Calicoflower.

A perennial vine with long-stalked, broadly ovate leaves 2 to 3 inches across and solitary flowers, which have no unpleasant odor, borne on the pendulous new wood. The flowers have a yellow-green tube 2 to 3 inches long, and the cordate-circular limb, 3 inches across, is purple and white blotched, white outside with a yellow eye. Native to Brazil.

124958, CELTIS RHAMNIFOLIA Presl. Ulmaceae.

A tree about 20 feet high, with smooth gray bark, ovate, abruptly acuminate, leathery leaves, and inconspicuous flowers. Native to South Africa.

For previous introduction see 112637.

124959. TERMINALIA TRIFOLIATA Spreng. Combreta ceae.

A tall shrub or vigorous tree with 3-parted leaves and flattened, winged fruits. The yellowish wood is strong and flexible. Native to the temperate regions of South America.

For previous introduction see 42548.

124960. Vernonia abyssinica Sch. Bip. Asteraceae.

An erect shrubby perennial up to 2 feet high, with lanceolate elliptical leaves and small campanulate flower heads in panicles. Native to Ethiopia.

124961 to 124964. Prunus spp. Amygdalaceae.

From Germany. Seeds presented by Otto Mann, Leipzig. Received September 24, 1937. 124961 to 124964—Continued.

124961. PRUNUS AVIUM L. Sweet cherry.

Variety Sylvestris. Originated in Germany.

124962 and 124963, PRUNUS MAHALEB L. Mahaleb cherry.

124962. Yugoslavian origin.

124963. French origin.

124964. PRUNUS CERASIFERA Ehrh.
Myrobalan plum.

A small yellow plum, 1 inch in diameter, rather flavorless.

For previous introduction see 118072.

124965. JUNIPERUS ASHEI Buckholz. Pinaceae.

From Glenn Dale, Md. Plants growing at the United States Plant Introduction Garden. Numbered in September 1937.

A shrubby tree 12 to 20 feet high, usually with several trunks coming from a short fluted main trunk, forming a broad, globular, open, irregular crown. Related to Juniperus monosperma, but differing in the tetragonal and more slender branchlets and large fruits and seeds. Native to the Ozark region in southern Missouri and Arkansas.

#### 124966 to 124968.

From Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received September 29, 1937.

124966. CARICA PAPAYA L. Papayaceae. Papaya.

124967, NEANTHE ELEGANS (Mart.) O. F. Cook (Chamaedorea elegans Mart.). Phoenicaceae.

A pinnate-leaved palm up to 6 feet high, native to southern Mexico. The leaves, nearly 4 feet long, have about 20 pairs of pinnae, each a foot long and nearly 1 inch wide. The closely ringed stem is about 1½ inches thick.

For previous introduction see 101699.

124968. TIGRIDIA sp. Iridaceae.

Flowers orange with golden-yellow spots.

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Sugarcane. See Saccharum spontaneum.

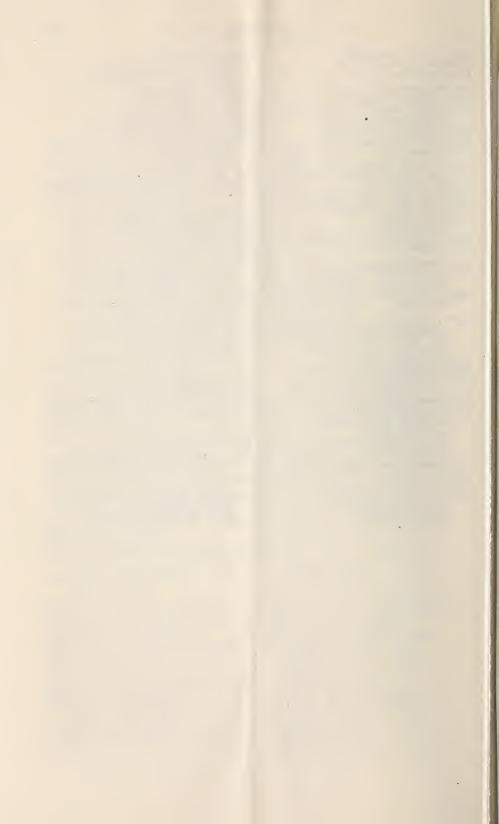
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# Plant Inventory No. 133

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. June 1948



# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, 1 OCTOBER 1 TO DECEMBER 31, 1937 (Nos. 124969 to 126493)

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# INTRODUCTORY STATEMENT

This inventory, No. 133, records the plant material (Nos. 124969 to 126493) received by the Division of Plant Exploration and Introduc-

tion during the period October 1 to December 31, 1937.

With the definite purpose of studying wild tomato material in the field and of collecting whatever was available, particularly from plants believed to be truly wild, Dr. H. L. Blood, of the Utah Agricultural Experiment Station, and cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, spent the last 2 months of 1937 in Peru, Bolivia, northern Argentina, and Chile, collecting not only this type of material but also cultivated tomatoes from native markets.

In addition to true tomatoes, he gathered seeds of various other nontuberous solanaceous plants, including species of Cyphomandra, Nicandra, Physalis, and Solanum, which have been added to the work-

ing material of Department pathologists.
Since that time, many of his collections have been studied taxonomically and reported by C. H. Muller (Miscellaneous Publication No. 382, A Revision of the Genus Lycopersicon, July 1940); these include one new species, one new variety, and three new forms.

Pathologists have already published on the unusual characteristics of one of the wild tomatoes, Lycopersicon hirsutum, found by Dr. Blood. It is stated (Phytopathology 29: 757-759, 1939) that while making crosses between this wild species and the common tomato the discovery was made that L. hirsutum is apparently completely tolerant to tobacco mosaic and extremely resistant to fusarium wilt.

Contrary to many suppositions, Afghanistan is not entirely inaccessible if one may judge by the more than 900 introductions in this present inventory that are credited to the Bureau's agricultural explorer

<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

Walter Koelz. His instructions were essentially for the collection of materials in the field of vegetables, continuing the long program of obtaining essential breeding materials for this Bureau's Division of Fruit and Vegetable Crops and Diseases and its specialized programs, not only for the Southeastern States but for its specialists elsewhere.

With his customary thoroughness, Dr. Koelz has sent in not only vegetables but also unusual fruits and high-altitude cereals, which, because of their hardiness under difficult conditions, have been wel-

comed by Department specialists.

This inventory has been prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

B. Y. Morrison,

Principal Horticulturist, in Charge, Division of Plant Exploration and Introduction, Plant Industry Station, Beltsville, Md.

# INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

# 124969-124971.

From the Philippine Islands. Plants presented by the Director of Forestry;. Bureau of Plant Industry, Department of Agriculture and Commerce, Manila.. Received October 9, 1937.

124969. Dendrocalamus merrillianus Elm. Poaceae.

·Bamboo...

A tall slender tree bamboo forming large clumps of smooth, thick-walled green culms, with prominent nodes and with descending linear leaves about 1 foot long. Native to the Philippine Islands.

124970. DINOCHLOA SCANDENS (Blume) O. Kuntze. Poaceae. Zigzag bamboo.

A thick-walled, climbing bamboo with several tough glossy stems up to 100 feet long and leathery linear leaves about 1 foot long. It forms impenetrable thickets in forests in the Philippines under favorable conditions. Native to the Malayan region.

124971. SCHIZOSTACHYUM LUMAMPAO (Blanco) Merr. Poaceae. Bamboo.

Buho. This thin-walled bamboo is the species chiefly utilized in making the building matting known as sawale. It is also used for making baskets, fences, fish corrals, fish poles, and flutes and for many other purposes. It is reported to have been investigated as a paper-making material and is said to be the one species of Philippine bamboo that, without extensive cultivation, promises commercial possibilities for this purpose.

For previous introduction see 74507.

124972-124973. PRUNUS spp. Amygdalaceae.

From China. Seeds collected by Capt. F. Kingdon Ward in Yunnan Province and presented by Sir Lionel de Rothschild, London, England. Received July 23, 1937.

124972. PRUNUS Sp.

Reported to grow at 5,000 feet altitude. The fruits, which ripen in May, are sold in the markets in the southwestern part of Yunnan Province.

124973. PRUNUS Sp.

Fruit large, dark, ripening in Yunnan in April and May. Sold in the markets.

## 124974-124975.

From Germany. Bulbs purchased from Karl Foerster, Bornim-Potsdam-Sanssouci. Received October 11, 1937.

124974. Colchicum hungaricum Janka. Melanthiaceae.

A colchicum with 2 or sometimes 3 linear-lanceolate leaves 1 to 2 inches long at flowering time; later up to 8 inches long and recurved. The 1 to 8 pale-pink to white flowers have tubes about 1 inch long. Native to southern Europe.

124975. Sternbergia lutea (L.) Ker. Amaryllidaceae.

A low bulbous plant with 6 to 8 strap-shaped leaves becoming 1 foot long and! 1 to 4 small yellow flowers about 1 inch long. Native to the Mediterranean region.

For previous introduction see 107144.

124976. Opsiandra maya O. F. Cook. Phoenicaceae.

Palm.

From Florida. Seeds collected at Coconut Grove by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received October 12, 1937.

A palm growing in "The Kampong," residence of Dr. David Fairchild; originally grown from seed collected by O. F. Cook near Uaxachtun, Department of Peten, Guatemala, in March 1922. It has a slender tapering trunk about 6 inches in diameter at the base, grows to a height of 60 or more feet, and is supported on a conical mass of thick roots. The few leaves, usually 5 or 6, are 8 to 9 feet long and have 90 pinnae on each side of the midrib. The flowers appear several joints below the leaves; the fruit is red and borne in clusters.

This is the first time this species has fruited in the United States.

124977. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae.

Okra.

From Mexico. Seeds presented by J. Acuma Ordaz, Serro Prieto, Sierra de Atoyac. Received October 12, 1937.

124978. Chelone Lyoni Pursh. Scrophulariaceae.

From North Carolina. Plants presented by Mrs. G. Latta Clement, Nik-Nar Nursery, Biltmore Station, Asheville. Received October 14, 1937.

124979. Annona senegalensis Pers. Annonaceae.

From Florida. Seeds presented by W. Paul Phillips, Orlando. Received October 19, 1937.

A shrub or small tree, sometimes 20 feet high, native to both eastern and western tropical Africa. The oval, blue-green, leathery leaves are up to 5 inches long, and the orange-yellow, edible fruits, over 1 inch in diameter, contain an aromatic dark-red pulp which suggests that of the cherimoya of tropical America.

For previous introduction see 124619.

124980-124981. Gossypium. Malvaceae.

Cotton.

From Puerto Rico. Seeds presented by Atherton Lee, Director, Agricultural Experiment Station, Mayaguez. Received October 2, 1937.

124980. Gossypium.

Haitian Forbes-Barker cotton; type 36-8-34-5.

124981. Gossypium.

Haitian Forbes-Barker cotton; type R-6-8-29.

124982. Antidesma platyphyllum H. Mann. Euphorbiaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received October 1, 1937.

A tree 20 to 30 feet high, native to the Hawaiian Islands. The rather stiff, ovate to obovate leaves are 3 to 5 inches long, and the inconspicuous flowers are followed by compressed, suboblique reddish fruits about ½-inch long.

For previous introduction see 101244.

124983-125003.

From Turkey. Seeds presented by Bey Rursit R. Korol, Istanbul, through S. Walter Washington, Charge d'Affaires ad interim, Istanbul, through the Department of State, United States of America. Received October 8, 1937.

124983. Cephalaria syriaca (L.) Schrad. Dipsacaceae.

Used to flavor bread.

For previous introduction see 123279.

124984. CICER ARIETINUM L. Fabaceae.

Chickpea.

124985. Coriandrum sativum L. Apiaceae.

Coriander.

For previous introduction see 123037.

124986. Cucurbita pepo L. Cucurbitaceae.

Pumpkin.

124987. Helianthus annuus L. Asteraceae.

Common sunflower.

124988-124989. Hordeum vulgare L. Poaceae. Barley.

124988. No. 1. 124989. No. 2.

124990-124991, Lens culinaris Medik. Fabaceae. Lentil. 124990 No. 1 124991, No. 2.

124990. No. 1. 124991. No. 2. 124992. Linum usitatissimum L. Linaceae.

124992. LINUM USITATISSIMUM L. Linaceae. Flax.

124993. Medicago sativa L. Fabaceae. Alfalfa.

124994. Phaseolus vulgaris L. Fabaceae. Common bean.
124995. Raphanus sativus L. Brassicaceae. Radish.

124996. Secale cereale L. Poaceae. Rye.

124997-125000. Triticum Aestivum L. Poaceae. Common wheat.

124997. A. 124999. C. 124998. B. 125000. D.

125001-125003. VICIA spp. Fabaceae.

125001. VICIA ERVILIA (L.) Willd. Vetch.

125002. VICIA FABA L. Broadbean.
125003. VICIA SATIVA L. Common vetch.

125004-125009. Beta vulgaris I.. Chenopodiaceae. Common beet.

From France. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received October 5, 1937.

125004. Rouge d'Eckendorf. 125007. Géante Rouge Demi-Sucrière.

125005. Géante Blanche Demi-Sucrière. 125008. Jaune d'Eckendorf.

125006. Géante Rose Demi-Sucrière. 125009. Jaune Géante de Vauriac.

125010-125014.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received October 6, 1937.

A collection of native Australian seeds.

125010. ACACIA Sp. Mimosaceae.

125011. ACTINOTUS HELIANTHI Labill. Apiaceae.

New South Wales Flannel flower.

125012. EUCALYPTUS ERYTHROCORYS F. Muell. Myrtaceae.

Usually a shrub 8 to 10 feet high, but sometimes a tree up to 30 feet high. The broadly linear, rigid leaves are 6 inches long, and the large flowers, in axillary clusters, have bright-red, fleshy caps over the buds; the long stamens are yellow. The ribbed, hemispherical fruits are 1 to 2 inches long. It is native to Western Australia.

For previous introduction see 123773.

125013. EUCALYPTUS MACROCARPA Hook. Myrtaceae.

A stout evergreen shrub or small tree up to 15 feet high, with thick rigid cordate glaucous leaves 6 inches long and large solitary, brilliant-orange or crimson flowers. Native to Western Australia.

For previous introduction see 123775.

125014. Telopea speciosissima (J. E. Smith) R. Br. Proteaceae. Waratah.

A very striking evergreen Australian shrub about 8 feet high, with irregular toothed, dark-green leaves 6 inches long and deep-crimson, tubular flowers about 1 inch long, borne in a dense globular head surrounded by blood-red bracts 2 or 3 inches in length. The shrub is the State flower of New South Wales.

For previous introduction see 58512.

125015. Amygdalus persica L. Amygdalaceae.

Peach.

From Michigan. Budsticks presented by the Michigan State Agricultural College, East Lansing. Received August 25, 1937.

Kalhaven peach.

125016-125024.

From the Union of Soviet Socialist Republics. Plants presented by the Institute of Plant Industry, Leningrad. Received April 9, 1937.

125016-125019. Amygdalus spp. Amygdalaceae.

125016. Amygdalus persica var. platycarpa (Decaisne) Ricker. Peach. Ranniava.

125017. Amygdalus persica var. Nectarina Ait.

Nectarine.

Sary Oilor.

125018. AMYGDALUS PERSICA L.

Peach.

Inzhir Shaftali. No. 0647.

125019. AMYGDALUS PERSICA L. 125020-125024. Prunus armeniaca L. Amygdalaceae.

Peach. Apricot.

125020. Daravshak. No. 487.

125023, Khurmai,

125021. Bokhara. No. 665T.

125024, Mirzandzhali. No. 01189,

125022, Shirpaivan, No. 01070,

125025-125035.

From India. Plants collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 14, 1937. Numbered in October 1937.

125025. Amygdalus persica var. platycarpa (Decaisne) Ricker. Amygda-Peach. laceae.

China Flat peach.

125026. Amygdalus persica L. Amygdalaceae.

Peach.

Lemon.

Large Agra peach. 125027-125028. CITRUS LIMON (L.) Burm. f. Rutaceae.

125027. Kaghzi Long.

125028. Seedless.

125029. Malus sylvestris Mill. Malaceae.

Apple.

Unnamed local variety.

125030-125035. Prunus spp. Amygdalaceae.

125030. Prunus sp.

125031. PRUNUS Sp.

Early large red plum.

A large yellow plum.

125032. PRUNUS Sp.

Alacha. A purple plum of the Prunus bokhariensis type.

125033. Prunus sp.

Alubokhara. A large plum of the Prunus bokhariensis type.

125034. Prunus sp.

125035. Prunus sp.

Dwarf Early Yellow plum.

Ladakh plum.

125036-125038.

From Australia. Seeds presented by Dr. A. McTaggart, Senior Research Officer, Division of Plant Industry, Canberra. Received October 11, 1937.

125036. Casuarina torulosa Ait. Casuarinaceae.

An Australian evergreen tree 50 to 75 feet high, with erect, mostly terete, branches. The close-grained, prettily marked wood is used as veneer for cabinet work; also for shingles.

For previous introduction see 101608.

125037. CYCAS MEDIA R. Br. Cycadaceae.

An Australian cycad with a trunk up to 20 feet high and rarely branching. The pinnate leaves are 2 to 4 feet or more long, with many pinnae up to 8 inches long.

125038. Macrozamia miquelii (F. Muell.) A. DC. Cycadaceae.

A cycad 6 to 8 feet high with pinnate leaves 2 to 4 feet long; the many pinnae are up to 10 inches long or more. Native to Australia.

125039-125066, Poaceae.

Grass.

From Nevada. Seeds collected under the direction of W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received October 15, 1937.

A collection of native grasses. The I. P. numbers are those of the Indian Plant Project.

125039. AGROPYRON DASYSTACHYUM (Hook.) Scribn.

I. P. 6629. A perennial grass up to 2 feet high, with creeping rhizomes.

For previous introduction see 115292.

125040. AGROPYRON SPICATUM (Pursh) Scribn, and Smith.

I. P. 5143.

125041-125045. Bromus spp.

125041. Bromus commutatus Schrad.

Hairy chess.

I. P. 5114.

125042-125045. Bromus marginatus Nees.

A perennial grass of some value for grazing, growing on alluvial soils under very dry conditions.

For previous introduction see 106425.

125042. I. P. 4877.

125044. I. P. 5723.

125043, I. P. 4879.

125045, I. P. 7073.

125046. Deschampsia danthonioides (Trin.) Munro. Annual hairgrass.

I. P. 3893.

125047-125048. Elymus condensatus Presl.

Giant wild-rye.

125047, I. P. 5753.

125048, I. P. 6372.

125049. FESTUCA ELATIOR L.

Meadow fescue.

I. P. 2711.

125050. FESTUCA KINGH Cassidy.

Spike fescue.

I. P. 6691.

125051. GLYCERIA ELATA (Nash) Hitchc.

Tall mannagrass.

I. P. 6692.

125052. HORDEUM JUBATUM L.

Foxtail barley.

I. P. 6612.

125053. MELICA STRICTA Boland.

Rock melic.

I. P. 1423.

125054. Muhlenbergia asperifolia (Nees and Mey.) Parodi. Scratchgrass.

125055-125059. Oryzopsis hymenoides (Roem. and Schult.) Ricker.

Indian ricegrass.

125055. I. P. 1424.

125058. I. P. 2525.

125056. I. P. 3699.

125059. I. P. 6709.

125057, I. P. 4849.

125060-125061. Poa nevadensis Vasey.

Nevada bluegrass.

125060. I. P. 2785.

125061. I. P. 4848.

125062. Polypogon monspeliensis (L.) Desf.

I. P. 6613.

125063-125064. SITANION HYSTRIX (Nutt.) J. E. Smith.

125063. I. P. 2519.

125064. I. P. 5749.

125065. STIPA COMATA Trin. and Rupr.

I. P. 1425.

For previous introduction see 106443.

125066. STIPA THURBERIANA Piper.

I. P. 2524.

125067-125069. Solanum Tuberosum L. Solanaceae.

Potato.

From Poland. Tubers collected by Martin Bilon, Bureau of Plant Industry, United States Department of Agriculture. Received October 12, 1937.

125067. A pink potato.

125069. A white potato.

125068. An early pinkish potato.

125070-125073. Gossypium. Malvaceae.

Cotton.

From Australia. Seeds presented by the Department of Agriculture and Stock, Brisbane, Queensland, at the request of the Empire Cotton Growing Corporation. Received October 11, 1937.

125070. Durango. DB-30-16-4-1-0-X.0.0.0. 125072. Lone Star. No. 34.

125071. Lone Star. No. 33-S.

125073. Lone Star. No. 25.

125074-125076. HEDERA HELIX L. Araliaceae.

English ivy.

From England. Plant's purchased from J. Jefferies & Son, Ltd., Royal Nurseries, Cirencester. Received October 20, 1937.

125074. Var. Lee's Silver.

125076. Var. New Bronze.

125075. Var. Discolor.

125077-125079. Prunus spp. Amygdalaceae.

From Maryland. Scions collected at the United States Plant Introduction Garden, Glenn Dale, February 13, 1934. Numbered in October 1937.

The trees from which these scions were taken were originally received from Collingwood Ingram, Benenden, Kent, England, in 1930,

125077. PRUNUS SERRULATA Lindl.

Oriental cherry.

Tai-haku.

125078. PRUNUS SERRULATA Lindl.

Oriental cherry.

Ingram.

125079. Prunus sieboldii (Carr.) Wittmack.

Siebold cherry.

Takasago.

125080-125081.

From the Canal Zone. Seeds presented by Walter R. Lindsay. Acting Director, Canal Zone Experiment Gardens, Summit. Received October 21, 1937.

125080. Annona muricata L. Annonaceae.

Soursop.

A large-fruited variety.

For previous introduction see 114419.

125081. Annona purpurea Moc. and Sesse. Annonaceae.

Soncoya.

This species, native to Mexico and Central America, is considered of possible interest as a stock for choicer species of Annona. The fruits, 5 or 6 inches in diameter, contain orange-colored flesh of good flavor, but are rarely eaten, except by the natives, because the flesh is coarse and filled with large seeds.

For previous introduction see 91569.

125082-125095. Triticum aestivum L. Poaceae.

Common wheat.

From France. Seeds presented by Vilmorin-Andrieux & Cie., Paris. Received October 25, 1937.

 125082. Allies.
 125089. Joncquois.

 125083. Bon Fermier.
 125090. Paix.

 125084. Bordier.
 125091. Tresor.

 125085. Chanteclair.
 125092. Vilmorin 23.

 125086. Dattel.
 125093. Vilmorin 27.

 125087. Hatif Inversable.
 125094. Vilmorin 29.

125096. Canavalia ensiformis (L.) DC. Fabaceae.

Jackbean.

From Cuba. Seeds presented by Coert de Bois, American consul general, Habana. Received October 15, 1937.

125097. Sorghum vulgare Pers. Poaceae.

Sorghum.

From the Union of South Africa. Seeds presented by the American consulgeneral, Johannesburg. Received October 22, 1937.

Wintersome. Used as a winter forage crop.

125098-125099. SACCHARUM. Poaceae.

Sugarcane.

From Barbados, British West Indies. Cuttings presented by S. J. Saint, Director of Agriculture, Bridgetown. Received October 27, 1937.

125098. B-30-13.

125088. Ile de France.

125099. B-32-34.

125095. Bon Maulin.

125100. Haemanthus filiflorus Baker. Amaryllidaceae.

Bloodlily.

From Africa. Bulbs purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony, British East Africa. Received October 28, 1937.

A bloodlily closely related to *Haemanthus multiflorus*. The leafy stem, about 1 foot long, bears about 6 large oblong leaves with clasping petioles and blades almost 1 foot long. The small, bright-red, tubular flowers, nearly 1 inch across, are in a dense umbel 5 to 6 inches in diameter, borne on a lateral upright scape 1 foot high. Native to tropical Africa.

125101. Arachis hypogaea L. Fabaceae.

Peanut.

From Colombia. Seeds presented by Dr. M. J. Rivero, Estacion Agricola Experimental, Palmira. Received October 29, 1937.

Muzo.

125102. Amygdalus communis L. Amygdalaceae.

Almond.

From Morocco. Trees presented by H. Brayard, Directeur, Station Experimentale, Marrakech. Received April 9, 1936. Numbered in October 1937.

No. 33. P-1.

125103-125104. Amygdalus persica L. Amygdalaceae.

Peach.

From New Jersey. Trees presented by Dr. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received November 23, 1936. Numbered in October 1937.

125103. Primrose.

125104. Ambergem.

125105-125106. PRUNUS spp.

From Morocco. Trees presented by H. Brayard, Directeur, Station Experimentale, Marrakech. Received April 8, 1936. Numbered in October 1937.

125105. PRUNUS ARMENICA L. Amygdalaceae.

Apricot.

No. 14. Particolare.

125106. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

No. 41. Bigareau Hatif de Burlat.

125107. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.

From New York. Scions presented by Dr. H. Wellington, New York Experiment Station, Geneva. Received January 11, 1932. Numbered in November 1937.

Hall

125108. Jatropha sp. Euphorbiaceae.

From Mexico. Roots presented by Mrs. G. M. Clark, Tolosa, Oaxaca. Received November 2, 1937.

Barbasco.

125109-125114.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received October 25, 1937.

125109. Aloe Davyana Schoenland. Liliaceae.

A stemless aloe with 12 to 14 broadly ovate, prickly leaves about 15 inches long in a dense rosette; the upper leaf surface is light green, sometimes reddish in the upper half, with transverse dark-green bands. The simple or one- to two-forked raceme, about 2 feet high, bears many yellowish-red flowers about 1 inch long. Native to South Africa.

125110. Aloe Globuligemma Pole Evans. Liliaceae.

A stemless succulent with a rosette of erect-spreading, sword-shaped leaves 1 to 2 feet long, having cartilaginous wavy-toothed margins. The flower stalk, 3 to 4 feet high, carries a dense raceme a foot long, of tubular flowers that are globular and red in the bud, becoming elongated and sulfur-yellow tinged with red at the base. It is native to South Africa.

For previous introduction see 111229.

125111. CLEMATIS Sp. Ranunculaceae.

Received under the name "burchellii," for which a place of publication has not been found.

125112. DIGITARIA ERIANTHA VAI. STOLONIFERA Stapf. Poaceae.

Wooly fingergrass.

A dry-land grass, native to South Africa. It prefers a loose sandy soil, but is also found in the hard red soil and occasionally in black turf. It is very palatable to stock of all kinds as green herbage and in winter as hay.

For previous introduction see 77998.

125113. Pennisetum ciliare (L.) Link. Poaceae.

Grass.

A perennial grass with ascending stems up to 2 feet long. Native to South Africa,

For previous introduction see 110266.

125114. Rhus viminalis Ait. Anacardiaceae.

Sumac.

*Karre Boom.* An evergreen tree up to 30 feet high, native to South Africa in semiarid regions at over 4,000 feet altitude. Sheep and goats browse on the foliage.

For previous introduction see 119293.

125115-125120. Antirrhinum. Scrophulariaceae.

From Germany. Seeds presented by Dr. F. Gruber, Kaiser Wilhelm Institut für Züchtungsforschung, Müncheberg Mark. Received October 29, 1937.

125115. Benajoan. 20245×20244.

125116. Figueira. 22296×22292.

125117. Lucena. 22210×36/21 c LV.

125118. Pampaneira Kahl. 22098×22099.

125119. Torcal. 37/25 XIX×37/25 XIII.

125120. Troia. 20442×20441.

125121. LACTUCA VIROSA L. Cichoriaceae.

From the Netherlands. Seeds presented by Dr. Th. J. Stomps, Director, Botanic Garden of the University of Amsterdam, Amsterdam. Received October 29, 1937.

A biennial lettuce with a long fusiform root and a tall leafy stem branched at the base. The sagittate, cordate, ovate-oblong leaves are spiny, and the sulfuryellow flowers are in cylindrical heads. Native to rocky places in central and southern Europe.

For previous introduction see 115528.

125122. Cuspidaria Pterocarpa DC. Bignoniaceae.

From Brazil. Seeds presented by P. H. Rolfs, Escola Superior de Agricultura a Veterineria, Viçosa, Minas Geraes, through L. C. Corbett, Bureau of Plant Industry, United States Department of Agriculture. Received November 1, 1937.

A plant native in the vicinity of Lavras, Minas Geraes, where it climbs over trees and fences. The flowers vary in color from lavender to pale reddish pink.

125123-125125. Rubus spp. Rosaceae.

From Java. Seeds presented by 's Lands Plantentuin, Buitenzorg. Received November 1, 1937.

125123. RUBUS Sp.

A variety with edible fruits.

For previous introduction see 121630.

125124. RUBUS MOLUCCANUS L.

A tall-growing bramble with attractive foliage and an abundance of sour, purplish fruits.

For previous introduction see 115010.

125125. Rubus rosaefolius J. E. Smith.

Roseleaf raspberry.

A raspberry native to southeastern Asia and evergreen in the Tropics. The hairy stems are 3 to 6 feet high, the pinnately compound leaves are made up of 2 to 7 pairs of ovate, sharply serrate leaflets, and the white flowers, 1 to 2 inches across, are in small clusters and are followed by erect, bright-red, thimble-shaped fruits nearly 2 inches long, edible but insipid.

For previous introduction see 114149.

125126. CARICA PAPAYA L. Papayaceae.

Papaya.

From Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received November 2, 1937.

A large fruit, bronze red and very sweet.

125127. Lactuca virosa L. Cichoriaceae.

From England. Seeds presented by Sir Arthur W. Hill, Director, Royal Botanic Gardens, Kew. Received November 4, 1937.

For previous introduction and description see 125121.

125128. Triticum aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by the University of Sydney, Sydney, New South Wales. Received November 9, 1937.

Gaya wheat, W. 277.

125129. Bowenia serrulata (André) Chamberl. Cycadaceae.

From Australia. Seeds collected by H. G. Simmons, curator, Botanic Gardens, Rockinghampton, Queensland, and presented through A. McTaggart, Senior Research Officer, Division of Plant Industry, Canberra. Received November 8, 1937.

A cycad, similar in general habit to Zamia, with bipinnate leaves, 3 to 6 feet long, arising from a thick trunk scarcely rising above the ground. The serrate leaflets are about 1 foot long. Native to Queensland, Australia.

125130. LACTUCA VIROSA L. Cichoriaceae.

From Sweden. Seeds presented by Dr. Robert E. Fries, Director, Botanic Garden, Stockholm. Received November 8, 1937.

For previous introduction and description see 125127.

125131. Castanopsis Javanica (Blume) A. DC. Fagaceae.

From the Philippine Islands. Seeds presented by the Bureau of Forestry, Department of Agriculture and Commerce, Manila. Received November 8, 1937.

A large handsome evergreen tree with oblong entire leaves up to 10 inches long. Native to the East Indies.

125132. Avena sterilis L. Poaceae.

Animated oats.

From Algeria. Seeds presented by the Institut Agricole d'Algerie, Maison-Carrée, Station de Semences et d'Amelioration des Plantes, Algiers.

No. 912.

125133-125154.

From New Zealand. Seeds purchased from Mrs. R. T. Richards, Round Top, Windwhistle, Canterbury. Received November 6, 1937.

A collection of plants, native to New Zealand.

125133. ARTHROPODIUM CANDIDUM Raoul. Liliaceae.

A tufted herbaceous perennial 3 to 14 inches high, with very narrow, linear, grasslike leaves 2 to 10 inches long and few to many small white flowers each  $\frac{1}{2}$  inch across, on a slender scape. Native to New Zealand from sea level to 3,500 feet altitude.

125134. ARTHRODIUM CANDIDUM Raoul. Liliaceae.

Introduced under the varietal name "maculosum," for which a place of publication has not been found.

125135. Bulbinella hookeri (Colenso) Cheeseman. Liliaceae.

A perennial herb related to the asphodels, varying in size from 2 to 3 feet. The numerous glaucous green leaves are linear, and the loose racemes of bright-yellow flowers are on slender scapes up to 10 inches long.

For previous introduction see 97597.

125136. CARMICHAELIA GRANDIFLORA (Benth.) Hook. f. Fabaceae.

An erect or spreading, much-branched evergreen shrub 2 to 8 feet high, usually leafy, but leafless in exposed positions. The leaves are numerous, pinnately 3-foliolate to 5-foliolate, and silky pubescent when young. The small purplish flowers are in lax racemes 1 inch long.

For previous introduction see 89219.

125137. CARMICHAELIA GRANDIFLORA DIVARICATA Kirk. Fabaceae.

Differs from the type in its right-angled branching and in the slightly smaller flowers.

125138. CARMICHAELIA NANA (Benth.) Colenso. Fabaceae.

A dwarf leafless shrub forming matted patches 2 to 4 inches high, with few-flowered racemes of small purplish-red flowers.

125139. COTULA AUSTRALIS (Sieb.) Hook. f. Asteraceae.

A slender soft-hairy perennial with pinnate leaves and small yellow flower heads. Native to New Zealand and also to temperate Australia.

125140. Cotula pyrethrifolia Hook. f. Asteraceae.

A creeping herbaceous perennial with fleshy or leathery pinnatifid leaves and flower heads ¾ inch or less in diameter.

125141. Fuchsia excorticata (Forst.) L. f. Onagraceae.

A shrub or small tree with ovate-lanceolate or lanceolate leaves 2 to 5 inches long and solitary, pendulous green and purple flowers.

125142. FUCHSIA PROCUMBENS R. Cunn. Onagraceae. Trailing fuchsia.

A slender prostrate shrub with small ovate or cordate leaves and fragrant yellowish green flowers about ½ inch long. Native to sandy or rocky places.

For previous introduction see 97611.

125143. GAULTHERIA ANTIPODA Forst. f. Ericaceae.

An erect or prostrate evergreen shrub from a few inches high (at high altitudes) to 4 feet high in the lowlands. The leaves are small, orbicular to oblong-lanceolate, and the small white or red flowers are followed by berrylike fruits about ½ inch in diameter.

125144. Gaultheria depressa Hook. f. Ericaceae.

A prostrate evergreen shrub with small orbicular to oblong-lanceolate leaves and small flowers followed by white or red berries.

125145. Gaultheria Perplexa T. Kirk. Ericaceae.

A small evergreen shrub, often procumbent, with narrow leaves up to  $\frac{1}{2}$  inch long and small solitary flowers.

125146. Libertia ixioides (Forst. f.) Spreng. Iridaceae.

A perennial herb with a short creeping rhizome which forms a compact clumplike a beardless iris. It has rigid coriaceous linear leaves 1 foot long and large panicles of small white flowers on a stem 2 feet high.

For previous introduction see 113773.

125147. Notospartium carmichaeliae Hook, f. Fabaceae.

A beautiful moderate-sized leguminous shrub with leafless broomlike branches on which the short racemes of pink or purplish flowers are freely produced.

For previous introduction see 101148.

125148. Notospartium glabrescens Petrie. Fabaceae.

A small pendulous round-headed leafless tree with racemes, 1 to 2 inches long; of many small purplish flowers.

125149. Notospartium torulosum T. Kirk. Fabaceae.

A leafless, pendulous shrub 3 to 8 feet high, with short racemes of 3 to 10 small purple flowers.

125150. Rubus australis Forst. f. Rosaceae.

A tall climbing rubus with leathery variable-shaped leaves and large panicles of white flowers, followed by small red fruits.

For previous introduction see 11505.

125151. Rubus cissoides A. Cunn. Rosaceae.

A dense, rambling unarmed shrub with 3- to 5-foliolate leaves and yellowish-white flowers, followed by orange-red fruits. It is related to Rubus australis.

125152. Rubus Parvus J. Buch. Rosaceae.

A dwarf prostrate shrub with leathery leaves and red juicy oblong fruits-½-inch long.

125153. Rubus schmidelioides A. Cunn. Rosaceae.

A scrambling or climbing shrub with 3- to 5-foliolate leaves that have coriaceous, broadly cordate-serrate leaflets 2 to 4 inches long. The small white flowers, in panicles 2 to 8 inches long, are followed by pale-yellow edible fruits about  $\frac{1}{3}$ -inch in diameter.

For previous introduction see 101152.

125154. Viola cunninghamii Hook. f. Violaceae.

A New Zealand violet with ovate leaves, tufted on short stems, and white-flowers usually streaked with lilac and yellow.

125155. Amygdalus persica var. nectarina Ait. Amygdalaceae. Nectarine.

From California. Plants growing at the United States Plant Introduction Garden at Chico. Numbered November 11, 1937.

A seedling of P. I. 88097, which was collected in the valley of the Amu Darya in Turkmenia, Soviet Union.

125156-125167. Phaseolus spp. Fabaceae.

From Morocco. Seeds presented by H. Brayard, Direction Generale de l'Agriculture du Commerce et de la Colonisation, Casa Blanca. Received November 9, 1937.

125156. Phaseolus coccineus L.

Scarlet runner bean.

De Prague Marbré à Tier Longues Casses.

125157-125167. Phaseolus vulgaris L.

Common bean.

125157. Baraquet.
125158. Beurre Nain Crayon.
125159. Blance de Juillet à Rames.
125160. Fin de Brignols.
125161. Le Cabannais.
125167. Beurre Nain Chaute.

125162. Maircan.

# 125168-125171.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received November 9, 1937.

## 125168. DIPHYSA ROBINIOIDES Benth. Fabaceae.

Presented by the Forestry Department, Habana, Cuba. An evergreen shrub or small tree sometimes over 20 feet high, with pinnate leaves and numerous rather large yellow flowers in racemose clusters. Native to Central America.

For previous introduction see 124870.

125169. Guaiacum officinale L. Zygophyllaceae.

Lignumvitae.

Presented by the Forestry Department, Habana, Cuba. An evergreen tree up to 30 feet high, native to tropical America. The pinnate leaves are made up of 4 to 6 obovate leaflets 2 inches long, and the small blue flowers are in terminal clusters. The yellow-brown wood is very hard and heavy and is valued for hubs, cogs, and pulleys.

For previous introduction see 99011.

125170-125171. Lobelia gibberoa Hemsl. Campanulaceae.

Presented by the Jardin Colonial de Laeken, Brussels, Belgium. A woody lobelia up to 25 feet high, with a palmlike habit, crowded oblong-obovate or lanceolate leaves about  $1\frac{1}{2}$  feet long, and a dense terminal spikelike raceme of greenish-yellow flowers. Native to tropical Africa.

125170. Received as variety "ulugurensis," for which a place of publication has not been found.

125171. Received as Lobelia sp.

125172-125192. AVENA SATIVA L. Poaceae.

Oats.

From Japan. Seeds presented by K. Nakata, Kyushu Imperial University, Fukuoka. Received November 10, 1937.

Fukuoka. Received November 10, 1937. 125172. Korean native oats from Sansui. 125183. Korean native oats from Ko-

125172. Korean native oats from Sansui. 125183. Korean 125173. Belgian oats.

125174. Clydesdale.

125175. Banners Benalton.

125176. Albion.

125177. Slow Victoria.

125178. Antonis Capaty, original.

125179. Korean native oats from Hozan.

125180. Wase Rokujunichi.

(Early 6-days, native to Korea.)

125181. Black Tatar.

125182. Red oats.

125183. Korean native oats from Kozan.

125184. Howdale Black Tatar.

125185. White oats.

125186. Ligovo.

125187. Victoria No. 1.

125188. Idamine.

125189. Golden Rain.

125190. Swedish Select.

125191. Cro-Gold oats.

125192. Race Horse.

125193-125199. Juglans regia L. Juglandaceae.

Persian walnut.

From Poland. Seeds presented by St. Biaiobok, Państwowy Instytut Naukowy Gospodarstwa Weijskiego w Pulawach, Pulawy, Dnia. Received November 10, 1937.

A collection of walnuts, grafted on frost-resistant stocks.

125193. No. 1. From Kórnik, near Poznan.

125194-125197. From Pulawy, near Lublin.

125194. No. 2.

125196. No. 4.

125195. No. 3.

125197, No. 5.

125198-125199. From Sandomierz.

125198. Received as Juglans polonica.

125199. Received as Juglans polonica  $\times$  J. maxima.

# 125200-125202.

From Mexico. Seeds presented by E. O. Matthews, Parral, Chihuahua. Received November 11, 1937.

125200. PRUNUS CAPULI Cav. Amygdalaceae.

 $\it Capulin.$  A wild cherry from Tezuitlan, State of Puebla. A dark-purple cherry of good flavor, a little smaller than the  $\it Black\ Tartarian.$ 

For previous introduction see 111983.

125201. PSIDIUM GUAJAVA L. Myrtaceae.

Guava.

A yellow variety from Aguascalientes.

For previous introduction see 106812.

Desertlily.

From Jiménez. A yucca with dull-yellow, tuberose-shaped flowers.

125203. Colocasia sp. Araceae.

125202. Yucca sp. Liliaceae.

From Colombia. Seeds presented by M. J. Rivero, Cali, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received November 19, 1937.

Giant wild dasheen.

125204. Hibiscus sp. Malvaceae.

From Puerto Rico. Cuttings presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received November 17, 1937.

Puerto Rican Single Red.

125205-125215.

From England. Material presented by William Blake, Maipes, Cheshire. Received November 18, 1937.

125205-125209. Corylus spp. Betulaceae.

125205. Corylus sp.

125207. CORYLUS Sp.

No. 1.

No. 3.

125206. Corylus sp.

125208. Corylus sp.

No. 2.

125209. CORYLUS SD.

125210-125214. Juglands spp. Juglandaceae.

125210. JUGLANS Sp.

125212. Juglans sp.

No. 4.

No. 6.

125211. JUGLANS Sp.

125213. JUGLANS Sp.

No. 5.

125214. Juglans sp.

125215. PAEONIA sp. Ranunculaceae.

Peony.

Walnut.

125216. Buphane disticha (L.f.) Herbert. Amaryllidaceae.

From Africa. Bulbs purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony, British East Africa. Received November 20, 1937.

A South African plant with a very large bulb up to a foot in diameter, which grows half out of the ground, protected by a multitude of papery coats. The stout scape, 6 inches to 1 foot high, bears a large globose umbel of dull red flowers, and the thick distichous leaves, which appear late, are strap-shaped and 1 to 2 feet long.

For previous introduction see 115319.

125217. CARMICHAELIA ODORATA Colenso. Fabaceae.

From New Zealand. Seeds purchased from Mrs. R. T. Richards, Round Top, Windwhistle, Canterbury. Received November 6, 1937.

A bushy shrub 3 to 10 feet high, leaflless except in the spring and early summer, when it is clothed with numerous small pinnately 3- to 7-foliolate leaves. The very small purple flowers,  $\frac{1}{6}$  to  $\frac{1}{6}$  of an inch long, are in slender erect racemes on the pendulous branchlets. Native to New Zealand.

For previous introduction see 89220.

125218. SACCHARUM. Poaceae.

Sugarcane.

From New Guinea. Cuttings collected near the Sepik River. Received November 22, 1937.

125219-125222. Asparagus spp. Convallariaceae.

From Rumania. Seeds presented by Professor Dr. Al Borza, Jardin Botanique de l'Université, Cluj. Received November 18, 1937.

125219. ASPARAGUS MARITIMUS Mill.

A herbaceous perennial, native to the coasts of Europe and northern Africa, closely resembling the common asparagus. The more woody plant, however, has a bitter flavor, is more bushy, the cladodes are angled, and the globose fruits are dark red.

For previous introduction see 42771.

125220. ASPARAGUS OFFICINALIS L.

Garden asparagus.

125221. ASPARAGUS TENUIFOLIUS Lam.

A herbaceous perennial native to southern Europe, with very slender, numerous cladodes and large bright-red berries; much like *Asparagus officinalis*.

For previous introduction see 37713.

# 125222. ASPARAGUS VERTICILLATUS L.

A semi-woody, climbing vine with stems 10 to 15 feet long, green angled, flexuose branches, and filiform cladodes 2 inches long. The funnel-shaped greenish-yellow flowers are in clusters of 1 to 4 and are followed by red berries ¼ inch in diameter. Native to Iran [Persia] and Siberia.

For previous introduction see 91308.

# 125223-125231.

From Germany. Plants purchased from L. Späth, Berlin. Received November 24, 1937.

125223-125225. Malus sylvestris Mill. Malaceae.

Apple.

125223. Apfel aus Grünheide.

125225. San Jacinto.

125224. Augustkalvill Dr. Fritz Baum.

125226-125229. Prunus spp. Amygdalaceae.

125226. Werdersche Marktkirsche. A cherry.

125227. Katalonischer Spilling. A plum.

125228. Späth's Früheste. A plum.

125229. Wilhelmine Späth. A plum.

125230-125231. Pyrus communis L. Malaceae.

Common pear.

125230. Bunte Julibirne.

125231. Philippsbirne.

125232. DIGITARIA HENRYI Rendle. Poaceae.

From Hawaii. Seeds presented by Lee D. Whitney, Hawaii Agricultural Experiment Station, Honolulu. Received November 17, 1937.

A grass with slender stems about 1 foot high, similar to *Digitaria eriantha*. It is a promising grass for wet subtropical situations, as it spreads rapidly and produces a large quantity of forage. Apparently an annual. It is native to Taiwan.

125233-125235. PRUNUS spp. Amygdalaceae.

From Austria. Seeds purchased from Jul. Stainer, Wiener-Neustadt. Received November 22, 1937.

125233. PRUNUS AVIUM L.

Sweet cherry.

Variety Sylvestris. From Austria.

125234. PRUNUS AVIUM L.

Sweet cherry.

Variety Sylvestris. From Czechoslovakia.

125235. PRUNUS MAHALEB L.

Mahaleb cherry.

From Dalmatia.

For previous introduction see 124963.

125236. Eragrostis tef (Zuccagni) Trotter. Poaceae.

Teff.

From the Union of South Africa. Seeds purchased from C. Starks & Co., Ltd., Mowbray, Cape Town. Received November 26, 1937.

For previous introduction see 115053.

125237. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

From the Netherlands. Seeds presented by A. E. H. R. Boonstra, Department of Botany, Institute for Plant Breeding, Wageningen. Received November 27, 1937.

Robusta.

125238-125249. Juglans regia L. Juglandaceae.

Persian walnut.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered in December 1937.

125238. Seedling of P. I. 71149. (D. R-36, T-33).

125239. Seedling of P. I. 71149. (D. R-36, T-34).

125240. Seedling of P. I. 65869. (D. R.-18, T-3).

125241. Seedling of P. I. 86347. (D. R-18, T-9).

125242. Seedling of P. I. 73561. (D. R-36, T-36).

125243. Seedling of P. I. 86346. (D. R-18, T-8).

125244. Seedling of P. I. 63430. (D. R-36, T-42).

125245. Seedling of P. I. 86347. (D. R-18, T-10).

125246. Seedling of P. I. 63430. (D. R-36, T-41).

125247. Seedling of P. I. 86346. (D. R-18, T-7).

125248. Seedling of P. I. 65870. (D. R-18, T-5).

125249. Seedling of P. I. 65870. (D. R-18, T-6).

125250-125251.

From Africa. Bulbs purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony, British East Africa. Received December 1, 1937.

125250. Canarina sp. Campanulaceae.

Received as Canarina abyssinica.

764465-48---3

125251. Haemanthus zambesiacus Baker. Amaryllidaceae.

Received as *Haemanthus multiflorus*. A bloodlily with oblong leaves about 8 inches long, narrowing to connate petioles forming a short stem, and a dense globose umbel, 6 inches across, of bright red flowers. Native to Mozambique District, Africa.

125252-125256. HEDERA HELIX L. Araliaceae.

English ivy.

From England. Plants purchased from the Backhouse Nurseries (York) Ltd., York. Received October 1, 1937.

125252. Digitata. A variety with small digitate green leaves.

125253. Lobata Major. A green-leafed variety with a very large middle lobe.

125254. Purpurea. A variety with leaves purple colored in cold weather.

125255. Digitata. Received as Hedera pennsylvanicum, a name without botanical standing.

125256. Silver Variegated. A variety with variegated leaves.

125257. ORYZA MINUTA Presl. Poaceae.

From the Philippine Islands. Seeds presented by the Director, Bureau of Plant Industry, Manila. Received December 1, 1937.

An erect annual grass about 3 feet high. Native to the Philippine Islands.

125258. PRUNUS MAHALEB L. Amygdalaceae.

Mahaleb cherry.

From Germany. Seeds purchased from John Noth, Jr., Fischbach, Kreis Gotha (Thur. Wald). Received November 27, 1937.

125259-125260. Beta vulgaris L. Chenopodiaceae.

Common beet.

From England. Seeds presented by R. W. Baxter, Alresford, Hants. Received November 27, 1937.

Collected in Lancing, Sussex.

125259. An upright form.

125260. A prostrate form.

125261. BAUHINIA PURPUREA L. Caesalpiniaceae.

From Egypt. Seeds presented by the Horticultural Section, Cairo, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received November 27, 1937.

Received as Bauhinia candicans, but the seeds are not of that species.

#### 125262-125280.

From England. Plants purchased from George Pyne, Denver Nurseries, Top-sham, Devon. Received December 4, 1937.

## 125262-125274. Malus sylvestris Mill. Malaceae.

Apple.

 125262. Braddick's Nonpareil.
 125269. St. Cecitia.

 125263. Christmas Pearmain.
 125270. Stubbard.

 125264. Cornish Pine.
 125271. Tom Putt.

 125265. Crimson Peasgood.
 125272. Upton Pyne.

 125266. Devonshire Quarrenden.
 125273. Venus Pippin.

 125267. Ponsford.
 125274. Woolbrook Pippin.

125268. Pyne's Pearmain.

125275-125280. Prunus spp. Amygdalaceae.

125275.  $\times$  Prunus effusa (Host) Schneid. (*Prunus avium*  $\times$  *cerasus*). Noble cherry.

125276. PRUNUS AVIUM L.

Sweet cherry.

St. Margaret's cherry.

125277. PRUNUS Sp.

Allgrove's Superb plum.

125278. PRUNUS SD.

Evesham Wonder plum.

125279. PRUNUS Sp.

Pershore Purple plum.

125280. PRUNUS Sp.

Steward's Golden prune.

125281. Puccinellia Limosa (Schur) Holmb. Poaceae.

Grass.

From Hungary. Seeds presented by the Royal Hungarian Soil Science Research Station, Szeged. Received November 29, 1937.

A perennial grass with slender decumbent stems about 2 feet high. Native to Europe. It is closely related to *Puccinellia distans*.

125282-125283. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From New Jersey. Trees presented by Dr. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received November 23, 1936. Numbered December 6, 1937.

125282. Sunbeam.

125283. New Jersey No. 70.

125284-125288.

From the Union of Soviet Socialist Republics. Seeds presented by the Mountain-Taiga Station, Far Eastern Branch of the Academy of Sciences, Voroshilov-Ussuriaky. Received December 3, 1937.

125284-125287. CLEMATIS spp. Ranunculaceae.

125284. CLEMATIS BREVICAUDATA DC.

A vigorous climbing vine, native to China, with pinnate or bipinnate, coarsely toothed leaves and axillary panicles of white flowers.

For previous introduction see 71143.

125285. CLEMATIS PANICULATA Thunb.

A somewhat woody vine, 12 to 15 feet long, native to eastern Asia, with compound leaves made up of 5 to 7 oblong-ovate leaflets 2 to 3 inches long. The nodding urn-shaped flowers, 1 inch long, have thick sepals with recurved tips and are densely brownish pubescent outside and violet within. The achenes have brown plumose styles.

For previous introduction see 102218.

125286. CLEMATIS RECTA MANDSHURICA (Rupr.) Maxim.

An ornamental herbaceous perennial 2 to 3 feet high, with masses of large white panicles. Native to Manchuria.

For previous introduction see 30244.

125287. CLEMATIS SERRATIFOLIA Rehder.

A woody climber 10 feet long, native to Chosen. The biternate leaves are made up of ovate-lanceolate serrate leaflets, and the large yellow flowers, with purple filaments, are 2 inches across and appear in the autumn.

For previous introduction see 76111.

125288. LACTUCA RADDEANA Maxim. Cichoriaceae.

125289. SACCHARUM. Poaceae.

Sugarcane.

From the Territory of New Guinea. Cuttings presented by F. J. Kirschbaum, Alexishafen-Madang. Received December 7, 1937.

Wild sugarcane.

125290-125309. ORYZA SATIVA L. Poaceae.

Rice.

From Australia. Seeds presented by the Department of Agriculture, New South Wales. Received December 7, 1937.

125290. Blue Rose, Seln. 5-3.

125291. Blue Rose, Seln. 5-9.

125292. Blue Rose, Seln. 7-10. 125295. Blue Rose, Seln. 7-38.

125293. Blue Rose, Seln. 7-12. 125296. Blue Rose, Seln. 7-41.

125294. Blue Rose, Seln. 7-19. 125297. (Blue Rose × Caloro) F<sub>3</sub> 13-18 '37.

125298. Sze Min. Y 4269 (China) 13-15 '37. An early variety with small flinty grains and weak straw.

125299. Bungala Y 4650 (Kenya) 431 I '37.

125300. Kisuki Y 4656 (Kenya) 443 I '37.

125301. Moumias Y 4659 (Kenya) 449 I '37. Very late, scented.

125302. Agar Y 4705 (Iraq) 453 I '37. A late variety with very erect heads.

125303. Shishma'a Y 4709 (Iraq) 461 I '37. A late variety.

125304. Sima'a Y 4710 (Iraq) 463 I '37. Midseason variety.

125305. Jaray Kungo Y 4738 (Gambia) 517 I '37. A late and variable variety.

125306. Yaka Mosgue Y 4790 (Gambia) 603 I '37. A late, variable variety.

125307. Sadi (Bi-dum) Y 4961 (Persia) 30-51 '37. A late variety.

125308. Sadri Y 4962 (Persia) 31-51 '37. A late variety.

125309. Siah-dum Y 4963. 32-52 '37. A late variety.

# 125310-125395.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 11, 1937.

This material was all collected in 1937.

125310-125327. HORDEUM VULGARE L. Poaceae.

Barley.

125310. No. 2930. Jan. From Laghman, May 25.

125311. No. 2982. Jan. From Daulatshah, June 1.

125312. No. 2990. Firmai. From Tagan, June 10. Said to be planted in the fall: harvested in June.

125313. No. 2991. Bahari. From Tagao, June 10. Said to be planted in the spring.

125314. No. 3009. Jan. From Gordez, June 20.

125315. No. 3014. Jan. From Nozi, at 8,500 feet altitude, June 22.

125316. No. 3021. *Muyak*. From Kabul, June 25, at 7,000 feet altitude. A thin-headed form of rather poor quality; said to be sown in the spring.

125317. No. 3022. *Kunduzi*. From Kabul, June 25, at 7,000 feet altitude. A large-headed form with grains arranged in a cylindrical head.

125318. No. 3023. *Jan-i-landani*. From Kabul, June 25, at 7,000 feet altitude. Head 4 inches long with grains in 2 rows only.

125319. No. 3091. Jan. From Khanabad, July 4, at 1,200 feet altitude. The only variety grown in this locality.

125320. No. 3116. From Gandocheshma, July 9, at 5,000 feet altitude. Heads up to 4 inches in length, tending to become beardless.

125321. No. 3200. Kaljan. From Krunn, July 30, at 9,000 feet altitude.

125322. No. 3201. Gurzak. From Krunn, July 30, at 9,000 feet altitude; tends to be beardless.

125323. No. 3204. Pustajan. From Krunn, July 30, at 9,000 feet altitude.

125324. No. 3206. Kaljan. From Zebak, July 23, at 10,000 feet altitude.

125325. No. 3455. *Jan.* From Tolokhan, July 28, at 2,000 feet altitude. A barley which grows 2 feet high in an extremely dry climate.

125326. No. 3789. *Baharijan*. From Shiburghan, September 15, at 1,200 feet altitude. Said to be a spring barley and probably unwatered.

125327. No. 3810. From Akcha, September 16, at 1,200 feet altitude. Said to be sown in the fall and irrigated.

125328-125339. ORYZA SATIVA L. Poaceae.

Rice.

125328. No. 2939. Birinj-i-luk. From Khudikhl, May 24, at 6,000 feet altitude.

125329. No. 2944. Loka. From Laghman, May 26. Sown in beds in the spring and transplanted after wheat is harvested.

Nos. 125330 to 125335. From Laghman, May 26.

125330. No. 2945. Laghmani Shali. 125333. No. 2948. Kunari Shah.

125331. No. 2946. Kunari Garma. 125334. No. 2949. Shali-i-Siya.

125332. No. 2947. Kunari Sarda. 125335. No. 2951. Shali Longin,

Nos. 125336 and 125337. From Laghman, May 27.

125336. No. 2955. Seray Ghati Shali.

125337. No. 2963. Pargani.

125338. No. 3071. *Mahin*. From Khanabad, July 3, at 1,200 feet altitude. Harvested in July; the finest rice grown locally.

125339. No. 3072. Berinj-i-luk. From Khanabad, July 3, at 1,300 feet altitude. Transplanted in July.

125340-125390. Triticum aestivum L. Poaceae.

Common wheat.

125340. No. 2626-A. From Akcha, September 8, at 1,200 feet altitude. Sown in the fall and grown under irrigation.

Nos. 125341 to 125350. From Laghman, May 25 and 26.

125341. No. 2920. Sufedcha. Planted in the fall and harvested in May; considered one of the best.

125342. No. 2925. Maparcha. Up to 4 feet high; the heads sometimes  $5\frac{1}{2}$  inches long, with over 100 kernels to the head; seems to stool little.

125343. No. 2926. *Maparcha*. A race with reddish, still larger heads and longer, stronger beards.

125344. No. 2927. Maparcha. Another race with the longest heads and strong blackish beards.

125345. No. 2928. Surkheha. A bearded, red-hulled wheat with heads up to 4 inches long.

125346. No. 2929. *Kafiri Kulumi*, or *Aulaki*. An early variety said to be grown in Kafirstan.

125347. No. 2931. Mohmad Amiri-i-surkh. A bearded red-hulled wheat with heads about 3½ inches long.

125348. No. 2932. *Mohmad Amiri-i-sufed*. A bearded, red-hulled wheat with heads about 3½ inches long.

125349. No. 2933. Gandum-i-munda. A beardless, red-hulled wheat with heads about  $3\frac{1}{2}$  inches long.

125350. No. 2934. Gandum-i-munda-i-sufed. A beardless whitish hulled wheat with heads 3½ inches long.

125351. No. 2965. Dandan-i-Shutus. From above Laghman, May 27. Heads said to be over 6 inches long.

125352. No. 2976. Bajauri. From Kalaghulanat, May 28. A red-hulled wheat with thin heads about  $2\frac{1}{2}$  inches long.

Nos. 125353 and 125354. From Tagan, June 9, at 6,000 feet altitude.

125353. No. 2988. *Garma*. A narrow-headed, short-bearded, white-hulled wheat.

125354. No. 2989. *Bajauri*. A red-hulled wheat, otherwise resembling No. 2988 [P. I. 125353].

Ncs. 125355 to 125357. From Gardez, June 20, at 8,000 feet altitude.

125355. No. 3006. Lalmi. A dry-land wheat.

125356. No. 3010. Awi-i-surkh. 125357. No. 3011. Awi-i-sufed.

Nos. 125358 and 125359. From Nozi, June 22, at 8,500 feet altitude.

125358. No. 3015. Awi. 125359. No. 3016. Lalmi.

Nos. 125360 to 125362. Luchak. From Kabul, June 25, at 7,000 feet altitude.

- 125360. No. 3024. Head firm, flattened, with the kernels in two double rows; hull white, bearded. A rare form.
- 125361. No. 3025. A form like No. 3024 [P. I. 125360], but with a red hull; kernel hard. Said to be the best of the local wheats.
- 125362. No. 3026. Like No. 3025 [P. I. 125361], but with undeveloped heads. Said to be the ancestral *luchak*; a rare form.

Nos. 125363 and 125364. From Shekhele, June 30, at 8,500 feet altitude.

- 125363. No. 3038. *Kandahari*. A name used in nearby places for a totally different type of wheat. This is a form 2 weeks earlier than No. 3039 [P. I. 125364], from which these heads were taken as strays.
- 125364. No. 3039. A form with long loose heads about  $5\frac{1}{2}$  inches long, with the grains in alternating groups of three. Said to be a spring wheat.

Nos. 125365 and 125366. From Khanabad, July 2, at 1,200 feet altitude.

- 125365. No. 3059. Sufed. A form with heads about 4 inches long, red-hulled, with the grains in alternating rows of three. Irrigated.
- 125366. No. 3060. *Surkha*. An irrigated wheat like No. 3059 [P. I. 125365], but with white hulls.
- 125367. No. 3063. *Kandahari*. From Baghlan, July 1. Grown without irrigation. The flattened heads are red-hulled and  $1\frac{1}{2}$  inches long.

Nos. 125368 and 125369. From Khanabad, July 3 and 4, at 1,200 feet altitude.

- 125368. No. 3070. *Munda*. Heads 4 inches long, red-hulled, beardless; grains in alternating groups of 3 and 4.
- 125369. No. 3084. Surkha. Like No. 3070 [P. I. 125368], but grown without irrigation.

Nos. 125370 to 125372. From Faizabad, July 11 and 12, at 4,000 feet altitude.

- 125370. No. 3143. Kulezan; also called Luchak, Bohonda, Kandalari, and Khoscha. Heads flattened with grains in close groups of three; hull white, heads 4 inches long by 2 inches wide.
- 125371. No. 3144. Zarda. Heads flattened, 3 inches long by % inch wide, hull white.
- 125372. No. 3145. Heads 4 inches long by % inch wide, hull white, beard 4 inches long.
- 125373. No. 3158. From Chakaran, July 17, at 6,000 feet altitude. A redhulled wheat with heads 4 inches long. Sown here in the fall, but at higher altitudes sown in the spring.
- 125374. No. 3184. From Zebak, July 22, at 10,000 feet altitude. A local mixture.
- 125375. No. 3203. Sufedak. From Krunn, July 30. Spring wheat.
- 125376. No. 3228. From Iskarzir, July 31, at 8,500 feet altitude.

Nos. 125377 and 125378. From Iskan, Augst 4, at 7,500 feet altitude.

- 125377. No. 3240. Head  $2\frac{1}{2}$  inches long by  $\frac{1}{2}$  inch wide; hull red.
- 125378. No. 3241. Head 4 inches long by % inch wide; hull white.
  - Nos. 125379 to 125381. From Jurm, August 5, at 7,000 feet altitude.
- 125379. No. 3242. Jaltak. Spring wheat, white hulled.
- 125380. No. 3243. *Gandum-i-surkh*. A red-hulled form of No. 3242 [P. I. 125379]; sown in the fall.

125381. No. 3244. Kalgandum. A short bearded, white-hulled form; sown in the spring.

Nos. 125382 to 125384. From Daraim, August 11, between 6,500 and 7,000 feet altitude.

125382. No. 3217. Surkhbamd. Heads about 4 inches long, long bearded, red-hulled, grains in 4's, alternating; total in head, 57.

125383. No. 3298. Like No. 3217 [P. I. 125382], but not so well grown.

125384. No. 3301. A wheat 3½ feet high, with white-hulled, bearded heads over 3 inches long, the grains in 4's, alternating.

125385. No. 3310. Surkha. From Gandakul, August 12, at 6,000 feet altitude. Planted in the fall, irrigated only from melting snow. The heads are 4 inches long, with the red grains in 4's, alternating.

125386. No. 3323. *Karlakato*. From Takia, August 14, at 4,500 feet altitude. An irrigated wheat with heads about 4 inches long, red hulled; beards strong, spreading, blackish, 3½ inches long; grains in 4's, alternating.

Nos. 125387 and 125388. From Balkh, September 5, at 1,200 feet altitude; from a farmer's grain piles.

125387. No. 3562. *Bahari*. Said to be a 90-day spring wheat that makes good bread; irrigated.

125388. No. 3563. *Gandum*. Said to be a fall wheat, not so good as No. 3562 [P. I. 125387], but fall wheats are sown to give pasture to lambs.

Nos. 125389 and 125390. From Saripul, September 11, at 1,500 feet altitude.

125389. No. 3711. Red-hulled, bearded heads about 3 inches long, with the grains in alternate 3's; irrigated.

125390. No. 3712. White-hulled, bearded heads about 3 inches long, with the grains in alternate 3's; irrigated.

125391-125395. ZEA MAYS L. Poaceae.

Corn.

125391. No. 2917. Zawar. From Laghman, May 25. Possibly an early variety.

125392. No. 2959. Jawar. From Laghman, June 3. Said to require little heat.

125393. No. 2985. Jawari. From Kail, June 3. Heat requirement low.

125394. No. 3080. From Khanabad, July 4, at 1,200 feet altitude. Possibly early.

125395. No. 3083. *Janahri*. From Khanabad, July 4, at 1,200 feet altitude. Possibly quick maturing.

125396. SOPHORA Sp. Fabaceae.

From China. Seeds collected for the Asiatic Expedition and forwarded by Soderbom Bros., Etsingol, Inner Mongolia. Received November 30, 1937.

A shrub about 2 feet high, with pale yellow flowers, which grows under very dry conditions. The Chinese use this shrub as a fertilizer.

125397. Amygdalus persica var. Nectarina Ait. Amygdalaceae. Nectarine.

From North Carolina. Budsticks presented by the Lindley Nurseries, Pomona. Received August 4, 1933. Numbered in December 1937.

Grady.

125398. Amygdalus persica var. Nectarina Ait. Amygdalaceae. Nectarine.

From New York. Budwood presented by H. B. Tukey, New York Fruit Testing Association, Geneva. Received August 9, 1933. Numbered in December 1937.

Hunter.

125399-125401. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

From New Zealand. Plants presented by H. R. Wright, Avondale, Auckland. Received in August 1936. Numbered in December 1937.

125399. Eleyi crab. Originally from Holland.

125400. No. 2. Delicious X (Ribstone Pip X Northern Spy).

125401. Lemonii, a flowering crab.

125402. Malus sylvestris Mill. Malaceae.

Apple.

From South Dakota. Scions presented by Prof. N. E. Hansen, South Dakota State College, Brookings. Received March 1, 1935. Numbered in December 1937.

Red Soviet. Originally from the Soviet Union.

125403-125404. Pyrus communis L. Malaceae.

Common pear.

From the Union of Soviet Socialist Republics. Scions presented by the Michurin Research Institute of Fruit Production, Michurinsk. Received February 8, 1935. Numbered in December 1937.

125403. Beurré Tolstobienshka pear.

125404. [Received without notes.]

125405-125557. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 9, 1937.

Collected in the summer and fall of 1937.

Nos. 125405 and 125406. Henduwana. From Laghman, May 26.

125405. No. 2935.

125406. No. 2937.

Nos. 125407 to 125409. From Khanabad, July 4, at 1,200 feet altitude.

125407. No. 3078. Fruit globose, 6 inches in diameter, green with blotched darker stripes; flesh white, tinted pink around the seeds; no flavor or sugar but probably not full grown.

125408. No. 3079. Fruit 1 foot by 8 inches, deep black green; rind 2½ inches thick; flesh red, sweet, of good quality and said to be a good keeper.

125409. No. 3092. Fruit globose, 6 inches in diameter, green with dark blotched stripes; flesh yellow, stained pinkish around the seeds; quality poor, but probably poorly grown.

Nos. 125410 to 125413. From Takia, August 12 to 14, at 4,500 feet altitude.

125410. No. 3315. Tarbuza. Fruit elongate, 14 inches long, blotch-striped; rind 1 inch thick; flesh yellow, stained pink in places, fairly sweet, melting, seedy.

125411. No. 3320. Fruit globose, 16 inches in diameter, plain light green; flesh pink, very sweet, of fine texture, rind 1 inch thick.

125412. No. 3328. Fruit globose, 14 inches in diameter, pale green; rind 1 inch thick; flesh pink, sweet, very good.

125413. No. 3330. A mixed collection of seeds from 10 different fruits; all had sweet melting flesh, often seedy.

Nos. 125414 to 125419. *Tarbuza*. From Chahiab, August 22, at 2,000 feet altitude. All melons grown in this locality are watered only by winter snow, and all are said to be good winter keepers.

125414. No. 3397. Fruit 18 by 10 inches, pale green, unmarked; flesh clear pink, sweet, and of good texture; nearly seedless.

125415. No. 3398. Fruit subglobose, about 1 foot in diameter, deep green with darker blotched ribs; flesh rose, fairly sweet, good texture, seedy.

125416. No. 3400. Fruit subglobose, 1 foot in diameter, sea green with darker blotched stripes; rind ½ inch thick; flesh pink, fair.

125417. No. 3401. Superficially like No. 3400 [P. I. 125416], but flesh is rose purplish and sweet.

- 125418. No. 3402. Fruit indistinguishable from No. 3399 except by seed color.
- 125419. No. 3403. Like No. 3398 [P. I. 125415], except for the seed color.

Nos. 125420 to 125422. From Hazarbagh, August 27 and 28, at 2,000 feet altitude.

- 125420. No. 3451. A mixture from several globose melons about 1 foot in diameter. These melons were irrigated.
- 125421. No. 3453. Fruit subglobose, 1 foot in diameter, pale green; flesh bright pink, sweet, good quality.
- 125422. No. 3454. Fruit pale green, grown under irrigation, somewhat pear-shaped, 18 inches long and weighs 30 pounds; flesh bright pink sweet, good texture, but the remarkable feature is that the stem half of the melon is absolutely seedless.
- Nos. 125423 to 125429. Tarbuz. From Khanabad at 1,500 feet altitude, August 29 and September 1.
- 125423. No. 3459. Fruit elongate 10 by 14 inches, pale green; flesh bright pink, sweet, but slightly stringy.
- 125424. No. 3472. Fruit pear-shaped, 12 inches in diameter, pale green with blotched stripes of darker green; rind  $1\frac{1}{2}$  inches thick; flesh pink, sweet with few seeds.
- 125425. No. 3500. Fruit globose, 12 inches in diameter, green, vermiculated darker; in appearance exactly like No. 3499 [P. I. 125512], but flesh is clear pink and of fair quality, but slightly stringy.
- 125426. No. 3503. Fruit 17 by 7 inches, dark green, line-blotched lighter; rind 1 inch thick, flesh rose, becoming yellow next the rind, exceedingly sweet, texture good.
- 125427. No. 3506. Fruit 15 by 7 inches, pale green with traces of reticulations; rind 1 inch thick; flesh pink, sweet and slightly stringy.
- 125428. No. 3509. Fruit dark green, 12 by 8 inches; rind 1 inch; flesh pink, becoming yellow near the rind, sweet and of good texture.
- 125429. No. 3510. Fruit 11 by 7 inches, dark green with still darker blotched stripes; rind ¾ inch thick; flesh pink, sweet with some fiber.
- Nos. 125430 to 125434. Tarbuz. From Tashkurgan, September 4, at 1,200 feet altitude.
- 125430. No. 3519. Fruit 14 by 10 inches, grass green; rind  $3\!\!4$  inch thick; flesh rose, good quality.
- 125431. No. 3520. Fruit 16 by 12 inches, greenish white with blotched stripes of green; rind ½ inch thick; flesh rose, good texture, but little sugar.
- 125432. No. 3524. Fruit globose, 10 inches in diameter, pale green with broad stripes of darker green; rind ½ inch thick; flesh rose, sweet, and of good texture.
- 125433. No. 3525. Fruit 14 by 10 inches, grass green; rind ¾ inch thick; flesh rose, sweet, and of good texture.
- 125434. No. 3530. Fruit globose, 10 inches in diameter, green vermiculated with darker green; rind ½ inch thick; flesh pink of good texture, sweet.
- Nos. 125435 to 125437. Tarbuza. From Mazarisharif, September 4, at 1,200 feet altitude.
- 125435. No. 3544. Fruit 16 by 8 inches, light green with darker green blotched stripes; rind ½ inch thick; flesh pink, sweet, of good texture, and with few seeds.
- 125436. No. 3546. Fruit 16 by 6 inches, dark green with broken, blotched stripes of pale green; rind ½ inch thick; flesh rose, sweet, of good quality.
- 125437. No. 3550. Fruit 14 by 7 inches, dark green with paler green stripes; rind ¾ inch thick; flesh rose, sweet, rather firm, but no fiber.
  - Nos. 125438 and 125439. From Balkh, September 5, at 1,200 feet altitude.

- 125438. No. 3559. Fruit globose, 12 inches in diameter, very dark green; rind 1 inch thick, flesh pink, firm, sweet, no fiber.
- 125439. No. 3560. Fruit globose about 12 inches in diameter, dark green with darker blotched stripes; rind 1 inch thick; flesh rose, firm, sweet.
- Nos. 125440 to 125448. From Mazarisharif, September 5 to 7, at 1,200 feet altitude.
- 125440. No. 3565. Fruit subglobose, 16 inches in diameter, light green, heavily covered with dark-green, blotched stripes; rind 1 inch thick; flesh rose mixed white, sweet, of good texture.
- 125441. No. 3568. Fruit 18 by 10 inches, light green with traces of vermiculation; rind ½ inch thick; flesh bright pink, sweet, of good texture.
- 125442. No. 3569. Fruit elongate, 16 by 10 inches, pale green with traces of vermiculation; rind ½ inch thick; flesh rose, tinged purple, of good texture.
- 125443. No. 3580. Fruit 14 by 12 inches, pale green with narrow blotched stripes of darker green; rind about 1 inch thick; flesh pink, sweet, of good texture for so large a melon.
- 125444. No. 3583. Fruit globose, 14 inches in diameter, dark green with blotched stripes of darker green; rind 1½ inches thick; flesh pink, sweet, of good texture.
- 125445. No. 3585. Fruit globose, 10 inches in diameter, leopard spotted light green; rind ¼ inch thick; flesh rose, sweet, good texture.
- 125446. No. 3605. Fruit 13 by 6 inches, blotched, striped in two shades of green; rind  $\frac{1}{2}$  inch thick; unripe.
- 125447. No. 3606. Fruit 15 by 7 inches; pale green with irregular narrow stripes of white green; rind ¾ inch thick; flesh rose, sweet, of good texture.
- 125448. No. 3607. Fruit 12 inches long, white green; rind ½ inch thick; flesh yellow stained pink abundantly around the seeds; flesh sweet and of good texture, few seeds.
  - Nos. 125449 to 125452. From Akcha, September 8, at 1,200 feet altitude.
- 125449. No. 3632. Fruit globose, 10 inches in diameter, grass green; rind 1¼ inches thick; flesh pink, sweet, of good texture but for a little fiber.
- 125450. No. 3638. Fruit globose, 12 inches in diameter, with distinctly indented ribs, grass green dotted and blotched, striped with darker green; rind 1 inch thick; flesh pink, sweet, but a little stringy.
- 125451. No. 3639. Fruit 10 by 14 inches, grass green with blotched stripes of darker green; rind ¾ inch thick; flesh pink, sweet, of good texture, first class.
- 125452. No. 3640. Fruit 14 by 10 inches, grass green with blotched stripes of darker green; rind ¾ inch thick; flesh pink, fairly sweet, some fiber. Very much like No. 3639 [P. I. 125451].
- 125453. No. 3643. From Mazarisharif, September 7, at 1,200 feet altitude. Fruit globose, 11 inches in diameter, dark green with blotched stripes of darker green; rind  $\frac{3}{4}$  inch thick; flesh rose, sweet, of good texture.
  - Nos. 125454 to 125468. From Akcha, September 9, at 1,200 feet altitude.
- 125454. No. 3645. Fruit 19 by 10 inches, grass green with irregular blotches of paler green; rind 1 inch thick; flesh sweet, bright pink, of good texture.
- 125455. No. 3652. Fruit 19 by 10 inches, light green; rind ½ inch thick; flesh pink, sweet, of good texture.
- 125456. No. 3653. Fruit globose, 10 inches in diameter, yellow with broad blotched stripes of orange; rind ½ inch thick; flesh pink, of good texture, and fairly sweet. A local type.
- 125457. No. 3660. Fruit 16 by 9 inches; rind 1¼ inches thick; flesh rose, sweet, good texture.
- 125458. No. 3667. Fruit irregularly elongate, 20 by 8 inches, deep green; rind 1 inch thick; flesh pink, sweet, with some fiber.

- 125459. No. 3669. Fruit green, globose, 12 inches in diameter, broadly striped with black green and dotted with green, distinctly indented ribs; rind 1 inch thick; flesh pink, sweet, a little fiber.
- 125460. No. 3684. Fruit globose, 9 inches in diameter, pale green with traces of vermiculation; rind 1 inch thick; flesh rose.
- 125461. No. 3688. Fruit irregularly elongate, 18 by 8 inches; light green, more or less reticulated; flesh pink, very sweet, some fiber; rind 1½ inches thick.
- 125462. No. 3689. Fruit 13 by 10 inches, pale green with reticulated ribs; rind 1 inch thick; flesh sweet, of good texture, the heart cream, and pink around the seeds.
- 125463. No. 3692. Fruit 20 by 9 inches, black green; rind 1¼ inches; flesh yellow near the rind and at the heart; around the seeds it is pink, sweet, with some fiber.
- 125464. No. 3694. Fruit 14 by 9 inches, dark green, clouded with lighter green; rind 1½ inches across; flesh pink, sweet, some fiber.
- 125465. No. 3698. Fruit 16 by 6½ inches; very dark green with lighter green stripes; rind 1¼ inches thick; flesh yellow, strongly tinted pink around the seeds.
- 125466. No. 3702. Fruit 13 by 11 inches, green, blotched and reticulated with darker green; rind 1¼ inches thick; flesh stringy, pink; hollow-hearted, a rare fault in Afghan melons.
- 125467. No. 3708. Fruit 12 by 5 inches, irregularly elongate, light green, reticulated; rind ½ inch thick; flesh pale yellow, stained pink around the seeds, sweet, and of good texture.
- 125468. No. 3714. Fruit 18 by 8 inches, dark green with narrow stripes of lighter green; rind 1 inch thick; fruit was unripe.
  - Nos. 125469 to 125472. From Saripul, September 13, at 1,500 feet altitude.
- 125469. No. 3719. Fruit 11 by 9 inches, pale green with more or less apparent stripes of dark green; rind 1 inch thick; flesh pink, of good texture, very sweet.
- 125470. No. 3721. Fruit 11 by 9 inches, deep green; rind 1 inch thick; flesh bright pink, sweet, of good texture.
- 125471. No. 3722. Fruit globose, 9 inches in diameter, grass green with distinctly indented ribs; rind 1 inch thick; flesh pink, sweet, more or less stringy.
- 125472. No. 3727. Fruit globose, 10 inches in diameter, striped with grass green and paler green in equal stripes; rind ½ inch thick; flesh deep pink, sweet, some fiber.
- 125473. No. 3786. From Shiburghan, September 14, at 1,200 feet altitude. Fruit 12 by 10 inches, pale green with blotched stripes of darker green; rind 1 inch thick; flesh pink, of good texture, fairly sweet.
  - Nos. 125474 to 125488. From Akcha, September 16, at 1,200 feet altitude.
- 125474. No. 3790. Fruit 17 by 6 inches, plain pale green; rind 1 inch thick; flesh pink, sweet, of good texture.
- 125475. No. 3792. Fruit 14 by 9 inches, sea green with traces of vermiculation; rind 1¼ inches thick; flesh pink, sweet, some fiber.
- 125476. No. 3794. Fruit 17 by  $10\frac{1}{2}$  inches, equal blotched stripes of sea green and grass green; rind  $1\frac{1}{2}$  inches thick; flesh rose, sweet, some fiber.
- 125477. No. 3795. Fruit 15 by 10 inches, sea green, heavily obscured by blotched stripes of grass green; rind ½ inch thick; flesh pink, sweet, of good texture.
- 125478. No. 3797. Fruit subglobose, 9 inches in diameter, white green; rind ½ inch thick; flesh pink, little sugar, but of good texture.
- 125479. No. 3801. Fruit subglobose, 11 inches in diameter, grass green with broad stripes of very dark green; rind 1¼ inches thick; flesh pink, streaked white, sweet, of fair texture.

- 125480. No. 3802. Fruit subglobose, 11 inches in diameter, very dark green with faintly indented ribs; rind 1 inch thick; flesh rose, sweet, of good texture.
- 125481. No. 3804. Fruit subglobose, 12 inches in diameter, grass green with broad stripes of darker green; rind 1 inch thick; flesh pink, sweet, some fiber.
- 125482. No. 3805. Fruit irregularly elongate, 18 by 6½ inches, dark green with obscure clouding in stripes of paler green; rind 1½ inches thick; flesh yellow, stained around the seeds with pin; sweet and of good texture.
- 125483. No. 3806. Fruit 12 by 7 inches, green white with broad stripes of grass green; rind ¾ inch thick. Unripe.
- 125484. No. 3809. Fruit 20 by 9 inches, sea green with faint vermiculation; rind 1½ inches thick; flesh pink, sweet, of good texture.
- 125485. Nó. 3812. Fruit 13 by 9½ inches, light green with equal stripes of grass green; rind 1 inch thick; flesh pink, sweet, of good texture.
- 125486. No. 3816. Fruit 15 by 9 inches, very dark green with narrow stripes of paler green; rind 1¼ inches thick; flesh pink, sweet, of good texture.
- 125487. No. 3817. Fruit irregularly elongate, 15 by 7 inches, dark green with lengthwise cloudings of pale green; rind 1 inch thick; flesh yellow, heavily stained around the seeds with pink, sweet and of good texture.
- 125488. No. 3820. Fruit 14 by 6½ inches, dark green with blotched stripes of darker green; rind ½ inch thick; flesh rose, sweet, of good texture.
- Nos. 125489 to 125500. From Balkh, September 18 to 20, at 1,200 feet altitude.
- 125489. No. 3823. Fruit globose, 9 inches in diameter, yellow, blotched with orange stripes; rind ½ inch thick; flesh pink, of fair texture, little fiber.
- 125490. No. 3832. Fruit 12 by 9 inches, grass green, reticulated with darker green; rind % inch thick; flesh pink, sweet, some fiber.
- 125491. No. 3837. Fruit 15 by 8 inches, pale green, reticulated; rind ¾ inch thick; flesh pink, sweet, of good texture.
- 125492. No. 3843. Fruit 14 by 10 inches, pale green, with narrow stripes of grass green; rind 1 inch thick; flesh pink, of good texture, but with little sugar.
- 125493. No. 3845. Fruit globose, 11 inches in diameter, about equal stripes of sea green and grass green with broken irregular reticulations; rind 34 inch thick; flesh pink, sweet, with some fiber.
- 125494. No. 3846. Fruit globose, 10 inches in diameter, grass green; rind ½ inch thick; flesh rose, of good texture, but insipid.
- 125495. No. 3848. Fruit 14 by 12 inches, grass green; rind 1 inch thick; flesh rose, sweet, some fiber.
- 125496. No. 3849. Fruit 14 by 10 inches, pale green with some vermiculation; rind 1 inch thick; flesh pale rose, some fiber and with a strange musty flavor.
- 125497. No. 3852. Fruit 18 by 9 inches, grass green with some vermiculation; rind ¾ inch thick; flesh rose, sweet, some fiber.
- 125498. No. 3853. Fruit 15 by 7 inches, grass green with narrow broken blotched lines of paler green; rind ¾ inch thick; flesh rose, good texture, but low in sugar.
- 125499. No. 3858. Fruit globose, 10 inches in diameter, dark green; rind ¾ inch thick; flesh bright pink, sweet, of good texture.
- 125500. No. 3859. Fruit 15 by 12 inches, equal stripes of vermiculated grass green and plain very dark green; rind 1½ inches thick; flesh pink, of fair texture and fair sugar content.
- 125501. No. 3609. From Mazarisharif, September 7 at 1,200 feet altitude. Fruit 10 by 8 inches, very dark green; rind ½ inch thick; flesh rose, tinged purple, fair quality.
  - Nos. 125502 and 125503. Hinduwana. From Laghman, May 26.
- 125502. No. 2936. Reported the largest and best.

- 125503. No. 2938.
- 125504. No. 3037. *Hinduvana*. Sold at Kabul June 29, but grown near Peshawar, India. Fruit 22 by 13 inches, pale green, with traces of bold blotched lines of darker green; rind 1¾ inches thick; flesh pink, good texture, fairly sweet, moderately seedy.
- 125505. No. 3095. From Khanabad, July 4, at 1,200 feet altitude. Fruit subglobose, 12 inches in diameter, medium green, faintly reticulated; rind 1½ inches thick; flesh rose. Unripe.
  - Nos. 125506 and 125507. From Takia, August 12 to 14, at 4,500 feet altitude.
- 125506. No. 3316. *Tarbuza*. Fruit elongate, 14 inches long, reticulated; rind 1 inch thick; flesh fairly sweet, melting, seedy.
- 125507. No. 3321. A large elongate melon of fine quality.
  - Nos. 125508 and 125509. From Chahiab, August 22, at 2,000 feet altitude.
- 125508. No. 3399. *Tarbuza*. Fruit subglobose, 12 inches in diameter, sea green, finely netted with darker green.
- 125509. No. 3404. Like No. 3398 [P. I. 125415], except for the seed color.
- Nos. 125510 to 125514. From Khanabad, August 29 and 30, at 1,500 feet altitude.
- 125510. No. 3460. *Tarbuza*. Fruit subglobose, 12 inches in diameter, pale green, vermiculations darker green; flesh white in center, pink around the seeds, sweet, tender, seedy.
- 125511. No. 3477. Fruit globose, 12 inches in diameter, pale green with blotched, darker green stripes; rind 1¾ inches thick; flesh white at the heart, the rest rose, sweet, fine texture.
- 125512. No. 3499. Fruit globose, 12 inches in diameter, green, vermiculated darker green; rind 1½ inches thick; flesh pink, mottled with white, sweet, melting and seedy, of excellent quality.
- 125513. No. 3502. *Tarbuza*. Fruit subglobose, 12 inches in diameter, pale green with dots and broken reticulated ribs of darker green.
- 125514. No. 3516. Fruit globose, 12 inches in diameter, dark green with cloudings of darker green; rind ½ inch thick; flesh yellow, abundantly stained with rose around the seeds, sweet, melting, first class except that it is rather seedy.
- Nos. 125515 to 125521. Tarbuza. From Tashkurgan, September 4, at 1,200 feet altitude.
- 125515. No. 3521. Fruit 16 by 12 inches, pale green, finely reticulated; rind 1 inch thick; flesh rose-colored, sweet, and of good texture.
- 125516. No. 3522. Fruit globose, 8 inches in diameter, grass green, vermiculated; rind ¼ inch thick; flesh pink, sweet, of good texture.
- 125517. No. 3523. Fruit globose, about 12 inches in diameter, dark green with showing of vermiculations and stripes of darker green; rind 1 inch thick; flesh rose, sweet, of good texture.
- 125518. No. 3526. Fruit globose, 15 inches in diameter, green white with blotched stripes of darker green; overripe, flesh stringy.
- 125519. No. 3527. Fruit globose, 12 inches in diameter, greenish white with reticulated ribs; rind ½ inch thick; flesh rose, sweet, of good texture.
- 125520. No. 3528. Fruit globose, 10 inches in diameter, white with vermiculated ribs; rind ½ inch thick; flesh rose, sweet, of good texture.
- 125521. No. 3529. Fruit 14 by 16 inches, green with blotched stripes of darker green; rind ½ inch thick; flesh rose, of good quality.
- Nos. 125522 to 125524. From Mazarisharif, September 5 to 7, at 1,200 feet altitude.
- 125522. No. 3566. Fruits 18 by 12 inches, light green, vermiculated, with darker green; rind 1¼ inches thick; flesh yellow, heavily stained rose around the seeds, sweet, of good texture.

- 125523. No. 3575. Fruit globose, 10 inches in diameter, pale green, reticulated; rind  $\frac{1}{2}$  inch thick; flesh rose, sweet, of fair texture.
- 125524. No. 3644. Fruit globose, 12 inches in diameter, very dark green; rind 1 inch thick; flesh rose, sweet, of good texture.
  - Nos. 125525 to 125531. From Akcha, September 8, at 1,200 feet altitude.
- 125525. No. 3661. Fruit globose, 10 inches in diameter, green with darker green blotched stripes; rind 1 inch thick; flesh sweet, of good texture.
- 125526. No. 3666. Fruit 18 by 10 inches, dark green with short blotched stripes of lighter green; rind ½ to ¾ of an inch thick; flesh pink, sweet, of good texture.
- 125527. No. 3687. Fruit globose, 10 inches in diameter, light green with blotched stripes of grass green; rind 1 inch thick; flesh pink, some fiber.
- 125528. No. 3690. Fruit 10 by 12 inches, dark green with narrow streaks of lighter green; rind 1¼ inches thick; flesh pink with white heart, sweet, with a few fibers.
- 125529. No. 3693. Fruit 18 by 10 inches, very dark green; rind ½ inch thick; flesh rose, sweet, of good texture.
- 125530. No. 3696. A long melon.
- 125531. No. 3705. Fruit 11 by 9 inches, white green with narrow blotched stripes of darker green; rind 1 inch thick; flesh pink, sweet, of good texture.
- Nos. 125532 to 125539. From Saripul, September 12 and 13, at 1,500 feet altitude. All melons from this place are said to be grown without irrigation.
- 125532. No. 3715. Fruit globose, 10 inches in diameter, pale green with blotched stripes of darker green; rind ½ inch thick; flesh pink, fairly sweet, of good texture.
- 125533. No. 3717. Fruit pear-shaped, 12 inches long, pale green; rind ½ to 1 inch thick; flesh pink, of good texture, very sweet.
- 125534. No. 3718. Fruit globose, 13 inches in diameter, pale green with narrow blotched stripes of darker green; rind ½ inch thick; flesh deep pink, sweet, of good texture.
- 125535. No. 3720. Fruit globose, 10 inches in diameter, pale green with broad blotched stripes of darker green; rind 1 inch thick; flesh bright pink, sweet, of good texture.
- 125536. No. 3723. Fruit globose, 9 inches in diameter, very dark green with distinctly indented ribs; rind  $\frac{1}{2}$  inch thick; flesh deep pink, very sweet, of good texture.
- 125537. No. 3724. Fruit 13 by 8 inches, grass green with irregular stripes of darker green; rind ¾ inch thick; flesh rose, sweet, some fiber.
- 125538. No. 3725. Fruit subglobose, 11 inches in diameter, grass green, reticulated; rind ¾ inch thick; flesh pink, sweet, some fiber.
- 125539. No. 3726. Fruit globose, 9 inches in diameter, deep green with darker blotched stripes; rind  $\frac{1}{2}$  inch thick; flesh deep pink, sweet, of good texture.
- Nos. 125540 and 125541. From Shiburghan, at 1,200 feet altitude, September 13 and 15.
- 125540. No. 3785. Fruit globose, 12 inches in diameter, very dark green; rind 1 inch thick; flesh pink, sweet, of good texture.
- 125541. No. 3787. Fruit subglobose, 12 inches in diameter, dark green; rind ¾ inch thick; flesh pink, sweet, of good texture.
  - Nos. 125542 to 125545. From Akcha, at 1,200 feet altitude, September 16.
- 125542. No. 3791. Fruit subglobose, 12 inches in diameter, sea green, obscurely reticulated; rind 1 inch thick; flesh pink, sweet, some fiber.
- 125543. No. 3807. Fruit 12 by 9 inches, very dark green; rind 1 inch thick; flesh pink, sweet, a few fibers.
- 125544. No. 3808. Fruit 17 by 7½ inches, sea green, vermiculated with darker green; rind ¾ inch thick; flesh pink, sweet, of good texture.

- 125545. No. 3811. Fruit subglobose, 11 inches in diameter, green white with irregular stripes of two shades of pale green, mixed; rind 1 inch thick; flesh is mostly white, some pale yellow, stained pink around the seeds, rather too firm and with little sugar.
- 125546. No. 3815. Fruit 19 by 9 inches, grass green with paler narrow blotched stripes; rind 1 inch thick; flesh pink, becoming yellow near the rind, sweet, some fiber.

Nos. 125547 to 125557. From Balkh, at 1,200 feet altitude, September 18 to 20.

125547. No. 3822. Fruit elongate; flesh pink.

125548. No. 3824. Fruit globose, 9 inches in diameter, grass green; rind ½ inch thick; flesh pink, sweet, of good texture.

125549. No. 3838. Fruit 14 by 12 inches, grass green; rind 1 inch thick; flesh rose, sweet, a few fibers.

125550. No. 3840. Fruit globose, 11 inches in diameter, sea green with traces of vermiculations; rind % inch thick; flesh rose, insipid, fibrous.

125551. No. 3842. Fruit subglobose, 11 inches in diameter, green with some darker green vermiculations and some paler green cloudings; rind ¾ inch thick; flesh pink, sweet, some fiber.

125552. No. 3844. Fruit 14 by 7 inches, with equal stripes of light and grass green; rind 1 inch thick; flesh pink, broadly yellow next the rind, fairly sweet and of good texture.

125553. No. 3850. Fruit 18 by 12 inches, with equal stripes of grass green and light green, the light green stripes vermiculated with darker green; rind 1½ inches thick; flesh rose, sweet, of good texture.

125554. No. 3851. Fruit 14 by 10 inches, somewhat tapered to the stem end, pale green; rind 1 inch thick; flesh bright rose, sweet, slightly fibrous.

125555. No. 3856. Fruit 14 inches in diameter, pale green vermiculated, with broken stripes of pea green; rind 1 inch thick; flesh yellow with heavy pink staining around the seeds, sweet, of good texture.

125556. No. 3857. Fruit 20 by 10 inches, broad dark-green and narrow light-green stripes, the latter vermiculated; rind 1 inch thick; flesh rose, sweet, some fiber.

125557. No. 3847. Fruit 16 by 11 inches, grass green with darker vermiculations; rind 1½ inches thick; flesh rose, of fair quality.

From France. Trees purchased from Charles Détriché, Angers. Received December 10, 1937.

125558. PRUNUS AVIUM. L. Amygdalaceae.

Mazzard cherry.

125559. Prunus Mahaleb L. Amygdalaceae.

Mahaleb cherry.

125560-125566. Malus sylvestris Mill. Malaceae.

Apple.

125560. De Jaune. 125561. Gros Locard. 125564. Reinette de Caux.

125562. Fréquin de Chartres.

125565. Noir de Vitry.

125563. Reinette Clochard.

125566. Surpasse Fréquin.

123303. Remember Olochara

125567. Prunus avium L. Amygdalaceae.

Sweet cherry.

Bigarreau Moreau.

125568-125569. Prunus domestica L. Amygdalaceae.

Common plum.

From New York. Scions presented by Dr. H. Wellington, New York Experiment Station, Geneva. Received January 11, 1932. Numbered in November 1937.

125568. Stanley.

125569. Albion.

125570-125660.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 10, 1937.

Seeds collected in the summer and autumn of 1937.

125570-125577. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

- 125570. (No Koelz number.) From Kabul. A yellow freestone with a pink cheek,  $2\frac{1}{2}$  inches in diameter.
- 125571. No. 3104. From Gumbaz, at 3,000 feet altitude, July 6. A large almond-shaped peach 3 inches in diameter, probably white-fleshed.
- 125572. No. 3250. Shaftaln. From Jurm, at 7,000 feet altitude, August 7. A globose peach, 1½ inches in diameter; flesh cream, not stained red at pit, a freestone of excellent flavor.
- 125573. No. 3498. Shaftain. From Khanabad, at 1,500 feet altitude, September 1. Fruit globose, 2 inches in diameter, yellow with pink cheek; flesh white, stained red at pit, a freestone with a flavor rather different from our peaches.
- 125574. No. 3613. Shaftaln. From Mazarisharif, at 1,200 feet altitude, September 7. Fruit 2 inches in diameter, yellow green with pink cheek; flesh cream, stained red at pit; flesh sweet and well-flavored.
- 125575. No. 3677. Shaftaln. From Akcha, September 9, at 1,200 feet altitude. Fruit 2 inches in diameter, pale yellow, heavily clouded pink; flesh cream, stained red at pit, good flavor.
- 125576. No. 3827. From Balkh, September 19, at 1,200 feet altitude. Tree 15 feet high, 6 inches in diameter. Fruit 2 inches in diameter, pale yellow; flesh creamy yellow, stained red at the pit. A freestone of excellent flavor.
- 125577. No. 3866. Shaftaln. From Saripul, September 11. Fruit 2¼ inches in diameter, light yellow with cream-yellow flesh stained more or less at the pit; freestone.

125578. Amygdalus sp. Amygdalaceae.

No. 3271. From Daraim, at 8,000 feet altitude, August 10. A tree 12 feet high, 18 inches in diameter, on a dry slope; attractive form; fruit bitter.

125579. JUGLANS REGIA L. Juglandaceae.

Persian walnut.

No. 2905. Charmagz. From above Marnakhel, about 6,000 feet altitude, May 20. Nuts thin shelled, said to be of good quality; tree said to be cold resistant.

125580-125587. Morus spp. Moraceae.

125580-125584. MORUS ALBA L.

White mulberry.

125580. No. 3055. *Ibrahirn Kharie.* From Khanabad, at 1,200 feet altitude, July 2. Fruit 1 by ½ inch, white, rose tinged or purple black, sweet. Mixed fruit from a grafted tree.

Nos. 125581 to 125583. From Chakaran, at  $6{,}000$  feet altitude, September 17.

125581. No. 3150.

125583. No. 3152. Bedana.

125582. No. 3151.

125584. No. 3183. Bedana. From Takia, at 5,000 feet altitude, July 6. Fruit sweet, white, small, nearly seedless.

125585. Morus sp.

No. 3054. Shahtut. From Khanabad, at 1,200 feet altitude, July 2. Fruit reddish black, 1 inch by  $\frac{3}{4}$  inch, acid, of delicious flavor, firm; flavor resembles that of a good dewberry.

125586. Morus sp.

No. 3155. Shahtut. From Chakaran, at 6,000 feet altitude, September 17. Fruit  $1\frac{1}{2}$  to  $\frac{1}{8}$  inch, red black; flavor pleasantly acid, delicious.

125587. Morus sp.

No. 3170. Shahtut. From Faizabad, at 4,000 feet altitude, July 13. Fruit large, red and black, pleasantly acid; a late variety.

125588. PISTACIA CABULICA Stocks. Anacardiaceae.

No. 3309. *Pista*. From Teshkan Pass, at 5,000 feet altitude, August 12. Bushes about 8 feet high, growing on a dry slope that is watered by winter snow. Fruits mange-scented, yellow with pink cheek.

125589-125657. Prunus spp. Amygdalaceae.

#### 125589-125624. PRUNUS ARMENIACA L.

Apricot.

Nos. 125589 to 125591. Zardalu. From Jalalabad, at about 2,000 feet altitude, May 24. Fruit subglobose, about 2 inches in diameter, pale yellow, very sweet but insipid.

125589. No. 2912.

125591. No. 2914.

125590, No. 2913,

125592. No. 2954. Zardalu. From Laghman, May 26. Fruit 1 by 1½ inches, pale yellow; flesh, although rather acid, has a pleasant taste, and the kernels are sweet.

Nos. 125593 to 125597. From Kabul, at 7,000 feet altitude.

125593. No. 2995. June 11. Fruit pale yellow; flesh and kernels sweet. Nos. 125594 to 125597 were collected June 25.

125594. No. 3028. Sufedcha. Fruit 2 inches high, pale yellow; flesh fiberless, low in sugar, kernel sweet.

125595. No. 3029. Kaisi. Fruit subglobose, 1½ inches long, pale yellow with rosy cheek, suture deep; flesh white, sweet; kernel edible.

125596. No. 3030. Zardalu paiwanda. Fruit subglobose, golden yellow, 2 inches high; flesh yellow, fairly sweet, no fiber; kernel sweet.

125597. No. 3031. Gulepumba. Fruit almond-shaped, 2 inches high, green; kernel sweet. Unripe fruit used for flavoring meat.

Nos. 125598 and 125599. From Charikar, June 30, at 6,000 feet altitude.

125598. No. 3041. Kaisi. Fruit subglobose, 1½ inches high, pale yellow with pink cheek, suture relatively deep; flesh white, sweet, insipid, no fiber; kernel sweet.

125599. No. 3042. Zardalu. Fruit 1½ inches high, golden yellow; flesh firm, fiberless, sweet but insipid; kernel not edible.

Nos. 125600 to 125603. Zardalu. From Khanabad, at 1,200 feet altitude, July 3 and 4.

125600. No. 3064. Fruit 1½ inches high, pale yellow, suture shallow; flesh pale yellow, fiberless, very sweet; kernel sweet.

125601. No. 3069. Fruit 2 inches high, golden yellow, fiberless; kernel edible.

125602. No. 3081. Fruit almond-shaped, 21/4 inches high, orange; flesh sweet, fiberless.

125603. No. 3090. Fruit almond-shaped, 1½ inches high, yellow, suture shallow; flesh orange, sweet, fiberless.

Nos. 125604 to 125607. From Faizabad, July 11, at 4,000 feet altitude.

125604. No. 3137. Fruit beaked, 2½ inches high, yellow with suture moderately deep; flesh firm, sweet with little flavor; kernel sweet.

125605. No. 3138. Fruit beaked, 2 inches high, suture shallow, red-cheeked; flesh watery, fiberless; kernel sweet.

125606. No. 3139. Fruit globose, 2½ inches high, golden yellow; flesh sweet, fiberless, very good quality; kernel sweet.

125607. No. 3140. Fruit globose, 1¼ inches high, greenish yellow; flesh pale yellow, sweet, fiberless; kernel sweet.

Nos. 125608 to 125611. From Barak, July 16, at 5,000 feet altitude.

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125608. No. 3173. A fruit with sweet kernels.

125609. No. 3174. Another type with sweet kernels.

125610. No. 3175. Seeds collected from dried fruit which was very sweet and candylike, probably pale-fleshed.

125611. No. 3176. Fruit globose, 2½ inches high, yellow; flesh sweet; kernel sweet.

Nos. 125612 to 125615. Zardalu. From Krunn, July 30, at 9,000 feet altitude. Bitter kernels from wild fruits,

125612. No. 3207.

125614. No. 3209.

125613. No. 3208.

125615. No. 3210.

Nos. 125616 to 125622. Zardalu. From Iskarzir, July 31, at 8,500 feet altitude.

125616. No. 3217. With yellow fruit 1½ inches high; kernel sweet.

125617. No. 3218. Fruit quince-shaped, 1¼ inches high, yellow; wild; kernel sweet.

125618. No. 3219. Wild form with fruit subglobose, slightly compressed, yellow, red-cheeked, 1¼ inches high; kernel sweet.

125619. No. 3220. Wild form with yellow, subglobose fruit 1½ inches high, slightly compressed; flesh sweet; kernel bitter.

125620. No. 3221. Wild form with fruit 1½ inches high, golden yellow; kernel sweet.

125621. No. 3222. Wild form with fruit subglobose, slightly compressed, 1½ inches high, golden yellow with trace of pink on cheek; kernel bitter.

125622. No. 3223. Wild form with clingstone fruit, globose, 1¼ inches high, golden yellow; kernel bitter.

125623. No. 3224. Zardalu. From Parwara, August 1, at 8,500 feet altitude. Fruit subglobose, yellow, freestone, very large; flesh sweet, kernel sweet. Probably a wild form.

125624. No. 3304. Zardalu. From Daraim, August 11, at 8,000 feet altitude. Fruit subglobose, 1½ inches high, yellow; flesh sweet, kernel sweet.

125625-125627. PRUNUS AVIUM L.

Sweet cherry.

125625. No. 3036. Gelas. From Paghman, June 27, at 7,500 feet altitude. Fruit crimson, washed orange, watery, not firm like our sweet cherries, good flavor. May be more cold-tolerant than the seeds of others previously collected. Found growing in minus zero temperatures.

125626. No. 3043. *Alubalu*. From Charadeh, June 30, at 7,500 feet altitude. Fruit deep maroon, ¾ inch in diameter, sour. Some forms tolerate heavy frost; others grow where the winters are mild.

125627. No. 3052. *Alubalu*. From Khanabad, July 2, at 1,200 feet altitude. Fruit deep maroon, ¾ inch in diameter, sweet with a sharp tang. The best flavored of its kind so far seen.

125628-125636. Prunus cerasifera Ehrh,

Myrobalan plum.

Nos. 125628 to 125630. From Kabul, June 11, at 7,000 feet altitude.

125628. No. 2994. Alucha. Fruit 1 inch in diameter, very sweet, yellow, probably also ornamental.

125629. No. 3032. Tamsok. Fruit subglobose, 1½ inches in diameter, redpurple, washed yellow, good texture and taste; skin downy.

125630. No. 3033. Fruit subglobose, 1½ inches high, grass green with deep suture; flesh firm, sweet.

Nos. 125631 to 125634. From Khanabad, July 2 to 4, at 1,200 feet altitude.

125631. No. 3056. Koksuetani. Fruit round,  $1\frac{1}{4}$  inches in diameter, dark red and sweet.

125632. No. 3057. *Alucha*. Fruit subglobose, 1 inch in diameter, plum red with pale bloom, sweet.

125633. No. 2068. Alucha. Tree 15 feet high, ornamental; fruit  $1\frac{1}{2}$  inches in diameter, red, sweet.

125634. No. 3082. Alucha. Fruit globose, 1 inch in diameter, yellow, sweet.

Nos. 125635 and 125636. From Takia, August 12, at 4,500 feet altitude.

125635. No. 3312. Aluchaisiya. Fruit globose, 1 inch in diameter, nearly black, tart.

125636. No. 3313. Aluchaizard. Fruit globose, 1 inch in diameter, golden yellow, tart.

125637-125640. PRUNUS CERASUS L.

Sour cherry.

Nos. 125637 and 125638. From Charikar, June 10.

125637. No. 2992. Alubalu. Fruit ¾ of an inch in diameter, deep red, sour.

125638. No. 2993. Gelàs. Fruit not so large as No. 2992 [P. I. 125637], orange red, sweet, moderately firm.

125639. No. 3134. From Faizabad, July 11, at 4,000 feet altitude. Fruit up to 1 inch in diameter, the largest seen of this species. Tree attractive, of the sweet-cherry type.

125640. No. 3141. Alubalu. From Farakar, July 6, at 3,000 feet altitude. Fruit nearly 1 inch in diameter, deep crimson, sweet with a wild tang; best seen so far.

## 125641-125644. PRUNUS DOMESTICA L.

Common plum.

Nos. 125641 and 125642. From Rustak, August 17, at 4,000 feet altitude.

125641. No. 3338. Fruit globose, 2½ inches in diameter, red purple; flesh yellowish, melting, of fine quality.

125642. No. 3339. Fruit prune-shaped, 1½ inches long, purple; flesh yellow, firm, sweet.

125643. No. 3614. Alu. From Mazarisharif, September 7, at 1,200 feet altitude. Fruit purple, 1½ inches in diameter; flesh firm, yellowish, of good flavor.

125644. No. 3314. Arghonjar. From Takia, August 12, at 4,500 feet altitude. Fruit globose, 2 inches in diameter, red purple; flesh firm, good.

#### 125645. Prunus sp.

No. 2978. From Najil, May 30. An ornamental shrub up to 4 feet high, which may stand low temperatures. Flowers probably pink; fruits red, edible.

# 125646. PRUNUS Sp.

No. 3040. Alucha. From Charikar, June 30, at 6,000 feet altitude. Fruit yellow, 1 inch in diameter, sweet, probably wild and ornamental.

## 125647. Prunus sp.

No. 3097. From Khanabad, July 5, at 1,200 feet altitude.

## 125648. PRUNUS Sp.

No. 3163. From Pahinshahr, July 16, at 5,000 feet altitude. Shrub up to 4 feet high, growing in field borders; fruit red, edible.

#### 125649. Prunus sp.

No. 3164. From Sofian, July 18, at 7,000 feet altitude. Shrub found in a field border, up to  $4\frac{1}{2}$  feet high; fruit crimson.

## **125650.** Prunus sp.

No. 3165. From Sofian, July 18, at 7,000 feet altitude. Shrub up to 6 feet high, found in a field border; fruit red, edible.

Nos. 125651 and 125652. From Barak, July 16, at 5,000 feet altitude.

125651. PRUNUS Sp.

No. 3177. Fruit globose, 1 inch in diameter, purple red with a fierce tang.

125652. PRUNUS Sp.

No. 3178. Fruit subglobose, 1½ inches in diameter, green, unripe.

125653. Prunus sp.

No. 3216. From Iskarzir, July 31, at 8,500 feet altitude. Bush about 5 feet high found on dry slopes. Fruit large, crimson, sweet; gathered here for use.

125654. Prunus sp.

No. 3273. From Daraim, August 10, at 8,500 feet altitude. A bushy shrub, 4 feet high, found on dry slopes; fruit crimson, edible.

125655. Prunus sp.

No. 3311. Kokisultan. From Takia, August 12, at 4,500 feet altitude. Fruit 2½ inches in diameter, green yellow; skin tender; flesh melting, of excellent quality.

125656. Prunus sp.

125657. PRUNUS Sp.

(No number.) From Kabul.

(No number.) From Kabul.

125658. Pyrus sp. Malaceae.

No. 3405. From Chahiab, July 22, at 2,000 feet altitude. An attractive small tree growing wild on dry gumbo hills where no rain falls after May. Fruit green, 2 inches high, flesh sweet and granular.

125659. Rubus sp. Rosaceae.

No. 3168. From Chakaran, July 18, at 7,000 feet altitude. A creeping plant up to 2 feet long, with white flowers; fruit black, completely covered with bloom.

125660. Prunus sp. Amygdalaceae.

No. 3102. Bedana. From Takia, July 6, at 3,000 feet altitude. Fruit white, one of the sweetest found.

125661-125662.

From Brazil. Plants purchased from José Dierberger, São Paulo. Received December 17, 1937.

125661. Citrus sinensis (L.) Osbeck. Rutaceae.

Orange.

Bahianinha Navel.

125662. CITRUS NOBILIS DELICIOSA (Ten.) Swingle. Rutaceae.

Mandarin orange.

Tangerino Cravo.

125663. Melilotus officinalis (L.) Lam. Fabaceae.

Yellow sweetclover.

From Canada. Seeds purchased from S. T. B. Bergmann, Wynward, Saskatchewan. Received December 16, 1937.

Redfield, yellow sweetclover.

125664-125666. Prunus spp. Amygdalaceae.

From Germany. Seeds purchased from Otto Mann, Leipzig. Received December 13, 1937.

125664. PRUNUS AVIUM L.

Sweet cherry.

Of German origin.

125665 and 125666. PRUNUS MAHALER L.

Mahaleb cherry.

125665. Originally from Yugoslavia.

125666. Originally from France.

125667-125679.

From Austria. Seeds presented by Gustav and Wilhelm Löw, Spiritusfabrik und Raffinerie, Angern, through Lloyd V. Steere, agricultural attaché, Berlin. Received December 9, 1937.

125667. ARRHENATHERUM ELATIUS (L.) Beauv. Poaceae. Tall oatgrass. French Ray grass.

125668. Dactylis glomerata L. Poaceae. Orchard grass. Crested dogtail.

Meadow fescue. 125669. Festuca elation L. Poaceae. 125670. HORDEUM VULGARE L. Poaceae. Barley.

Summer barley.

125671. MELILOTUS ALBA Desr. Fabaceae. White sweetclover. Bokhara clover.

Pea. 125672-125673. PISUM SATIVUM L. Fabaceae.

125672. Feed peas. 125673. Winter peas.

125674. Trisetum flavescens (L.) Beauv. (Avena flavescens L.). Poaceae. Grass.

Gold oats. A grass resembling tall meadow-oat grass.

For previous introduction see 110445.

125675-125677. Triticum aestivum L. Poaceae. Common wheat.

125675, Angern Early Winter wheat. 125677, Kadolz Winter wheat No. 4. 125676, Kadolz Winter wheat No. 3.

125678. Vicia pannonica Crantz. Fabaceae. Vetch.

Hungarian vetch. An annual vetch, native to Europe and Asia. It makes a less viny growth than common vetch (Vicia sativa) or hairy vetch (V. villosa), but it is a vigorous grower attaining a full stem length of from 2½ to 3 feet. It is more winter hardy than common vetch and will seldom winterkill as far north as Washington, D. C.—This species is especially adapted to poorly drained areas and is the best of the vetches in this regard.

For previous introduction see 103977.

125679. VICIA SATIVA L. Fabaceae. Common vetch. Summer vetch.

125680. ZEA MAYS L. Poaceae.

Corn. From Peru. Seeds presented by T. S. Payne, Calca, through G. N. Collins, Bureau

of Plant Industry, United States Department of Agriculture. Received December 15, 1937. Clover.

125681. Trifolium montanum L. Fabaceae.

From France. Seeds presented by Dr. J. Dufrenoy, Station de Pathologie Vegetale, Pont-de-la-Maye, Bordeaux. Received December 18, 1937.

For previous introduction see 108709.

125682. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

From the Union of Soviet Socialist Republics. Seeds presented through Charles R. Toothaker, Philadelphia Commercial Museum, Philadelphia. Received December 22, 1937.

Originally from the Ukraine; a round melon from 6 to 10 inches in diameter, rind very thin, flesh very red, sweet, and of a delightful flavor.

#### 125683-125714.

From Germany. Plants and scions purchased from Baumschulen Christian Fey, Meckenheim bei Bonn, Bez. Köln. Received December 27, 1937.

125683-125696. Malus sylvestris Mill. Malaceae.

125683. Ausbacher Roter. 125690. Roter Hauptmannsapfel. 125684. Biesterfelder Reinette. 125691. Schöner aus Boskoop.

125685, Creo. 125692. Wöbers Rambur.

125693, Geheimrat Breuhahn.

125687. Lady Hollendale.

125694. Eifeler Rambur.

125688. Peter Broich. 125689. Winterrambour.

125686. Feys Record.

125695. Jonas Hannes. 125696. Luxemburger Renette.

125697-125703. Prunus avium L. Amygdalaceae.

Sweet cherry.

125697. Bigarreau de St. Charmez.

125701. Hedelfinger Riesenkirsche.

125698. Geisspeter. 125702, Kassins Frühe.

125699. Grevenbroicher Knorpelkirsche. 125703. Uhlhorn's Wunderkirsche.

125700. Früheste der Mark.

125704-125706. Prunus cerasus L. Amygdalaceae.

Sour cherry.

125704. Frühe Ludwigskirsche.

125706. Spanische Glaskirsche.

125705. Harlemer Doppelte.

125707. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

Donissens Gelbe Knorpelkirsche.

125708-125714. Pyrus communis L. Malaceae.

Common pear.

125708. Blumenbachs Butterbirne, 125712. Sievernicher Mostbirne. 125709. Merveille Ribet.

125713. Pleiner Mostbirne.

125710. National Bergamotte.

125714. Philippsbirne.

125711. Rising Summer.

125715. Gossypium.

Cotton.

From Iran. Seeds presented through the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture. Received December 14, 1937.

# 125716-125728.

From France. Plants purchased from L. Levasseur, Pépinières Louis Leroy, D'Angers, Angers. Received December 28, 1937.

125716-125722. Malus sylvestris Mill. Malaceae.

Apple.

125716. Cantaloup.

125720. Reinette Ontz.

125717. Groseille.

125721. Reinette Thouin.

125718. Impériale.

125722, Belle du Desert.

125719. Patte de Loup.

125723. Prunus avium L. Amygdalaceae.

Sweet cherry.

De Mezel. 125724-125725. PRUNUS CERASUS L. Amygdalaceae.

Sour cherry.

125724. Belle de Varenne.

125725. Belle de Planchoury.

125726-125727. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.

125726. Bleu de Belgique. 125727. Précoce Prolifique.

125728. Pyrus communis L. Malaceae. President Loubet.

Common pear.

#### 125729-125741.

From Germany. Plants and scions purchased from Phillip W. Werner, Reichelsheim, Odenwald. Received December 28, 1937.

125729. CYDONIA OBLONGA Mill. Malaceae.

Quince.

125730-125731. Malus sylvestris Mill. Malaceae.

Apple.

125730. Prinzenapfel.

125731. Reichelsheimer Weinsapfel.

125732-125733. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

125732. Dossenheimer frühe Schwarze.

125733. Donissens Gelbe.

125734-125735. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.

Common pear.

125734. Auerbacher Frühe.

125735. Frühe Fruchtbare.

125736-125741. PYRUS COMMUNIS L. Malaceae. 125736. Bayerischer Winterbirne.

125739. Robert de Neufville.

125737. Mollebusch.

125740. Weilersche Mostbirne.

125738. Oberösterreichische Weinbirne.

125741. Winterapothekenbirne.

125742-125749.

From France. Plants purchased from Paul Lecolier, La Celle, Saint Cloud, Seineet-Oise. Received December 25, 1937.

125742-125748. Malus sylvestris Mill. Malaceae.

Apple.

125742. Amère de Berthecourt.

125746. Grise Dieppoise.

125743. Argile Grice.

125747. Reinette de Cuzy.

125744. Barbarie.

125748. Peasegoods Nonsuch.

125745, Bedan.

125749. Prunus avium L. Amygdalaceae.

Sweet cherry.

Bigarreau Reverchon.

125750-125780.

From Germany. Plants purchased from Rudolf Schmidt, Rellingen, Holstein. Received December 28, 1937.

125772. Frühe Schwarze Altenlander. 125774. Hellrindige Harzer Vogelkirsch.

125750-125770. Malus sylvestris Mill. Malaceae.

125750. Altenlander Pfannkuchenanfel.

Apple.

125751. Angler Borsdorfer.

125761. Nathusius Taubenapfel.

125762. Ostpreussischer Kurzstiel.

125752. Englischer Winterprinz.

125763. Purpurroter Cousinot.

125753. Feissers Erstling.

125764. Rote Sternrenette.

125754. Gelber Winterstettiner.

125765. Roter Trierische Weinapfel.

125755. Herbstprinz.

125766. Schmalzprinz.

125756. Horneburger Pfannkuchenapfel. 125767. Schöner aus Herrnhut.

125768. Schöner aus Miltenberg.

125757. Johannsens Roter Herbstapfel. 125758. Krugers Dickstiel.

125769. Schöner aus Nordhausen.

125759. Landsberger Renette.

125770. Wohlschmeckender.

125760. Martiniapfel.

125771-125774. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

125771. Dankelmann.

125773. Werdersche Frühe Herzkirsche.

125775. Prunus Mahaleb L. Amygdalaceae.

Mahaleb cherry.

125776-125777. Prunus domestica L. Amygdalaceae.

Common plum.

125776. Königspflaum von Tours.

125777. Zesterfleth.

125778-125780. Pyrus communis L. Malaceae.

Common pear.

125778. Lubecker Prinzessinbirne.

125780. Speckbirne.

125779. Rote Herbstbergamotte.

125781-125782.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Alma Alta, Kazakstan. Received December 20, 1937.

125781. Papaver croceum Ledeb. Papaveraceae.

Poppy.

A perennial poppy, native to rocky situations in Turkistan. The leaves are pinnately divided, and the flowers are orange yellow.

For previous introduction see 107958.

125782. THALICTRUM PETALOIDEUM L. Ranunculaceae.

A herbaceous perennial nearly 1 foot high with 3- to 5-parted leaves and smooth, ovate, entire or 3-lobed leaflets. The rather small white flowers are in loose corymbs. Native to northern Asia.

125783. Bromus inermis Leyss. Poaceae.

Smooth bromegrass.

From Canada. Seeds presented by Dr. L. E. Kirk, University of Saskatchewan, Saskatchewan. Received December 21, 1937.

125784-125853.

From Afghanistan. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 13, 1937.

Collected in the summer and autumn of 1937; unless otherwise mentioned, the material was collected as seeds.

125784-125792. Allium spp. Liliaceae.

125784-125789. ALLIUM CEPA L.

Onion.

125784. No. 3497. From Khanabad, September 1. A mixture of red and white globe and flattened onions.

125785. No. 2974. Pujaz. From Laghman, May 27. A locally grown white globe onion.

125786. No. 3065. *Pujaz-i-surkh*. From Khanabad, July 3, at 1,200 feet altitude. A red, flat onion, moderately strong; not the large red-purple one of Kabul.

125787. No. 3132. *Pujaz*. From Faizabad, July 11, at 4,000 feet altitude. A locally grown, flat red onion; a few are yellow and white.

125788. No. 3594. *Pujaz.* From Mazarisharif, September 6, at 1,200 feet altitude. A mixture of red, white, and yellow flat and globe onions.

125789. No. 3775. Pujaz. From Saripul, September 13, at 1,500 feet altitude.

125790-125791. ALLIUM PORRUM L.

Leek.

125790. No. 2958. Gandana. From Laghman, May 27.

125791. No. 3597. Gandana. From Mazarisharif, September 6, at 1,200 feet altitude.

125792. ALLIUM SATIVUM L.

Garlic.

No. 3093. Sir. Bulbs from Khanabad, July 4, at 1,200 feet altitude.

125793-125794. Beta vulgaris L. Chenopodiaceae.

Common beet.

125793. No. 3128. *Lablabu*. From Faizabad, July 2, at 4,000 feet altitude. A variety with a long tapering red root of good quality.

125794, No. 3592. Lablabu. From Mazarisharif, September 6, at 1,200 feet altitude. A taper-rooted red beet.

125795-125800. Brassica Rapa L. Brassicaceae.

Turnip.

125795. No. 2968. From Laghman, May 27. A purplish-red variety.

125796. No. 3085. Shelgarn. From Khanabad, July 4, at 1,200 feet altitude. A red variety.

125797. No. 3086. Shelgarn. From Khanabad, July 4, at 1,200 feet altitude. A white variety.

125798. No. 3130. Shelgarn. From Faizabad, July 11, at 4,000 feet altitude.

125799. No. 3595. Shelgarn. From Mazarisharif, September 6, at 1,200 feet altitude. A red variety.

125800. No. 3649. From Akcha, September 9, at 1,200 feet altitude.

125801-125808. Capsicum frutescens L. Solanaceae. Common redpepper.

125801. No. 2967. Filfil-i-surkh. From Laghman, May 27. Fruit about 3 inches long, red, medium hot.

125802. No. 3067. Filfil-i-surkh. From Khanabad, July 3, at 1,200 feet altitude. Fruit bullnosed, red, 2 inches long; flesh sweet; seeds sweet.

125803. No. 3135. Filfil-i-surkh. From Faizabad, July 11, at 4,000 feet altitude. Fruit bullnosed, red, 4 inches long, mild.

125804. No. 3136. Filfil-i-surkh. From Faizabad, July 11. Fruit red, top-shaped, 2 inches long, mild.

125805. No. 3231. From Hazratsaid, August 2, at 8,000 feet altitude. Fruit scarlet, round, 2 inches in diameter, mild.

125806. No. 3340. *Mirchisurkh*. From Rustak, August 17, at 4,000 feet altitude. Fruit pointed, 2½ inches long, hot, scarlet to crimson, rather tough.

125807. No. 3646. From Akcha, September 9, at 1,200 feet altitude. Fruit bullnosed,  $4\frac{1}{2}$  by  $1\frac{1}{4}$  inches, scarlet, fairly hot.

125808. No. 3864. From Mazarisharif, September 22, at 1,200 feet altitude. Fruit blunt nosed, 2½ by 1 inches, scarlet, very tough, fairly hot.

125809-125811. CICER spp. Fabaceae.

125809. CICER sp.

No. 3161. From Chakaran, July 17, at 8,000 feet altitude. An ornamental shrub found in clumps 18 inches high, growing on dry slopes; used as fodder in Tibet.

125810. CICER sp.

No. 3187. From Sanglech, July 26, at 11,000 feet altitude. A bristly, much-branched perennial, 2 feet high, with blue-purple flowers; growing in dry places.

125811. CICER ARIETINUM L.

Chickpe

No. 2960. *Nakhud*. From Laghman, May 27. A useful dry-weather crop. 125812-125818. Daucus carota L. Apiaceae. Carrot.

125812. No. 2957. *Gazar*. From Laghman, May 27. Said to be an orange-colored carrot.

125813. No. 3087. *Gajar*. From Khanabad, July 4, at 1,200 feet altitude. Said to be a long orange carrot.

125814. No. 3129. Zardak. From Faizabad, July 11, at 4,000 feet altitude. Said to be orange.

125815. No. 3329. From Takia, August 14, at 4,500 feet altitude. A wild carrot, 4 feet high, with white flowers.

125816. No. 3648. From Akcha, September 9, at 1,200 feet altitude. Said to be the local yellow variety.

125817. No. 3865. *Gazar* or *Zardak*. From Mazarisharif, September 23, at 1,200 feet altitude; probably the local yellow carrot; good texture.

125818. No. 3066. *Gajar-i-zard*. From Khanabad, July 3, at 1,200 feet altitude. Said to be a long yellow carrot.

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125819. LACTUCA SERRIOLA L. Cichoriaceae.

Prickly lettuce.

No. 3058. From Khanabad, July 2, at 1,200 feet altitude.

For previous introduction see 115192.

125820. Lactuca sp. Cichoriaceae.

No. 3227. From Rubat, August 1, at 8,500 feet altitude. A plant 2 to 3 feet high, with purple flowers; found on dry slopes.

125821-125823. Lagenaria leucantha (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

125821. No. 2919. Surdi Kadu. From Laghman, May 25, at 3,000 feet altitude. An edible gourd.

125822. No. 3044. *Nasou Kadu*. From Khanabad, July 1, at 1,200 feet altitude. An ornamental cultivated gourd. The ripe fruits are dried, polished, stained, and used as snuff boxes.

125823. No. 3593. *Chob Kadu*. From Mazarisharif, September 6, at 1,200 feet altitude. Said to be a dipper gourd.

125824. Lens culinaris Medik. Fabaceae.

Lentil.

No. 2916. Mash. From Laghman, May 25, at 3,000 feet altitude. Used like split peas.

125825-125829. Luffa spp. Cucurbitaceae.

125825-125828. LUFFA ACUTANGULA (L.) ROXD. Singkwa towelgourd.

125825. No. 2953. Turai. From Laghman, May 26, at 3,000 feet altitude.

125826. No. 3172. *Tori*. From Faizabad, July 13, at 4,000 feet altitude. A four-sided fruit used as a vegetable while young.

125827. No. 3600. Turai-i-sdija. From Mazarisharif, September 6, at 1,200 feet altitude.

125828. No. 3782. *Tori*. From Saripul, September 13, at 1,500 feet altitude. Fruits about 1 foot long and grass green.

125829. LUFFA AEGYPTIACA Mill.

Suakwa towelgourd.

No. 2964. *Turai*. From Laghman, May 27, at 3,000 feet altitude. Young fruits used as a vegetable.

125830-125831. Lycopersicon esculentum Mill. Solanaceae. Tomato.

125830. No. 3341. Banjan-i-rumi. From Rustak, August 17, at 4,000 feet altitude. Fruit red, globose-flattened, 1 by 3 inches.

125831. No. 3512. Rumi Banjan. From Khanabad, September 1, at 1,500 feet altitude. Fruit yellow, irregular, flattened, 3\% inches in diameter.

125832-125838. Phaseolus spp. Fabaceae.

Bean.

125832. Phaseolus aconitifolius Jacq.

Moth bean.

No. 2909. Muth. From Jalalabad, May 24. Used as dry beans.

125833-125835. Phaseolus aureus Roxb.

Mung bean.

125833. No. 2962. Myi, Mash. From Laghman, May 27. One of the best.

125834. No. 2966. Myi. From Laghman, May 27. One of the best.

125835. No. 2975. Mung. From Gulbahar, May 27.

125836-125838. Phaseolus vulgaris L.

Common bean.

From Laghman, May 25 and 26, at about 3,000 feet altitude.

125836. No. 2915. Opia, Latagir. Used as green pods or dry beans.

125837. No. 2941.

125838. No. 2940.

125839-125840. PISUM SATIVUM L. Fabaceae.

Pea.

125839. No. 3181. *Mizhik*. From Zebak, July 22, at 10,000 feet altitude. Flowers madder purple.

125840. No. 2923. Mashang. From Laghman, May 25.

125841-125844. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

125841. No. 2924. Tarp. From Laghman, May 25. A large elongated, black and white radish.

125842. No. 2961. *Muli*. From Laghman, May 27. A large elongated red radish.

125843. No. 3088. *Muli*. From Khanabad, July 4, at 1,200 feet altitude. An elongated white summer radish.

125844. No. 3596. *Muli.* From Mazarisharif, September 6, at 1,200 feet altitude. A mixed sample of red and white summer radishes.

125845. Rheum sp. Polygonaceae.

No. 3264. From Kargasi Pass, August 9, at 10,000 feet altitude. An attractive species with all parts of the plant covered with warty scales; the petiole is up to 18 inches long and  $3\frac{1}{2}$  inches thick, mildly acid, becoming sweeter with age. The fruits and the old leaves are a beautiful crimson.

125846. RHEUM sp. Polygonaceae.

No. 3157. From Chakaran, July 17, at 9,000 feet altitude. An attractive plant growing on rather dry rocky slopes. Petioles and leaves with warty scales; petioles often 2 inches thick and 2 feet long, pleasantly acid; fruits red to maroon.

125847-125851. Solanum spp. Solanaceae.

125847. SOLANUM Sp.

No. 3825. From Balkh, September 18, at 1,200 feet altitude. Growing as a weed in a melon field. A bushy plant, 2 feet high; flowers white; fruit orange colored, ¼ inch in diameter, borne in clusters.

125848-125851. SOLANUM MELONGENA L.

Eggplant.

125848. No. 2922. Bawanjan. From Laghman, May 25. Fruit long, purple.

125849. No. 3089. Banjan. From Khanabad, July 4. Fruit 12 by 4 inches, purple, good; seeds few; a summer variety.

125850. No. 3133. *Benjan*. From Faizabad, July 11, at 4,000 feet altitude. Fruit long, purple.

125851. No. 3774. Benjan. From Saripul, September 13, at 1,500 feet altitude. Fruits purple to green purple, 6 by 2% inches.

125852. Tragopogon porrifolius L. Cichoriaceae.

Vegetable-oyster.

No. 3126. Salsify. From Gandocheshma, July 10, at 6,000 feet altitude. A vigorous plant.

125853. Vicia faba L. Fabaceae.

Broadbean.

No. 3215. Bakla. From Iskarzir, July 31, at 8,500 feet altitude. A common crop.

125854-125855.

From the island of Malta. Seeds presented by the Director of Agriculture, Office of Agriculture, Valetta. Received December 15, 1937.

125854. Celtis australis L. Ulmaceae.

European hackberry.

A shade tree, up to 60 feet high, with elmlike foliage and small, purple, edible fruits. Native to the Mediterranean region.

For previous introduction see 73981.

125855. Sapindus indica Poir. Sapindaceae.

A small evergreen tree with virgate branches and simple or trifoliolate, linear-lanceolate leaves about 7 inches long. Native to India.

125856. PISTACIA VERA L. Anacardiaceae.

Pistachio.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered in December 1937.

A selection from seedlings grown from nuts introduced under P. I. 86372.

125857-125859. Solanum spp. Solanaceae.

From Peru. Tubers presented by Nicolas E. Esposto, Lima. Received December 31, 1937.

125857. SOLANUM MEDIANS Bitter.

From the Botanical Section, College of Agriculture, Lima. A very productive plant whose tubers are smaller than potatoes, being commonly 1 or 2 inches long. They have white crisp flesh of very firm texture, but are not considered good to eat. Native to Peru.

For previous introduction see 62691.

125858. Solanum neoweberbaueri Wittm.

A rare wild potato with very small tubers about ½ inch in diameter, several to each plant. The plant belongs to a series of species of which *Solanum maglia* is the most common, occurring in arid sandy situations in Peru,

For previous introduction see 99075.

125859. SOLANUM WITTMACKII Bitter.

A native tuberous species growing in peat and rocky soils in the hills near Lima.

For previous introduction see 99109.

125860-126202. Cucumis melo L. Cucurbitaceae.

Muskmelon.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 8, 1937.

Collected in the summer and autumn of 1937.

125860. No. 2911. Kharbuz. From the market at Jalalabad, May 24.

125861. No. 2921. Kharbuza. From Laghman, May 25. A local mixture.

Nos. 125862 to 125864. From Khanabad, July 1 to 3, at 1,200 feet altitude. Melons from Khanabad are famous for sweetness and flavor.

125862. No. 3045. Kharbuza. From the bazar; probably a mixture.

125863. No. 3051. Zamburcha Gannak. Fruit subglobose, 6 inches long, yellowish brown with rib stripes of lighter brown, often with a trace of netting, scented; flesh 1½ inches thick, melting, sweet, not fragrant; much like the South Indian Sharbatanar.

125864. No. 3062. *Gurgaf.* Fruit subglobose, 10 inches long, yellow with island blotches of dark green, obscurely netted; flesh 3 inches thick, greenish white, sweet.

125865. No. 3096. Zermitin. From Khundus, July 4, at 1,200 feet altitude. Fruit subglobose, 8 inches long, yellow, obscurely netted with islands of green; flesh 2½ inches thick, salmon-colored, sweet.

125866. No. 3246. Gannak. From Jurm, August 6, at 7,000 feet altitude. Fruit ovoid, 1 foot long, yellow, blotched green, smooth, indistinctly ribbed green; flesh salmon to green,  $1\frac{1}{2}$  to 2 inches thick, sweet.

Nos. 125867 to 125869. From Takia, August 14, at 4,500 feet altitude.

125867. No. 3322. Fruit ovoid, 1 foot long, greenish yellow, mottled with deep green; flesh firm, white, sweet.

125868. No. 3324. Fruit ovoid, 1 foot long, obscurely netted or smooth, yellow blotched with golden brown; flesh 2½ inches thick, white, sweet, fragrant; very good.

125869. No. 3332. Fruit ovoid, 15 inches long, obscurely netted to smooth, pale yellow; flesh white to green, 3 inches thick, sweet, fragrant, fine.

Nos. 125870 to 125882. From Rustak, August 17 and 18, at 4,000 feet altitude.

125870. No. 3342. Fruit flattened, 8 by 6 inches, orange-colored blotched with green, more or less strongly netted; flesh 2¾ inches thick, white, fragrant, sweet.

- 125871. No. 3344. Fruit ovoid, 12 inches long, lemon yellow, blotched and dotted with green, smooth; flesh 2 inches thick, white, sweet.
- 125872. No. 3345. Fruit flattened, 8 by 6 inches, orange-colored, finely dotted and blotched with green, smooth; flesh  $2\frac{1}{2}$  inches thick, white, sweet, fragrant.
- 125873. No. 3349. Fruit flattened, 10 by 8 inches, pale green, faintly dotted with darker green and blotched with orange; flesh 2½ inches thick, bright salmon, sweet, rare.
- 125874. No. 3353. Shahpasand. Fruit subglobose, 10 inches long, netted, mixed pale yellow to orange and green; flesh 2 inches thick, white, rather firm, sweet.
- 125875. No. 3357. Fruit rounded elongated, 8 inches long, pale yellow with fine green ribs; flesh 2 inches thick, white, very sweet.
- 125876. No. 3362. *Bijani*. Fruit elongate, 10 by 6 inches, green, reticulated with darker green and blotched with orange, smooth; flesh 2½ inches thick, green; one of the best.
- 125877. No. 3363. Fruit elongate, 12 by 6 inches, yellowish green reticulated with darker green, nearly smooth or with traces of netting, ribs green; flesh white, crisp, fine.
- 125878. No. 3365. Fruit somewhat top-shaped, 10 inches long, yellow, ribbed with orange and obscurely netted; flesh white, 2 inches thick, sweet.
- 125879. No. 3366. Fruit elongate, 12 by 5½ inches, yellow, blotched with green, ribs of light green, smooth; flesh white, crisp, sweet.
- 125880. No. 3367. *Chahiabi*. Fruit elongate, 12 by 7 inches, pale green, heavily netted; flesh 1¾ inches thick, crisp, white, sweet.
- 125881. No. 3369. Fruit ovoid, yellow with blotches of orange green, traces of ribs in pale yellow; flesh white, sweet, fragrant.
- 125882. No. 3370. *Hakimbiki*. Fruit ovoid, 12 inches long, green, dotted and blotched with darker green, some orange blotching; flesh green, 2 inches thick, sweet, fragrant; one of the best.
  - Nos. 125883 to 125896. From Chahiab, August 20 to 22, at 2,000 feet altitude.
- 125883. No. 3373. *Vijani* or *Bijani*. Fruit elongate, tapered to both ends, 12 by 5 inches, yellow, netted and blotched green and with strong green ribs; flesh green, melting; one of the best.
- 125884. No. 3374. Badghahi (Royal), called in some places Chahiabi. Fruit elongate, 12 by 5½ inches, rounded at both ends, more or less netted, green blotched with darker green and sometimes with a little yellow; flesh crisp, 2 inches thick, white, sweet, one of the best.
- 125885. No. 3375. Fruit elongate, tapering to blossom end, 9½ by 6½ inches, smooth or with a trace of netting, yellow, dotted green with pumpkin ribs of white green; flesh 1½ inches thick, white, sweet.
- 125886. No. 3376. *Hakimbiki*. Fruit 8 by 6 inches, yellow, dotted and blotched with green, smooth, faintly ribbed, the rib lines pale green; flesh green, 1½ inches thick, melting, one of the best.
- 125887. No. 3377. *Hakimbiki*. Fruit elongated, 10 by 7 inches, tapering somewhat to the blossom end, greenish yellow, finely dotted with green, strongly netted, pumpkin ribs, marked deep green; flesh green, 1¾ inches thick, between crisp and melting.
- 125888. No. 3378. Fruit elongate, 10 by  $4\frac{1}{2}$  inches, rounded at ends, cream, smooth or somewhat netted; flesh white,  $1\frac{1}{2}$  inches thick, crisp, sweet.
- 125889. No. 3380. *Hakimbiki*. Fruit elongate, 9 by 6½ inches, tapering slightly to the blossom end, yellow with irregular blotched lines of dark green on either side of the pale-green pumpkin ribs; flesh green, 2 inches thick, crisp, sweet.
- 125890. No. 3383. *Kamyaft*. Fruit rounded at ends, 10½ by 6 inches, pale green, dotted and blotched with darker green, smooth; flesh 2 inches thick, white, between crisp and melting, sweet.

- 125891. No. 3384. *Alepuchok*. Fruit tapering to both ends, 12 by 6 inches, mixed yellow and green with more or less blotching of dark green, smooth; flesh 1½ inches thick, white, sweet, melting.
- 125892. No. 3387. *Ablak* or *Nazukch*. Fruit elongate, tapering to blossom end, 11 by 5½ inches, yellowish white with irregular unlined blotches of dark green; flesh 1½ inches thick, white, melting, sweet.
- 125893. No. 3388. *Khurnabadi*. Fruit elongate, 10 by 5 inches, tapering at both ends, lemon yellow, smooth; flesh 1½ inches thick, white to half green, melting, sweet.
- 125894. No. 3389. *Kandak*. Fruit elongate, 13 by 5 inches, pointed at both ends, yellow and orange, dotted with green; the pale-green, broad ribs are broadly edged with darker green; flesh 1¾ inches thick, firm, white, sweet.
- 125895. No. 3391. Fruit elongate, 8 by 5 inches, rounded at both ends, smooth, orange yellow, dotted with darker yellow or with green, ribs green; flesh salmon, firm, sweet, 1½ inches thick.
- 125896. No. 3394. Abinabat. Fruit elongate, 12 by 5 inches, gray with traces of green blotched ribs; flesh  $1\frac{1}{2}$  inches thick, greenish white, sweet, mucilaginous.
- 125897. No. 3406. From Ikabut, August 24, at 2,000 feet altitude. A mixed sample taken from a field.
  - Nos. 125898 and 125899. From Rustak, August 25, at 2,000 feet altitude.
- 125898. No. 3407. Fruit elongated, 7 by  $3\frac{1}{3}$  inches, rounded at ends, yellow green, heavily dotted with green; flesh  $1\frac{1}{4}$  inches thick, green, insipid.
- 125899. No. 3408. Fruit globose, 6 inches long, yellow with blotched ribs of orange and green; flesh  $1\frac{1}{4}$  inches thick, white, insipid.
  - Nos. 125900 to 125911. From Tolokhan, August 29, at 2,000 feet altitude.
- 125900. No. 3411. Fruit subglobose to somewhat elongate, 10 by 8 inches, heavily netted, blotched yellow and orange, some green; flesh 2½ inches thick, white stained green near the rind, firm, sweet.
- 125901. No. 3416. *Karakus Arkani*. Fruit ovoid, 13 by 7½ inches, wrinkled and furrowed, yellow lengthwise blotches of very dark green; flesh 2½ inches thick, white, firm, sweet. Keeps well.
- 125902. No. 3421. Fruit tapered, 14 by 5 inches, pale green dotted with darker green and with elongate island blotches of mixed orange and green, coarse heavy netting; flesh 1¾ inches thick, greenish, sweet.
- 125903. No. 3422. Fruit elongate, 10 by  $4\frac{1}{2}$  inches, yellow, dotted with green, heavy netting; flesh  $1\frac{1}{2}$  inches thick, green, sweet.
- 125904. No. 3423. *Taraka*. Fruit 18 by 8 inches, yellow clouded green, smooth; flesh 3 inches thick, white, sweet.
- 125905. No. 3425. Fruit subglobose, 7½ by 7 inches, yellow, dotted with green and blotched with very dark green, pale-green pumpkin ribs; flesh salmon, 1½ inches thick, sweet.
- 125906. No. 3426. Kandak. Fruit elongate, 10 by  $4\frac{1}{2}$  inches, yellow, heavily dotted and line blotched with dark green; flesh greenish white,  $1\frac{1}{2}$  inches thick, crisp, sweet.
- 125907. No. 3431. Fruit subglobose, 8 by 6 inches, lemon dotted orange, spotted green, coarse netting; flesh 2 inches thick, white, stained salmon toward cavity, sweet.
- 125908. No. 3434. Fruit elongate, 10 by 5 inches, smooth, lemon dotted with green; flesh green, 1½ inches thick, fair.
- 125909. No. 3435. Fruit 12 by 6 inches, pale green, dotted and ribbed with darker green, netted. Flesh  $2\frac{1}{2}$  inches thick, white, crisp, sweet.
- 125910. No. 3436. Fruit 14 by 6 inches, lemon-colored, obscurely furrowed: flesh greenish white, 2 inches thick, sweet, firm.

- 125911. No. 3441. Fruit subglobose, 8 inches long, yellow, dotted and blotched with green, smooth; flesh 2 inches thick, white, sweet.
- 125912. No. 3452. From Hazarbagh, August 27, at 2,000 feet altitude. A mixed sample from irrigated grown fruits.
- Nos. 125913 to 125931. From Khanabad, August 31 and September 1, at 1,500 feet altitude.
- 125913. No. 3465. Fruit elongate, 8 by 5 inches, green yellow, heavily dotted with green, rib lines of dull-green, smooth; flesh 1¾ inches thick, white, crisp, sweet.
- 125914. No. 3466. Fruit 12 by 5 inches, strongly tapered at ends, smooth, yellow, reticulated and blotched with green; flesh 1½ inches thick, white, sweet.
- 125915. No. 3469. Fruit 11 by 7 inches, pale yellow dotted and blotched orange and green, faintly indented ribs of lead green, faint netting; flesh 1¼ inches thick, salmon-colored, sweet.
- 125916. No. 3470. *Alichki*. Fruit 19 by 10½ inches, irregularly furrowed green with raised elongate blotches of darker green and orange, firm; flesh 2 inches thick, melting, sweet, white, fine. Seems to be a winter keeper.
- 125917. No. 3474. Fruit ovoid, 10 by 8 inches, nearly smooth, heavily indented ribs of green yellow, segments gold; flesh 2 inches thick, white, sweet, fair quality.
- 125918. No. 3479. Fruit 11 by 7 inches, netted, yellow, faintly blotched with orange; flesh white, 2 inches thick, sweet.
- 125919. No. 3478. Fruit globose, 8 inches in diameter, smooth, yellow, blotched with orange and more or less broadly ribbed green; flesh 2 inches thick, salmon-colored, fair.
- 125920. No. 3481. Fruit subglobose, 7 inches long, heavily netted, dark green, somewhat blotched with orange; flesh 2 inches thick, green, sweet.
- 125921. No. 3483. Fruit 14 by 6 inches, abruptly pointed at blossom end, coarsely netted, irregular broad alternating line blotches of orange and yellow with irregular green cloudings; flesh 1% inches thick, salmon-colored, firm, rather poor quality.
- 125922. No. 3484. Fruit 9 by 6 inches, orange, dotted green, smooth; flesh white, 1½ inches, sweet, firm.
- 125923. No. 3486. Fruit elongate, 12 by 5 inches, nearly smooth, yellow with broken broad blotched lines of orange, some green cloudings; flesh 1¾ inches thick, green, sweet.
- 125924. No. 3487. Fruit ovoid, 10 inches long, heavily netted, yellow, dotted green, blotched with darker green; flesh 2 inches thick, white, sweet.
- 125925. No. 3489. Fruit 12 by 6 inches, pointed at the blossom end, well-indented ribs of pale green, yellow, more or less clouded with green, more or less netted; flesh 1½ inches thick, crisp, white, sweet.
- 125926. No. 3490. Fruit subglobose, 12 inches long, yellow and green with irregular raised blotches of orange, netted; flesh 2¼ inches thick, greenish white, sweet.
- 125927. No. 3492. Fruit subglobose, 9 inches long, with a smooth hard shell, lemon sprinkled with green; flesh 1½ inches thick, green, sweet.
- 125928. No. 3493. Fruit globose, 8 inches in diameter, wrinkled and furrowed, orange yellow, no netting; flesh 2¼ inches thick, white, juicy, sweet.
- 125929. No. 3494. Fruit 12 by 6 inches, smooth with traces of indented ribs, yellow with small blotches of orange and green; flesh greenish white, 1¾ inches thick, watery, sweet.
- 125930. No. 3507. Fruit 13 by 7 inches, deeply indented ribs of green, lemon, more or less netted; flesh 2¼ inches thick, cream-colored, turning to green near the rind, sweet.

125931. No. 3515. Fruit ovoid, 12 inches long, dull gray, faintly dotted green, smooth; flesh 1¾ inches thick, green, crisp, little sugar; a rare quality in any muskmelon here.

Nos. 125932 and 125933. From Tashkurgan, September 4, at 1,200 feet altitude.

- 125932. No. 3532. Fruit elongate, 12 inches long, yellow, heavily netted; flesh creamy, 2½ inches thick, sweet.
- 125933. No. 3537. Fruit globose, 8 inches long, yellow green, dotted green, smooth; flesh 2½ inches thick, creamy green, sweet.
- 125934. No. 3548. From Khanabad, September 3. Fruit globose, 10 inches long with a hard shell, yellow, blotched and spotted with very dark green, coarsely netted; flesh 2½ inches thick, white, melting sweet.
- 125935. No. 3549. From Mazarisharif, September 4. Fruit egg-shaped, 10 inches long, yellow, finely dotted with green, netted around the stem end; flesh 1% inches thick, creamy, crisp, sweet.

Nos. 125936 to 125942. From Balkh, September 5, at 1,200 feet altitude.

- 125936. No. 3551. Fruit 18 by 7 inches, pointed at ends, yellow, blotched with orange, more or less netted; flesh white, 2 inches thick, sweet.
- 125937. No. 3552. Fruit ovoid, 12 inches long, yellow, blotched with ochre; coarsely netted; flesh 1\% inches thick, white, sweet.
- 125938. No. 3554. Fruit 10 by 6 inches, dark green, some yellow, heavy netting; flesh  $1\frac{1}{2}$  inches thick, green, crisp, sweet.
- 125939. No. 3555. Fruit ovoid, 14 inches long, orange, more or less heavily dotted with dark green, closely furrowed; shell cracks with ripping sound when cut; flesh 3 inches thick, white, melting, delicious.
- 125940. No. 3556. Fruit ovoid, 12 inches long, orange yellow, with darker dots, heavy netting; flesh 2 inches thick, creamy, sweet.
- 125941. No. 3557. Fruit ovoid, slightly irregular, 10 inches long, smooth, yellow, clouded with orange and green; flesh 1½ inches thick, white, tinged with salmon, very sweet.
- 125942. No. 3561. Fruit elongate, 14 by 7 inches, yellow dotted green with irregular narrow stripes of darker green, heavy netting; flesh 2½ inches thick, creamy green, crisp, very sweet.

Nos. 125943 to 125960. From Mazarisharif, September 6 and 7, at 1,200 feet altitude.

- 125943. No. 3567. Fruit 14 by 8 inches, cream yellow, heavily netted; flesh  $2 \frac{1}{4}$  inches thick, white, sweet.
- 125944. No. 3571. Fruit subglobose, 4 inches long, smooth, yellow, blotches orange and green; flesh 1½ inches thick, tinted salmon, sweet but firm; with four placentas, the rest of melons with three.
- 125945. No. 3573. Fruit 12 by 5 inches, yellow with spots of orange and green, heavy loose netting; flesh 2 inches thick, white, sweet.
- 125946. No. 3576. Fruit globose, 12 inches long, orange and yellow with cloudings of green, heavily netted, shallow-indented ribs; flesh  $2\frac{1}{2}$  inches thick, creamy, fine.
- 125947. No. 3577. Fruit ovoid, 10 inches long, yellow, dotted with green and blotched with very dark green, coarse heavy netting; flesh 2 inches thick, white, crisp, sweet.
- 125948. No. 3579. Fruit irregularly ovoid, 14 by 8 inches, orange, heavily sprinkled with green, coarsely and heavily netted; flesh  $2\frac{1}{2}$  inches thick, white, crisp, sweet.
- 125949. No. 3581. Fruit ovoid, 16 by 8 inches, smooth except for netting at the stem end, yellow and green marbled, spotted with orange red; flesh  $2\frac{1}{4}$  inches thick, creamy white, fine.

- 125950. No. 3582. Fruit 11 by 7 inches, pale yellow with traces of indented ribs, obscurely netted; flesh  $2\frac{1}{4}$  inches thick, creamy, green, crisp, sweet.
- 125951. No. 3584. Fruit 12 by 6 inches, dark green to more or less orange, with irregular narrow center of green, dotted with darker green in each segment, ribs dull gray green, nearly smooth; flesh 2 inches thick, green, delicious.
- 125952. No. 3587. Fruit subglobose,  $6\frac{1}{2}$  inches long, pale yellow, more or less clouded with green, ribs pale green, more or less netted; flesh 2 inches thick, creamy, sweet.
- 125953. No. 3588. Fruit 13 by 6 inches, tapered pale-yellow with narrow ribs of green, heavy netting; flesh 2 inches thick, creamy-green, very sweet, crisp.
- 125954. No. 3589. Fruit elliptical, 10 by 5 inches, shell hard, lemon-yellow, dotted green around the stem end, obscurely netted; flesh cream,  $1\frac{1}{2}$  inches thick, sweet, crisp.
- 125955. No. 3590. Fruit 10 by 5½ inches, pale yellow spotted closely with orange and somewhat with green, broad ribs of green, no netting; flesh 1¾ inches thick, white, fine.
  - Nos. 125956 to 125960. From Mazarisharif, September 7 at 1,200 feet altitude.
- 125956. No. 3604. Fruit ovoid, 10 inches long, creamy green with some yellow, more or less netted; flesh 2 inches thick, white, crisp, sweet.
- 125957. No. 3608. Fruit 14 by 5½ inches, lemon, somewhat sprinkled with green, obscurely netted; flesh 2 inches thick, white, crisp, sweet.
- 125958. No. 3610. Fruit 10 by 6 inches, nearly smooth, clouded green and yellow with some orange spots; flesh 2 inches thick, white, fine.
- 125959. No. 3611. Fruit 10 by 8 inches, warty, furrowed, orange yellow, heavily spotted and clouded with green; flesh 3½ inches thick, white, melting, fine.
- 125960. No. 3612. Fruit 13 by  $6\frac{1}{2}$  inches, yellow, blotched with orange, netted; flesh 2 inches thick, cream colored, fine.
  - Nos. 12591 to 126004. From Akcha, September 8 to 10, at 1,200 feet altitude.
- 125961. No. 3615. Fruit double, joined near the blossom end, yellow, dotted green and spotted with very dark green, surface furrowed; flesh  $2\frac{1}{2}$  inches thick, white, sweet.
- 125962. No. 3616. Fruit elongate oval, 13 by 7 inches, smooth, faintly indented green ribs, yellow with some dotting of green and broad broken stripes of orange and green; flesh 2 inches thick, cream-colored, fine.
- 125963. No. 3617. Fruit globose, 10 inches long, smooth, yellow, dotted green with broken streaks of darker green; flesh 2½ inches thick, white, sweet.
- 125964. No. 3618. Fruit 14 by 7 inches, smooth, pale-yellow dotted with green; flesh 2½ inches thick, white, sweet.
- 125965. No. 3619. Fruit ovoid, 10 inches long, yellow, weakly netted; flesh 2 inches thick, white, sweet.
- 125966. No. 3620. Fruit 16 by 8 inches, tapered at the ends, green, blotched with yellow and some pale dotting, netted; flesh 1¾ inches thick, creamy green, sweet, crisp.
- 125967. No. 3621. Fruit 11 by 8 inches, smooth, yellow, dotted with green and blotched with green yellow; flesh 2 inches thick, white, sweet.
- 125968. No. 3622. Fruit globose, 10 inches long, green, furrowed; flesh 3 inches thick, white, sweet; four placentas.
- 125969. No. 3624. Fruit 14 by 8 inches, orange, heavily sprinkled with green, unnetted, much-furrowed surface; flesh creamy, 2½ inches thick, sweet.
- 125970. No. 3627. Fruit hard shelled, 9½ by 6 inches, orange, reticulated green, and marked with broken stripes of green, coarse netting; flesh 2 inches thick, white, very sweet.

- 125971. No. 3629. Fruit 14 by 8 inches, very irregular surface, yellow, finely dotted and clouded with green and splashed with darker green, hard shell; flesh 2 inches thick, cream-colored changing to green next the rind, sweet.
- 125972. No. 3630. Fruit globose, 8 inches long, yellow, heavily obscured by dotting of green, fine netting; flesh 2 inches thick, creamy white, sweet.
- 125973. No. 3631. Fruit 12 by 6½ inches, yellow, heavily dotted and clouded with orange, nearly smooth, slightly indented ribs of pale yellow; flesh 2 inches thick, creamy white, very sweet.
- 125974. No. 3633. Fruit ovoid, 12 by 8 inches, yellow, heavily dotted with green, rather deeply indented ribs of pale green with darker edges; flesh 2½ inches thick, cream-colored to green next the rind, fine.
- 125975. No. 3634. Fruit flattened,  $3\frac{1}{2}$  by 5 inches, yellow blotched with orange and dotted with orange green; furrows whitish between ribs; flesh  $1\frac{1}{4}$  inches thick, salmon-colored, fair.
- 125976. No. 3642. Fruit 15 by 8 inches, pale yellow, finely dotted with green, smooth hard shell; flesh 2 inches thick, white, unripe.
- 125977. No. 3654. Fruit 12 by 8 inches, yellow, dotted with green, some netting at the stem end: flesh 2 inches thick, creamy.
- 125978. No. 3650. Fruit ovoid, 10 inches long and deeply furrowed, orange, more or less dotted with green; flesh 3 inches thick, creamy green, sweet.
- 125979. No. 3656. Fruit ovoid, 10 inches long, surface slightly uneven, dull gray green, finely dotted with green, shell hard; flesh 3 inches thick, firm.
- 125980. No. 3655. Fruit 12 by 8 inches, white green, dotted and clouded with green, obscurely netted; flesh 1¾ inches thick, white.
- 125981. No. 3657. Fruit subglobose, 10 inches long, yellow, almost covered with fine dots and cloudings of green, heavy netting, shell hard; flesh 2½ inches thick, white.
- 125982. No. 3658. Fruit globose, 8 inches long, white green dotted with darker green, indented ribs of green; flesh 1¼ inches thick, white, strange flavor, sweet.
- 125983. No. 3659. Fruit globose, 8 inches in diameter, smooth, yellow green with broken elongate blotches of green; flesh white, 2 inches thick, melting, fair, six placentas.
- 125984. No. 3662. 'Fruit 10 by 8 inches, wrinkled, pale green, some yellow, no netting; flesh 2 inches thick, creamy green, melting, fine.
- 125985. No. 3664. Fruit nearly smooth, 13 by 6 inches, broad dull-green ribs on pale-green ground, heavily dotted with dark green and blotched green; flesh crisp, sweet, green.
- 125986. No. 3668. Fruit globose, 8 inches long, very dark green with heavy netting; fruit 2 inches thick, white, sweet.
- 125987. No. 3670. Fruit 11 by 8½ inches, smooth, yellow, dotted with green, indented ribs of very dark green; flesh 2 inches thick, cream-colored to green toward the rind, sweet.
- 125988. No. 3674. Fruit 10 by 8 inches, hard shell, yellow and grass green mixed in large patches, coarse heavy netting; flesh 2½ inches thick, white, firm.
- 125989. No. 3678. Fruit 10 by  $7\frac{1}{2}$  inches, cream with broken stripes and dots of grass green, shell hard, faintly indented ribs; flesh 2 inches thick, cream-colored to green toward the rind, sweet.
- 125990. No. 3679. Fruit globose, 8½ inches in diameter, hard orange shell dotted with white and green, slightly indented ribs of white; flesh 2 inches thick, creamy, sweet.
- 125991. No. 3680. Fruit globose, 9 inches long, pale green dotted with grass green, narrow rib lines of green; flesh 1¾ inches thick, white, sweet.

- 125992. No. 3682. Fruit ovoid, 9 inches long with hard shell, yellow dotted green and with broad, much-broken stripes of very dark green; flesh 1¾ inches thick, cream-colored to green toward the rind, sweet.
- 12593. No. 3683. Fruit globose, 8 inches long, yellow, almost obscured by fine grass-green dots, indented ribs; flesh 2 inches thick, creamy white, melting, very sweet.
- 125994. No. 3685. Fruit globose, 8 inches long, yellow, clouded with green, no netting but furrowed; flesh 2 inches thick, tinged salmon, sweet.
- 125995. No. 3695. Fruit globose, 10 inches long, yellow with broken blotches of green, deep ribs of pale green; flesh 2 inches thick, creamy, fine.
- 125996. No. 3697. Fruit flattened, 7 by 9 inches, smooth, pale yellow splashed with orange and green, some green dots, deeply indented ribs of green; flesh 2 inches thick, greenish, fragrant, fair.
- 125997. No. 3699. Fruit 14 by 6 inches, smooth, greenish yellow with elongate border blotches of dark green; flesh 2 inches thick, creamy, crisp, sweet; with four placentas.
- 125998. No. 3700. Fruit roughly ovoid, 10 inches long, heavy net at the stem end, orange with obscure broken stripes of dark green; flesh 2 inches thick, creamy white, fine.
- 125999. No. 3701. Fruit 15 by 6½ inches, pointed at both ends, pale yellow, more or less dotted with green, netted; flesh 1¾ inches thick, creamy white, erisp, sweet.
- 126000. No. 3703. Fruit 8 by 7 inches, somewhat flattened and soft, orange with broad slightly indented ribs of two shades of green, smooth; flesh 2¼ inches thick, cream-colored to green toward the rind, good.
- 126001. No. 3704. Fruit 15 by 6 inches, yellow, dotted green, with broad broken stripes of orange and green, obscurely netted; flesh 1½ inches thick, cream-colored to green toward the rind, firm, sweet.
- 126002. No. 3707. Fruit 13 by 8 inches, coarsely netted, yellow, blotched with very dark green, faintly indented ribs; flesh  $2\frac{1}{4}$  inches thick, creamy white, sweet.
- 126003. No. 3709. Fruit 16 by 10 inches, yellow, finely dotted and clouded with green, heavily netted; flesh 2% inches thick, cream-colored to green toward the rind, sweet.
- 126004. No. 3713. Fruit 14 by 7 inches, yellow with broad broken blotches of grass green and very dark green, more or less strongly netted; flesh creamy white, sweet.
  - Nos. 126005 to 126024. From Saripul, September 13, at 1,500 feet altitude.
- 126005. No. 3731. Fruit 13 by 10 inches, shell hard, heavily furrowed, smooth, lemon yellow, nearly obscured by very dark-green dots; flesh 2½ inches thick, creamy white, unripe.
- 126006. No. 3732. Fruit globose, 7 inches long, smooth, lemon yellow, nearly obscured by very dark green dotting; flesh 2 inches thick, white, very sweet.
- 126007. No. 3737. Fruit globose, 7 inches long, yellow, dotted with green and blotched with orange, no netting but wrinkled; flesh 1½ inches thick, creamy white, sweet.
- 126008. No. 3738. Fruit tapered at ends, lemon yellow, traces of coarse netting; flesh 21/4 inches thick, creamy, sweet.
- 126009. No. 3739. Fruit 12 by 5 inches, tapered, no netting, yellow, dotted and with elongated raised blotches of very dark green; flesh 1½ inches thick, green, crisp, sweet.
- 126010. No. 3743. Fruit 9 by 6½ inches, orange, more or less clouded green and yellow, indented ribs of green; flesh 1½ inches thick, creamy white to green toward the rind, fine.
- 126011. No. 3744. Fruit 10 by 7 inches, smooth, pale lemon; flesh 2 inches thick, creamy white, fine.

- 126012. No. 3749. Fruit 9 by 6½ inches, somewhat flattened, faintly indented ribs of green; ground mottled, sea green and white, no netting; flesh 1½ inches thick, green, fine, cavity lined with orange.
- 126013. No. 3750. Fruit 10 by 7 inches, nearly smooth, yellow with dots of green, heaviest over the stem end; flesh creamy white, sweet.
- 126014. No. 3752. Fruit 11 by 8 inches, more or less coarsely netted, pale green with heavy splashing of very dark green; flesh 2 inches thick, creamy green, sweet.
- 126015. No. 3753. Fruit 13 by 6½ inches, irregular surface, no netting, green, dotted and splashed with very dark green; flesh 2 inches thick, creamy white, sweet.
- 126016. No. 3755. Fruit 13 by 8 inches, rather tapered, obscurely indented ribs, smooth, yellow with much-broken broad stripes of dark green; flesh 2½ inches thick, white, sweet.
- 126017. No. 3759. Fruit 14 by 5 inches, smooth, pale green dotted with darker green and more or less blotched with orange, broadly ribbed green; flesh 1½ inches thick, green, sweet.
- 126018. No. 3761. Fruit 9 by 6 inches, pale yellow, furrowed, no netting; flesh 2 inches thick, creamy white, sweet.
- 126019. No. 3762. Fruit subglobose, 8 inches long, broadly ribbed green, edged irregularly and broadly with green and orange, ground of segments yellow, more or less dotted green; flesh 1½ inches thick, green, more or less tinted salmon, fair.
- 126020. No. 3764. Fruit somewhat flattened, 7 by 6 inches, smooth, red, brown and yellow with indented ribs of dotted orange; flesh salmon to green toward the rind; fair.
- 126021. No. 3767. Fruit 12 by 5 inches, yellow, heavily dotted and clouded with dark green, tapered and netted at the stem end; flesh creamy green, sweet.
- 126022. No. 3769. Fruit 12 by 5 inches, smooth, tapered; flesh 2 inches thick, firm, sweet.
- 126023. No. 3770. Fruit 10 by 5 inches, lemon yellow, ribbed green, netted; flesh 1¾ inches thick, creamy white, sweet.
- 126024. No. 3771. Fruit 12 by 5 inches, nearly smooth, yellow, dotted with darker yellow, ribbed green; flesh 1% inches thick, creamy white, fair.
  - Nos. 126025 to 126029. From Akcha, September 9 to 16, at 1,200 feet altitude.
- 126025. No. 3784. Fruit ovoid, 8 inches long, green, clouded with orange, netted; flesh 1½ inches thick, green, fine.
- 126026. No. 3798. Fruit 14 by 7 inches, smooth, abruptly tapered, yellow, dotted with grass green and some blotches of grass green, indented ribs of yellow green irregularly edged with grass green; flesh 2½ inches thick, creamy, white, sweet.
- 126027. No. 3799. Fruit 10 by 6 inches, smooth, with large navel, orange yellow with blotches of pale green and dotted with darker green, somewhat indented ribs of pale green, irregularly edged with darker green; flesh 2 inches thick, creamy white, fine; seed cavity 2 inches wide.
- 126028. No. 3803. *Gaon Khataka*. Fruit 14 by 6½ inches, tapered, green, dotted with darker green and with broad broken stripes of very dark green, heavily netted; flesh 2 inches thick, creamy green, crisp, sweet.
- 126029. No. 3818. Fruit ovoid, 8 inches long, pale yellow, nearly smooth; flesh 1% inches thick, white, sweet.
  - Nos. 126030 and 125031. From Balkh, September 20, at 1,200 feet altitude.
- 126030. No. 3834. Fruit globose, 8 inches long, white with narrow ribs of green, netted; flesh 2 inches thick, creamy white, fine.

126031. No. 3835. Fruit globose, 6 inches long, pale green, dotted with darker green and clouded with orange; flesh  $1\frac{1}{2}$  inches thick, creamy white, unripe, tough.

Nos. 126032 and 126033. From Laghman, May 26.

126032, No. 2943. Kharbuza.

126033. No. 2950.

Nos. 126034 and 126035. From Kabul, June 10 and 12, at 7,000 feet altitude; fruit probably came originally from India.

- 126034. No. 2996. Fruit subglobose, 12 inches long, pale yellow, heavily netted; flesh sweet, salmon, about 2 inches thick. Persian melon type.
- 126035. No. 2997. Fruits very elongate, 14 inches long, yellow, heavily netted; flesh salmon, about 2 inches thick, sweet.
  - Nos. 126036 to 126043. From Khanabad, July 1 to 4, at 1,200 feet altitude.
- 126036. No. 3050. Barganai. Fruit 18 by 10 inches, tapering at both ends, yellow with islands of green; flesh greenish, melting, very sweet, not fragrant.
- 126037. No. 3053. Zamburcha Khandus. Fruit subglobose to somewhat flattened, 8 inches long, smooth, yellow with greenish rib lines; flesh 2 inches thick, melting, sweet.
- 126038. No. 3061. *Mazerik*. Fruit ovoid, 12 inches long, whitish, faintly ribbed, faintly netted; flesh white, 2 inches thick, sweet.
- 126039. No. 3073. Fruit subglobose, 8 inches long, pale yellow to whitish, nearly smooth, rib lines of green, no fragrance; flesh greenish white,  $2\frac{1}{2}$  inches thick, extraordinarily sweet, flavorless, crisp.
- 126040. No. 3074. Fruit globose, 8 inches long, netted, orange yellow, blotched with green; flesh 1½ inches thick, white, sweet, slightly fragrant.
- 126041. No. 3075. Fruit ovoid, 12 inches long, blotched stripes of nearly equal width, one smooth, pale yellow green, one netted, deep green and orange; flesh white, 3 inches thick, sweet.
- 126042. No. 3076. Fruit ovoid, 14 inches long, obscurely netted, pale yellow with irregular islands of dark green and orange; flesh crisp, 2½ inches thick, green white, becoming salmon at seed cavity, fragrant, sweet.
- 126043. No. 3077. Fruit elongate, 18 by 8 inches, pointed at each end, green, netted, unribbed; flesh green, 3 inches thick, sweet.
- 126044. No. 3099. *Kharbuza*. From Takia, July 6, at 3,000 feet altitude. A mixed sample of local varieties.
- 126045. No. 3125. *Kharbuza*. From Faizabad, July 10, at 4,000 feet altitude. A mixed sample of local varieties.
  - Nos. 126046 to 126050. From Jurm, August 6 to 10, at 7,000 feet altitude.
- 126046. No. 3245. *Kandak*. Fruit elliptical, 12 by 8 inches, pale green, ribbed with darker green; flesh 2 inches thick, salmon, becoming green near the rind, unripe.
- 126047. No. 3247. Fruit subglobose, 18 inches long, yellow, smooth; flesh 2 inches thick, white, unripe.
- 126048. No. 3248. *Kandrakh*. Fruit elongate, 12 by 8 inches, tapering to stem, green blotched with darker green, coarsely veined; flesh 3 inches thick, white, unripe.
- 126049. No. 3249. *Jorube*. Fruit ovoid, 12 inches long, yellow sprinkled with green; flesh 3 inches thick, green, unripe.
- 126050. No. 3278. Fruit elongate, 12 by 8 inches, smooth, green and yellow with green ribs; flesh 2 inches thick, musky, sweet, salmon color.
  - Nos. 126051 to 126053. From Takia, August 12 to 14, at 4,500 feet altitude.
- 126051. No. 3317. Fruit ovoid, 10 inches long, smooth, yellow, ribbed with green; flesh 2½ inches thick, white, fragrant, sweet.

- 126052. No. 3325. Fruit ovoid, 9 inches long, smooth, green, mottled with yellow, traces of ribs; flesh 21/4 inches thick, white, sweet, fragrant.
- 126053. No. 3327. Fruit 8 by 4 inches, smooth, green with island blotches of very dark green; flesh 2 inches thick, white, crisp, sweet.
- 126054. No. 3337. *Istanbul*. From Khishin, August 15, at 4,500 feet altitude. Fruit small, flattened, 3 by 2 inches, yellow with red island blotches and a large navel; fragrant and grown only for the odor.
  - Nos. 126055 to 126066. From Rustak, August 17 and 18, at 4,000 feet altitude.
- 126055. No. 3343. Fruit ovoid, 12 by 8 inches, tapered more at the blossom end, wrinkled, yellow and green with islands of very dark green; flesh 2 inches thick, white, sweet.
- 126056. No. 3350. Fruit flattened, 5 by 6 inches, orange, ribbed with green; flesh bright salmon, fragrant, sweet.
- 126057. No. 3351. Fruit subglobose, 8 inches long, smooth, yellow; flesh 2 inches thick, sweet, white.
- 126058. No. 3352. Fruit subglobose, 5 inches long, smooth yellow, traces of indented ribs; flesh 1½ inches thick, salmon, sweet.
- 126059. No. 3354. Fruit elongate, 12 by 6 inches, yellow with traces of broad broken ribs of green; flesh 1½ inches thick, white, crisp, sweet.
- 126060. No. 3355. Fruit ovoid, 8 inches long, obscurely netted, yellow, blotched, striped gold and yellow; flesh 2 inches thick, white, sweet, fragrant.
- 126061. No. 3356. Fruit ovoid, 8 inches long, green ribbed and dotted with darker green, more or less netted; flesh 2 inches thick, sweet.
- 126062. No. 3358. Fruit somewhat top-shaped, 8 inches long, pale yellow, vermiculated orange, deep pumpkin ribs, ribbed green; flesh  $1\frac{1}{2}$  inches thick, white, sweet.
- 126063. No. 3359. Fruit subglobose, 6 inches long, smooth, cream, with traces of fine green ribs; flesh 1 inch thick, white, sweet.
- 126064. No. 3360. Fruit ovoid, 12 inches long, smooth, yellow, more or less clouded with green; flesh 2 inches thick, white, sweet.
- 126065. No. 3361. Fruit ovoid, 12 inches long, cream, smooth; flesh 2 inches thick, white, fragrant, sweet.
- 126066. No. 3364. Fruit somewhat top-shaped; 10 inches long, smooth, clouded yellow and green; flesh 1¾ inches thick, white, sweet.
- 126067. No. 3326. From Takia, August 14, at 4,500 feet altitude. Fruit oval, 8 inches long, orange green, dotted and blotched with green, more or less smooth; flesh 2½ inches thick, sweet, fragrant, very good.
  - Nos. 126068 to 126070. From Rustak, August 18, at 4,000 feet altitude.
- 126068. No. 3368. Fruit ovoid, 10 by 7 inches, lemon, more or less netted; fresh white, crisp, sweet.
- 126069. No. 3371. Fruit subglobose, 12 inches long, deep ribs, lemon dotted green; flesh white, poor, keeps well.
- 126070. No. 3372. Fruit ovoid, 12 inches long, smooth, yellow; flesh white, 2 inches thick; one of the best.
- Nos. 126071 to 126080. From Chahiab, August 21 and 22, at 2,000 feet altitude.
- 126071. No. 3379. Fruit flattened, 4½ by 5 inches, smooth, orange with paler ribs; flesh salmon, 1 inch thick, musky, sweet.
- 126072. No. 3381. Fruit 12 by 5 inches, tapering a little at the blossom end, pale green to green yellow, finely dotted and blotched with dark green, more or less coarsely netted; flesh 1½ inches thick, white crisp, sweet.
- 126073. No. 3382. Fruit 9 by  $4\frac{1}{2}$  inches, rounded at the ends, lemon yellow, more or less smooth; flesh  $1\frac{1}{2}$  inches thick, white, melting, sweet.

- 126074. No. 3385. Shahpasand. Fruit 9 by 5 inches, tapering slightly toward the blossom end, smooth, orange yellow, ribbed with pale green; flesh 2 inches thick, white, melting, sweet.
- 126075. No. 3386. Fruit 12 by 6 inches, tapering to blossom end, mostly smooth, yellow with broad broken blotched lines of dark green; flesh 2 inches thick, white, melting, sweet.
- 126076. No. 3390. Fruit 9 by 5½ inches, tapering toward both ends, smooth, slightly furrowed, lemon yellow; flesh 1½ inches thick, white, sweet, firm.
- 126077. No. 3392. Fruit 8 by 6 inches, pale yellow, rounded at both ends, netted; flesh white, 2 inches thick, sweet, melting.
- 126078. No. 3393. Fruit elongate, 12 by 8 inches, tapering toward both ends, yellow, blotched and clouded with green, traces of heavy netting; flesh white,  $1\frac{1}{2}$  inches thick, firm, sweet.
- 126079. No. 3395. Fruit elongate, 12 by 5 inches, tapered to the blossom end, white with firm green ribs and traces of broad ones; flesh 1½ inches thick, white, firm, sweet.
- 126080. No. 3396. Fruit 12 by 6 inches, rounded at ends, pale yellow with broad, broken, blotched ribs of dark green, heavily netted; flesh 2 inches thick, green, crisp, sweet.
  - Nos. 126081 and 126082. From Rustak, August 25, at 2,000 feet altitude.
- 126081. No. 3409. Fruit subglobose, 7 inches long, dark green, heavily netted; flesh white, 1½ inches thick, fair, rare.
- 126082. Fruit subglobose, 8 inches long, orange, dotted with darker color, ribbed with pale green; flesh 1½ inches thick, salmon, firm, sweet, slightly musky. A distinct type.
  - Nos. 126083 to 126103. From Tolokhan, August 29, 2,000 feet altitude.
- 126083. No. 3412. Zarmitin. Fruit elongate, 12 by 6 inches, heavily netted, yellow, heavily dotted and blotched with green; flesh green, 1½ inches thick, very sweet. One of the best.
- 126084. No. 3413. Agnabat or Sufadak. Fruit mostly subglobose and mostly subglobose and mostly smooth, 8 by 6 inches, cream, sometimes with thin green rib lines; flesh white, 1½ inches thick, very sweet.
- 126085. No. 3414. Majari. Fruit tapered, 12 by 6 inches, russet yellow, washed green; flesh white,  $1\frac{3}{4}$  inches thick, crisp, sweet.
- 126086. No. 3417. Zairi. Fruit elongated, 17 by 7 inches, mostly smooth, green, washed more or less with yellow; flesh white, 2 inches thick, crisp, sweet.
- 126087. No. 3415. *Majari*. Fruit tapered, 12 by 5 inches, russet yellow, heavily dotted with green; flesh 1¾ inches thick, crisp, sweet, green.
- 126088. No. 3418. Fruit elongate, 13 by 5½ inches, green, dotted and ribbed with darker green, traces of netting; flesh 2 inches thick, green, sweet.
- 126089. No. 3419. *Amiri*. Fruit 12 by 5½ inches, deep green with lighter green ribs and elongate blotches of darker green; flesh 2 inches thick, crisp, white, sweet.
- 126090. No. 3420. *Urganji*. Fruit 9 by 5 inches, yellow, blotched and dotted with very dark green, traces of coarse netting; flesh 1½ inches thick, green or white, sweet.
- 126091. No. 3424. Fruit subglobose, 10 by 8 inches, pumpkin ribbed, pale green, yellow blotched with dark green; flesh 2 inches thick, white, fair.
- 126092. No. 3427. *Khatkhat*. Fruit ovoid, 11 by 6 inches, pumpkin ribbed light green, yellow washed with green; flesh 2 inches thick, white, sweet.
- 126093. No. 3428. Joruge. Fruit subglobose, 9 inches long, yellow, sprinkled and washed with green, traces of netting; flesh 2 inches thick, green, white, sweet.
- 126094. No. 3429. Fruit the color of grapefruit, smooth; flesh  $1\frac{1}{2}$  inches thick, white, sweet.

- 126095. No. 3430. Fruit subglobose, 7 inches long, pale green with broad broken ribs of orange; flesh green, 2 inches thick, sweet.
- 126096. No. 3438. Fruit subglobose, 11 by 8 inches, yellow, dotted and spotted green with raised island blotches of green and orange; flesh 2 inches thick, pale salmon, sweet.
- 126097. No. 3432. Fruit 14 by 6 inches, yellow dotted with green and blotched with very dark green, ribbed pale green; flesh 2 inches thick, white, sweet, fine.
- 126098. No. 3433. Fruit subglobose, 7 inches long, dull gray, dotted with dark green, smooth, ribbed with pale green; flesh 2 inches thick, green.
- 126099. No. 3437. Fruit elongate, 10 by 5 inches, smooth, yellow, blotched with orange, narrow ribs of green; flesh 1½ inches thick, white, very sweet.
- 126100. No. 3439. Fruit 10 by 6 inches, pale green, dotted and blotched along the ribs with very dark green; ribs of pale green; desh greenish white, 2 inches thick, firm, sweet.
- 126101. No. 3440. Fruit 10 by 4½ inches, yellow, irregularly dotted with green, traces of heavy netting; flesh 1 inch thick, greenish white, sweet.
- 126102. No. 3442. Fruit elongate, smooth, 14 by 7 inches, yellow, dotted with green, the dots often collected in clouding and blotching; flesh 1½ inches thick, greenish white, sweet.
- 126103. No. 3443. Fruit elongate, 15 by 5 inches, wrinkled and warty, yellow, finely dotted with green; flesh 1¼ inches thick, firm, white, sweet. Keeps well.
- 126104. No. 3446. *Istanbul*. From Rustak, August 30, at 2,000 feet altitude Fruit 3 by 2 inches, red brown with yellow rib streaks; scented; used only as a plaything.
- 126105. No. 3449. From Lalamaiden, August 27, at 2,000 feet altitude. A mixed sample; fruit probably grown without irrigation.
- Nos. 126106 to 126126. From Khanabad, August 29 to September 1, at 1,500 feet altitude.
- 126106. No. 3462. Fruit ovoid, 16 to 18 inches, weight usually 10 to 12 pounds, heavily netted, green, more or less blotched with orange and usually with irregular strips of darker green; flesh 2½ inches thick, cream-colored becoming green toward the rind, crisp, sweet, often excessively so; irrigated. One of the best.
- 126107. No. 3461. *Hakimbika*. Fruit ovoid, 10 inches long, strong white ribs, segments yellow, blotched green; flesh white, 1½ inches thick, sweet.
- 126108. No. 3463. Fruit ovoid, 10 inches long, cream-colored, smooth, faintly indented ribs lined often with green; flesh 1½ inches thick, white, rather watery, not very sweet.
- 126109. No. 3464. Fruit 14 by 10 inches, nearly smooth, deep purple, finely mottled with yellow green, ribs dull gray; flesh 2 inches thick, white, sweet.
- 126110. No. 3467. Fruit elongate, 12 by 6 inches, pale green blotched with darker green and heavily netted; flesh white,  $1\frac{1}{2}$  inches thick, sweet.
- 126111. No. 3471. Fruit 13 by 7 inches, smooth, cream-colored, with heavily indented ribs; flesh 2 inches thick, white, sweet, slightly watery.
- 126112. No. 3473. Fruit 11 by 7½ inches, nearly smooth, yellow blotched orange and green, dotted with green; flesh 2½ inches thick, white, sweet.
- 126113. No. 3475. Fruit globose, 10 inches long, pale yellow, dotted with green and clouded orange and green, nearly smooth; flesh 2 inches thick, white, becoming green near the rind, sweet.
- 126114. No. 3476. Fruit 15 by 7 inches, nearly smooth, lemon yellow, sprinkled more or less with green; flesh  $1\frac{1}{2}$  inches thick, white, sweet, fair quality.
- 126115. No. 3480. Fruit 21 by  $7\frac{1}{2}$  inches, dull gray, dotted with green and blotched with darker green; flesh  $2\frac{1}{2}$  inches thick, creamy green, fine, crisp, sweet.

- 126116. No. 3482. Fruit 12 by 5 inches, pale green, dotted with darker green, broad ribs of dark green; flesh 1½ inches thick, green, sweet.
- 126117. No. 3485. Fruit oval, 9 inches long, smooth, lemon yellow clouded with green, ribs somewhat indented; flesh 1% inches thick, white, crisp, sweet.
- 126118. No. 3488. Fruit ovoid, 12 inches long, netted, yellow with green dots and green and orange blotching; flesh 1¾ inches thick, green, fair.
- 126119. No. 3491. Fruit orange yellow, finely dotted with green, nearly smooth; flesh white, 2 inches thick, sweet.
- 126120. No. 3495. Fruit 11 by 6 inches, tapering gradually to the blossom end, gray green, dotted with darker green except on the rather broad rib lines, smooth; flesh 1¾ inches thick, greenish white, crisp, sweet. One of the best.
- 126121. No. 3496. Fruit 13 by 4½ inches, green, dotted and vermiculated with darker green except over the rather broad ribs, obscurely netted at the stem end; flesh 1½ inches thick, greenish, crisp, sweet.
- 126122. No. 3504. Fruit oval, 14 inches long, nearly smooth, lemon yellow, irregularly lined and blotched with orange; flesh 2½ inches thick, white, very sweet.
- 126123. No. 3505. Fruit 14 by 8 inches, broadly indented ribs, obscurely and strongly netted, green, blotched more or less with dark green and orange; flesh 2½ inches thick, cream-colored turning greenish near the rind, sweet, fine.
- 126124. No. 3508. Fruit subglobose, 10 inches long, indented ribs of dull gray green, orange yellow, dotted green; flesh white, 1½ inches thick, sweet.
- 126125. No. 3511. Fruit 11 by 5 inches, yellow, dotted green with broad broken lines of green, more or less strongly netted; flesh white, crisp, sweet, 1½ inches thick.
- 126126. No. 3513. Fruit subglobose, 10 inches long, yellow, irregularly furrowed, smooth; flesh creamy, 1½ inches thick, juicy, sweet.
  - Nos. 126127 to 126136. From Tashkurgan, September 4, at 1,200 feet altitude.
- 126127. No. 3531. Fruit globose, 8 inches long, nearly smooth, pale yellow with broad stripes of white, centered green, a few blotches of dark green scattered over the melon, distinctive in appearance; flesh 2½ inches thick, white merging into green near the rind, very sweet.
- 126128. No. 3533. Fruit globose, 6 inches long, dark green with dull-gray ribs, dotted green all over; flesh 2 inches thick, creamy, sweet.
- 126129. No. 3534. Fruit 10 by 6 inches, heavily netted, lemon yellow, dotted with green; flesh cream, 2 inches thick, sweet.
- 126130. No. 3535. Fruit flattened, 8 by 4 inches, heavily netted, green; flesh cream green, 2 inches thick, sweet.
- 126131. No. 3536. Fruit 10 by 6 inches, netted, pale yellow, blotched with orange and green; flesh cream green, crisp, sweet, 2 inches thick.
- 126132. No. 3538. Fruit globose, 7 inches long, green with long broken net lines; flesh 2 inches thick, green, sweet.
- 126133. No. 3539. Fruit 8 by 5 inches, smooth, deep green with blotch stripes of yellow green and ribs of dull gray green; flesh 2 inches thick, green, sweet.
- 126134. No. 3540. Fruit globose, 8 inches long, smooth, green dotted with orange; flesh green, 21/4 inches thick, very sweet.
- 126135. No. 3541. Fruit spherical triangular, 8 inches long, smooth, white clouded with green; flesh cream color changing to green near the rind, 3 inches thick, sweet.
- 126136. No. 3542. Fruit globose, 8 inches long, irregularly and finely furrowed, green yellow, dotted with green, no netting; flesh 2¾ inches thick, white, sweet.
  - Nos. 126137 to 126139. From Mazarisharif, September 4, at 1,200 feet altitude.

- 126137. No. 3543. Fruit globose, 10 inches long, dark green with irregular dots of white, more or less broken netting; flesh 3 inches thick, creamy, melting, sweet, but with cucumber flavor near the rind.
- 126138. No. 3545. Fruit 15 by 6 inches, pale green, heavily netted; flesh 2½ inches thick, green, crisp, sweet.
- 126139. No. 3547. Fruit 12 inches long, pointed at both ends, yellow with broken stripes of dark green, netted; flesh 2 inches thick, creamy, crisp, sweet.
- 126140. No. 3553. From Balkh, September 5, at 1,200 feet altitude. Fruit globose, 10 inches long, yellow, faintly dotted with greenish yellow and blotched with green, coarse netting.
  - Nos. 126141 to 126145. From Mazarisharif, September 6, at 1,200 feet altitude.
- 126141. No. 3570. Fruit somewhat flattened, 12 by 11 inches, lime yellow with darker yellow dots, heavily indented ribs of dull gray green; flesh  $3\frac{1}{2}$  inches thick, creamy green, delicious.
- 126142. No. 3572. Fruit ovoid, 12 inches long, cream clouded with light green, heavily netted; flesh 2¾ inches thick, white, crisp, sweet.
- 126143. No. 3574. Fruit 10 by 5½ inches, pointed at the ends, dark green, heavily netted; flesh 1½ inches thick, very sweet, fine.
- 126144. No. 3578. Fruit 12 by 9 inches, lemon yellow, warty and shallow furrowed, clouded green, netted at stem end; flesh 3 inches thick, white, delicious.
- 126145. No. 3586. A mixed sample, obtained from a farmer.
  - Nos. 126146 to 126163. From Akcha, September 9, at 1,200 feet altitude.
- 126146. No. 3623. Fruit hard-shelled, ovoid, 8 inches long, golden orange, nearly free of netting, but surface more or less irregular; flesh 2 inches thick, creamy white, firm, sweet.
- 126147. No. 3625. Fruit hard-shelled, 10 by 8 inches, lemon yellow, some strong netting; flesh 2 inches thick, white, sweet.
- 126148. No. 3628. Fruit 16 by 7½ inches, green blotched with darker green, little netting but furrowed; fruit 2 inches thick, creamy, sweet.
- 126149. No. 3635. Fruit 16 by 6 inches, lime color, heavily dotted green and with broad broken stripes of deep green, strongly netted; flesh 1½ inches thick, creamy to green near the rind, crisp, sweet.
- 126150. No. 3637. Fruit 14 by 9 inches, deep ribs of pale green, segments green dotted with darker green; flesh 2½ inches thick, white, fine.
- 126151. No. 3641. Fruit 10 by 6 inches, smooth, pale-yellow, clouded with green; flesh 1½ inches thick, firm, white, unripe.
- 126152. No. 3647. Fruit hard-shelled, subglobose, 12 inches long, irregular shape and furrowed, yellow with irregular broken narrow stripes of dark green; flesh 2½ inches thick, creamy green, sweet, seeds in 7 placentas.
- 126153. No. 3651. Fruit 15 by 10 inches, hard-shelled, tapered, yellow green, blotched and dotted with green, coarse long net lines around the stem end; flesh 3 inches thick, white, sweet.
- 126154. No. 3663. Fruit 11 by 7 inches, with a soft shell, faintly indented ribs, golden yellow, more or less heavily dotted and clouded with green, nearly smooth; flesh 2¼ inches thick, salmon color, fine.
- 126155. No. 3665. Fruit 14 by 9 inches, netted at stem end, very dark green with some orange-colored clouding; flesh 2½ inches thick, creamy white, sweet.
- 126156. No. 3671. Fruit subglobose, 9 inches long, smooth with indented ribs, yellow with fine dots of green and blotches of orange; flesh sweet, cream-colored to green next the soft rind.
- 126157. No. 3673. Fruit subglobose, 8 inches long, with a hard shell, yellow dotted with orange, faintly indented ribs of two shades of green; flesh 2 inches thick, salmon-colored, good.

- 126158. No. 3675. Fruit 13 by 8 inches with a firm shell, orange colored, nearly obscured by green dotting, surface slightly irregular with indented ribs; flesh  $2\frac{1}{2}$  inches thick, creamy, sweet.
- 126159. No. 3676. Fruit 14 by 9 inches, irregular and furrowed, green dotted with darker green and splashed with very dark green; flesh 2 inches thick, creamy white, fine, melting; seeds in 4 placentas.
- 126160. No. 3681. Fruit subglobose, 7 inches long, orange gold, blotched with darker yellow, obscurely netted; flesh 1½ inches thick, firm, sweet.
- 126161. No. 3686. Fruit 8 by 7 inches, somewhat flattened, indented ribs, lined green, mixed sea green and white, smooth; flesh 2 inches thick, green becoming orange at seed cavity, sweet.
- 126162. No. 3691. Fruit globose, 10 inches long, with hard shell, yellow, more or less obscured by green dotting, heavily netted; flesh white, 21/4 inches thick, very sweet.
- 126163. No. 3706. Fruit 11 by  $6\frac{1}{2}$  inches, mottled white and pale green and clouded with yellow, smooth; flesh  $1\frac{3}{4}$  inches thick, salmon tinted, sweet.
- Nos. 126164 to 126190. From Saripul, September 12 and 13, at 1,500 feet altitude. Melons from this region are grown without irrigation.
- 126164. No. 3716. Fruit flattened, 5 by 7 inches, orange colored, heavily netted, broad somewhat indented ribs of pale yellow; flesh 1½ inches thick, salmon-colored, sweet, fibrous; seeds on four placentas.
- 126165. No. 3728. Fruit 12 by 8 inches, smooth, lemon yellow, dotted green and splashed with orange, deeply indented ribs of pale green, feather-striped with darker green; flesh 2 inches thick, creamy white, fine.
- 126166. No. 3729. Fruit ovoid, 9 inches long, smooth, grass green clouded with orange; flesh  $1\frac{1}{2}$  inches thick, salmon color, sweet.
- 126167. No. 3730. Fruit 10 by 7 inches, flattened, pale yellow green, heavily dotted with very dark green, smooth; flesh 2½ inches thick, cream, fine, but deteriorates quickly with a cucumber flavor toward the rind.
- 126168. No. 3733. Fruit globose, 12 inches long with hard shell, lemon yellow, furrowed but not netted; flesh 3 inches thick, creamy white, sweet.
- 126169. No. 3734. Fruit 14 by 9 inches, orange yellow, dotted and blotched with green, netted coarsely around the stem end; flesh 2 inches thick, white, sweet.
- 126170. No. 3735. Fruit smooth, 13 by 9 inches, lemon yellow with broad broken stripes of very dark green; flesh 2½ inches thick, white, crisp, sweet.
- 126171. No. 3736. Fruit 7 by 9 inches, smooth, pale cream, dotted with yellow, obscurely indented ribs of white; flesh 1¾ inches thick, greenish white, sweet.
- 126172. No. 3740. Fruit globose, 8 inches long, pale green, dotted with darker green, faintly indented ribs of paler green, netted; flesh 1\% inches thick, greenish, poor.
- 126173. No. 3741. Fruit 13 by 7 inches, yellow orange, splashed with green orange, obscurely netted; flesh 2 inches thick, white, sweet.
- 126174. No. 3472. Fruit 6½ by 8 inches, greenish white, but the ground is nearly obscured by large dots, ribs green white; flesh creamy white, 1½ inches thick, sweet.
- 126175. No. 3745. Fruit obovoid, 12 by  $6\frac{1}{2}$  inches, yellow, dotted and clouded more or less with green, faintly indented ribs of white; flesh  $2\frac{1}{4}$  inches thick, sweet, white.
- 126176. No. 3746. Fruit tapered, 10 by 6 inches, pale yellow, obscurely netted, broad, somewhat indented ribs of white; flesh 2 inches thick, creamy white to green near the rind.
- 126177. No. 3747. Fruit 10 by 6 inches, smooth, orange clouded with green; flesh creamy green,  $1\frac{1}{2}$  inches thick, sweet.

- 126178. No. 3748. Fruit 14 by 7 inches, green blotched with yellow and orange and dotted with green, broadly ribbed, more or less faint netting; flesh 2 inches thick, creamy white to green near the rind, rather crisp, watery, fairly sweet.
- 126179. No. 3751. Fruit 10 by 7 inches, obovoid, smooth, lemon yellow heavily dotted with very dark green; flesh 1½ inches thick, poor.
- 26180. No. 3754. Fruit 9 by 6 inches, yellow, dotted with orange and green, green ribs, coarsely netted; flesh creamy white, sometimes tinted with salmon, 2 inches thick, sweet.
- 126181. No. 3756. Fruit 14 by 7 inches, smooth, tapered to blossom end, pale yellow, finely dotted with green, obscure ribs of green; flesh 1½ inches thick, creamy green, sweet.
- 126182. No. 3757. Fruit ovoid, 11 by 8 inches, shell hard, orange yellow, heavily clouded with grass green, coarsely netted; flesh green, 2 inches thick, cream-colored to greenish, crisp, sweet.
- 126183. No. 3758. Fruit globose, 8 inches long, smooth, yellow, more or less blotched and dotted with orange; flesh 2 inches thick, creamy, sweet.
- 126184. No. 3760. Fruit obovoid, 7 inches long, smooth, orange-brown, dotted with darker brown and green, faintly indented ribs of pale green bordered with darker green; flesh 1½ inches thick, creamy green, poor.
- 126185. No. 3763. Fruit 12 by 8 inches, smooth, yellow, dotted with green, indented ribs; flesh 2 inches thick, creamy white, sweet.
- 126186. No. 3765. Fruit 12 by 7 inches, tapered to the blossom end, pale greenish white, heavily dotted and striped with very dark green, indented ribs of pale green, no netting; flesh 2 inches thick, creamy green, sweet.
- 126187. No. 3766. Fruit 12 by 8 inches, yellow, dotted with green and clouded with orange; flesh white, sweet.
- 126188. No. 3768. Fruit 12 by 9 inches, mixed yellow and dark green, heavily netted; flesh 2 inches thick, crisp, sweet.
- 126189. No. 3772. Fruit 12 by 7 inches, tapered, orange yellow, mottled with darker yellow and green; flesh 1% inches thick, creamy white, fair.
- 126190. No. 3773. Fruit smooth, obovoid, 9 inches long, somewhat compressed, orange, more or less dotted with grass green; flesh 2 inches thick, white, very sweet.
  - Nos. 126191 to 126196. From Akcha, September 16, at 1,200 feet altitude.
- 126191. No. 3793. Fruit 9 by 5 inches, somewhat tapered, lemon yellow, heavily obscured by grass-green clouding, heavily netted; fruit 1½ inches thick, green, melting, fragrant, fine.
- 126192. No. 3796. Fruit ovoid, 13 inches long, surface covered with deep furrows, greenish white, dotted with sea green; flesh 3 inches thick at the stem end to 2 inches at the blossom end, white, juicy, sweet. A winter keeper.
- 126193. No. 3800. Fruit subglobose, 10 inches long, white, mottled pale sea green and clouded with lemon yellow, smooth, with broadly indented ribs; flesh creamy white, sweet,  $2\frac{1}{2}$  inches thick.
- 126194. No. 3814. Fruit 12 by 7 inches, nearly smooth, pale yellow green, dotted with darker green, broad stripes of pale green edged by irregular blotching of dark green; flesh 2¼ inches thick, green, crisp, very firm.
- 126195. No. 3819. Fruit globose, 10 inches long, lemon yellow splashed with orange, some green dotting, deeply indented ribs; fruit  $3\frac{1}{2}$  inches thick, creamy white, fine.
- 126196. No. 3821. Fruit ovoid, 8½ inches long, nearly smooth, orange yellow with some splashing of grass green, broad netted ribs of yellow green edged with blotched stripes of grass green.
  - Nos. 126197 to 126202. From Balkh, September 20, at 1,200 feet altitude.

- 126197. No. 3830. Fruit globose, 10 inches long, green, dotted with darker green and clouded with orange, smooth, indented ribs of pale green; flesh 2 inches thick, creamy white, sweet.
- 126198. No. 3831. Fruit globose, 5 inches long, coarsely netted, dark green and orange with spotted blotches of white, ribs green white, dotted with darker green; flesh 1½ inches thick, creamy white, fine.
- 126199. No. 3833. Fruit ovoid, 6 inches long, nearly smooth, bright yellow with faintly indented ribs of yellow, edged broadly with orange; flesh  $1\frac{1}{2}$  inches thick, creamy white, fine.
- 126200. No. 3836. Fruit globose, 8 inches long, yellow, vermiculated darker, smooth; flesh 2 inches thick, creamy white, good.
- 126201. No. 3841. Fruit 12 by 6 inches, tapered, yellow, nearly obscured by dots of dark green, heavily netted; flesh 1¾ inches thick, green, crisp, sweet.
- 126202. No. 3854. Fruit globose, 10 inches long, greenish white, faintly indented ribs; flesh 2 inches thick, pale greenish, sweet with strong cucumber odor, possibly unripe.

## 126203-126233.

From Afghanistan and India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received December 8, 1937.

Unless otherwise noted, material is from Afghanistan.

126203-126212. Cucumis spp. Cucurbitaceae.

126203-126209. CUCUMIS SATIVUS L.

Cucumber.

- 126203. No. 3331. *Tara*. From Takia, August 14, at 4,500 feet altitude. Fruits crook-necked, strongly ridged, 4 feet long. Excellent for salads and pickles when small.
- 126204. No. 2910. Badrang. From Jalalabad, May 24. Fruit about 5 by 8 inches, very tender.
- 126205. No. 2918. Badrang. From Laghman, May 25, at 3,000 feet altitude.
- 126206. No. 3131. Badrang. From Faizabad, July 11, at 4,000 feet altitude. Fruit 8 by 4 inches, locally grown, good quality.
- 126207. No. 3171. Taran. From Faizabad, July 13. A crook-necked muchridged cucumber, common in India; grows here to 3 feet.
- 126208. No. 3444. Badrang. From Takia, August 30. Fruit 8 by 3½ inches, russet gold, tender for a long period.
- 126209. No. 3445. Badrang. From Takia, August 30. Fruit 14 by 3 inches, russet brown, very good.

## 126210 and 126211. CUCUMIS MELO L.

Muskmelon.

- 126210. No. 3318. From Takia, August 12, at 4,500 feet altitude. Fruit oval,  $1\frac{1}{2}$  inches long, blotched, striped dark green; found as a weed in fields.
- 126211. No. 3564. From Balkh, September 5, at 1,200 feet altitude. Fruit oval, 1¼ inches long, lime-yellow with irregular ribs of orange; growing as a weed.

## 126212. Cucumis sp.

No. 3779. Istanbul. From Saripul, September 13, at 1,500 feet altitude. Fruit pear-shaped, 2 inches long, yellow, fragrant; grown only for the fragrance.

126213-126224. CUCURBITA MOSCHATA Duchesne.

Cushaw,

126213. No. 2904. From Peshawar, North West Frontier Province, India, May 8. Fruit 14 by 8 inches, orange red, strongly ribbed; flesh 1½ inches thick, yellow.

Nos. 126214 and 126215. From Laghman, May 27, at 3,000 feet altitude.

126214. No. 2970. Peta Kadu. 126215. No. 2971. Halua Kadu.

126216. No. 3334. *Kadu*. From Takia, August 15, at 4,500 feet altitude. Fruit flattened, 1 foot across, orange pink; flesh moderately sweet, no fiber; used like squash.

Nos. 126217 and 126218. From Khanabad, September 1 and 2, at 1,500 feet altitude.

126217. No. 3501. *Pilau Kadu*. Fruit 15 by 6 inches, usually slightly constricted in the middle, closely ribbed, buff pink; flesh without fiber; used like squash.

126218. No. 3518. Ash Kadu. Fruit 12 inches long, heavily ribbed, dark green, blotched with yellow; flesh 2 inches thick, golden yellow, no fiber.

126219. No. 3558. *Pilau Kadu*. From Balkh, September 5, at 1,200 feet altitude. Fruit 20 inches long, often crook-necked, buff with islands of paler and more or less green clouding; flesh orange yellow, no fiber.

Nos. 126220 and 126221. From Saripul, September 13, at 1,500 feet altitude.

126220. No. 3776. *Maka Kadu*. Fruit pumpkinlike, gray, flattened, 18 inches in diameter.

126221. No. 3780. Urganj. A long-necked variety.

Nos. 126222 and 126223. From Balkh, September 19 and 20, at 1,200 feet altitude.

126222. No. 3828. Fruit 2 feet long, blotched buff-pink and green; flesh orange,  $2\frac{1}{2}$  inches thick.

126223. No. 3829. Fruit 9 by 6½ inches, deeply ribbed, buff-orange with islands of paler orange; flesh orange, 1¾ inches thick.

126224. No. 3860. From Mazarisharif, September 22, at 1,200 feet altitude. Fruit obovoid, 12 inches long, deeply and handsomely ribbed, mixed pinkbuff and buff; flesh 1½ inches thick, orange.

126225-126229. CUCURBITA PEPO L.

Pumpkin.

126225. No. 3035. *Tarbuzabujehl*. From Kabul, June 26, at 7,000 feet altitude. Fruit globose, 4 inches in diameter; flesh orange; grows as a weed. Nos. 126226 and 126227. From Khanabad, September 1, at 1,500 feet altitude.

126226. No. 3514. Fruit  $2\frac{1}{2}$  inches in diameter, smooth, round, orange; an ornamental type.

126227. No. 3517. Shir Kadu. Fruit flattened, 12 by 7 inches, usually strongly ribbed and indented at both stem and blossom ends, salmon pink and two shades of pale green; flesh 2 inches thick, pale yellow, no fiber.

Nos. 126228 and 126229. From Akcha, September 8 and 9, at 1,200 feet altitude.

126228. No. 3636. Fruit slightly flattened, 10 by 11 inches, blue green, flecked more or less with orange, ribs indented; flesh 2½ inches thick, yellow, fibrous, not sweet.

126229. No. 3672. Fruit 12 by 8 inches, dark green, vermiculated darker, spotted with orange and striped with orange mixed with yellow; flesh 1½ inches thick, pale yellow, no fiber.

126230. Phaseolus mungo L. Fabaceae.

Urd or black gram.

No. 2973. My. From Laghman, May 27. The green pods and dried pods are used as food; the plant is used as fodder.

For previous introduction see 115490.

126231. PISTACIA VERA L. Anacardiaceae.

Pistachio.

No. 3861. *Pista*. Bears as a shrub 6 feet high, but becomes a tree 15 feet high, with a trunk 12 inches in diameter. Does not need summer rain; tolerates a mild winter with an abundance of snow.

126232-126233. Spinacia oleracea L. Chenopodiaceae. Common spinach.

126232. No. 2956. Palak. From Laghman, May 26.

126233. No. 3599. Palak. From Mazarisharif, September 6, at 1,200 feet altitude.

126234-126235. Solanum spp. Solanaceae.

From Peru. Tubers collected by H. L. Blood, Bureau of Plant Industry, United States Department of Agriculture. Received December 31, 1937.

126234. Solanum sp.

No. 34. A wild plant found about 12 miles south of Oroya, in the pampas, near an Indian village. Blossoms purple; tubers small and white.

126235. SOLANUM Sp.

No. 37. A wild plant collected on a hillside about 12 miles south of Oroya, at 11,500 feet altitude, away from any Indian habitation. Plant coarse with a few large tubers, not common.

126236-126237. ZEA MAYS L. Poaceae.

Corn.

From the Union of South Africa. Seeds presented through the American legation, Pretoria, Transvaal. Received December 31, 1937.

126238. CINCHONA OFFICINALIS L. Rubiaceae.

From Africa. Seeds purchased from the Superintendent of Plantations, East African Agricultural Research Station, Amani, Tanganyika. Received December 31, 1937.

A tree, native to the Andes, yielding a bark remarkably rich in quinine which crystallizes readily as quinine sulfate. Received as *Cinchona ledgeriana*, for which *C. officinalis* is now used.

For previous introduction see 118936.

### 126239-126403.

From Afghanistan. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received in December 1937.

Collected in the summer and autumn of 1937, and, unless otherwise mentioned, received as seeds.

126239-126247. ALLIUM Spp. Liliaceae.

126239. ALLIUM POLYPHYLLUM Kar. and Kir.

No. 3191. From Sanglech, July 27, at 11,000 feet altitude. A broad and flat-leaved onion up to 30 inches high, with large heads of rose-purple flowers.

For previous introduction see 110779.

126240. ALLIUM SD.

No. 2984. From Kail, June 3, at 10,000 feet altitude. Plants 1 foot high, with large heads of magenta-purple flowers, which bloom after the snow has melted, then lie dormant for the long drought.

126241. ALLIUM ODORUM L.

No. 3002. From Tera Kotal, June 15. Plant up to 4 feet high, with broad leaves and large heads of blue-purple flowers.

126242. ALLIUM Sp.

No. 3013. From Gardez, May 20. Bulbs collected in a grain field; probably two species, both up to 18 inches high, and flowers from a globular head of bulblets, one green, one rose.

126243. ALLIUM Sp.

No. 3160. From Chakaran, July 17, at 8,000 feet altitude. An onion up to 18 inches high, growing on soil now dry; possibly an ornamental.

126244. ALLIUM Sp.

No. 3192. From Sanglech, July 28, at 11,500 feet altitude. An interesting species, up to 3 feet high, nearly leafless, with heads of rose-purple flowers; grows in dry, bare places.

126245. Allium oreophilum C. A. Mey.

No. 3282. From Daraim, August 10, at 8,500 feet altitude. Plant 18 inches high, flower head 3 inches in diameter; probably rose purple.

126246. ALLIUM Sp

No. 3308. From Teshkan, Auugst 12, at 5,000 feet altitude. Plant 1 foot high with flower head 2 inches in diameter; found on a dry slope.

126247. ALLIUM Sp.

No. 3456. From Tolokhan, August 28, at 2,000 feet altitude. Plant 18 inches high, flower head 2 inches across, found in a dry field.

126248. ALTHAEA sp. Malvaceae.

No. 3027. *Guli-khatmir*. From Kabul, June 25. Plant 4 feet high, with habit and leaves like a hollyhock; flowers rose or white with yellow center.

126249. ALTHAEA Sp. Malvaceae.

No. 3107. From Atinjalao, July 7, at 4,000 feet altitude. Plant up to 3 feet high with hollyhock habit; flowers rose purple, about 2½ inches across.

126250. Amygdalaceae.

No. 3114. From Khaksar, July 9, at 4,500 feet altitude. A dense shrub up to 2 feet high, growing on dry sunny slopes.

126251. Amygdalus eburnea Spach. Amygdalaceae.

No. 3272. From Daraim, August 10, at 8,500 feet altitude. A bushy shrub 3 to 5 feet high with thorny branches, gray-green, spatulate-oblong leaves less than one-half inch long, and numerous small, sessile, rose-pink flowers appearing before the leaves, followed by drupes less than one-half inch across. Native to Iran in dry stony places.

126252. ANETHUM GRAVEOLENS L. Apiaceae.

Dill.

No. 3603. Shibet. From Mazarisharif, September 6, at 1,200 feet altitude. Leaves used dry or fresh as a potherb; also used in chutney.

126253. AQUILEGIA Sp. Ranunculaceae.

No. 3185. From Istakul, July 26, at 10,500 feet altitude. A plant up to 3 feet high, with fragrant, creamy white flowers, spurs tinged purplish.

126254. Arisaema sp. Araceae.

No. 3112. From Garao, July 2, at 5,000 feet altitude. A dry-ground jack-in-the-pulpit, 2 feet high, with attractive rose-tinted flowers.

126255-126258. ASTRAGALUS SPP. Fabaceae.

126255. ASTRAGALUS Sp.

No. 3186. From Sanglech, July 26, at 10,000 feet altitude. A bushy plant, 2 to 3 feet high, growing in a torrent bed. Leaves small, flowers small, dainty, tinged rose purple.

126256. ASTRAGALUS Sp.

No. 3276. From Daraim, August 10, at 8,500 feet altitude. A bushy perennial up to 4 feet high, possibly an ornamental.

126257. ASTRAGALUS Sp.

No. 3448. From Rustak, August 26, at 2,000 feet altitude. A plant with woolly pods; foliage not seen.

126258. ASTRAGALUS Sp.

No. 3299. From Daraim, August 11, at 7,000 feet altitude. Plants 3 feet high, found in dry places growing in clumps of 5 or 6 stalks; flowers not seen, seed pods ornamental.

126259-126261. AVENA Spp. Poaceae.

Oats.

126259. AVENA FATUA L.

Wild oats.

No. 3149. From Chakaran, July 17, at 6,000 feet altitude. A plant to 3 feet high, with well-developed panicles; occurs scattered in crops; apparently free from smut.

126260. AVENA SATIVA L.

No. 3238. Jaudor. From Hazratsaid, August 3, at 8,000 feet altitude. A variety with handsome heads up to 6 inches long.

126261. AVENA Sp.

No. 2981. From Daulatshah, June 1. A wild plant found growing in grain fields. Seems to be smut resistant and drought tolerant.

126262. Bupleurum sp. Apiaceae.

No. 2942. Zirra. From Laghman, May 26. A wild plant used as a spice.

126263. CARDUUS Sp. Asteraceae.

No. 3305. From Daraim, August 11, at 7,000 feet altitude. A bushy annual, 1 foot high, found in dry situations; flowers, deep rose purple.

126264. Onopordum sp. Asteraceae.

No. 3348. From Rustak, August 17, at 4,000 feet altitude. A sturdy annual thistle with large heads of rose-purple flowers 3 inches across; an uncommon ornamental, watered by melting snow.

126265-126266. CARUM COPTICUM (L.) Benth. and Hook. Apiaceae.

126265. No. 2972. Sperki. From Laghman, May 27. Cultivated for its medicinal qualities.

126266. No. 3601. *Jawani*. From Mazarisharif, September 6, at 1,200 feet altitude. Seeds eaten for indigestion; used in India also as a medicinal plant.

126267-126272. CENTAUREA Spp. Asteraceae.

126267. CENTAUREA MOSCHATA L.

No. 3109. From Atinjalao, July 7, at 4,000 feet altitude. An annual about 2 feet high, with attractive heads of vellow flowers 2 inches in diameter.

126268. CENTAUREA DEPRESSA Bieb.

No. 3012. From Gardez, May 20, at 9,000 feet altitude. An annual with simple or branching stems from 12 to 18 inches high, oblong to linear-lanceolate, entire or pinnatifid leaves, and showy heads of blue flowers, larger than those of our cultivated variety. Found as a weed in grainfields.

126269. CENTAUREA Sp.

No. 3124. From Gandocheshma, July 10, at 6,000 feet altitude. A perennial with large elliptical leaves and heads of yellow flowers, 2 inches across. 126270. Centaurea sp.

No. 3122. From Gandocheshma, July 10, at 6,000 feet altitude. An annual with heads of yellow flowers,  $\frac{3}{4}$  inch in diameter; of possible value as an ornamental.

126271. CENTAUREA Sp.

No. 3258. From Jurm, August 8, at 7,000 feet altitude. An annual up to 3 feet high, found in rather dry situations, with very attractive heads of yellow flowers.

126272. CENTAUREA Sp.

No. 3300. From Daraim, August 11, at 7,000 feet altitude. A perennial 4 feet high, found on dry slopes; flowers single, yellow, and 1½ inches across.

126273. Cercis sp. Caesalpiniaceae.

No. 3148. From Chakaran, June 17, at 6,000 feet altitude. A shrub or small tree up to 10 feet high, found on dry rocky slopes; flowers deep rose purple, % inch across.

126274. Chrysanthemum parthenium (L.) Bernh. Asteraceae. Feverfew.

No. 3283. From Daraim, August 10, at 8,500 feet altitude. A bushy plant up to  $2\frac{1}{2}$  feet high; flower heads 1 inch across with white ray flowers.

For previous introduction see 40643.

126275. Chrysanthemum sp. Asteraceae.

No. 3347. From Rustak, August 17, at 4,000 feet altitude. A yarrow-leafed plant up to 2 feet high, with a spike of small yellow flowers resembling goldenrod. Found in dry soil.

126276. CLEMATIS ORIENTALIS L. Ranunculaceae.

No. 3202. From Krunn, July 30, at 9,000 feet altitude. A climbing vine up to 15 feet high, with thin, shiny, pinnate leaves and golden yellow flowers about  $1\frac{1}{2}$  inches across.

For previous introduction see 122829.

126277. CLEMATIS Sp. Ranunculaceae.

No. 3252. From the Khash District, August 8, at 8,000 feet altitude. A bush up to 3 feet high with an abundance of white, fragrant flowers; growing on the dry bank of a mountain torrent; rare.

126278. Colutea sp. Fabaceae.

No. 3156. From Chakaran, July 17, at 8,000 feet altitude. An attractive, thornless bush up to 5 feet high, with yellow flowers and large inflated, purplish pods. Found in rather dry situations.

126279. Convolvulus sp. Convolvulaceae.

No. 3105. From Gumbaz, July 7, at 3,000 feet altitude. A bushy plant with few leaves and attractive fragrant rose flowers about 1 inch across.

126280. COTONEASTER Sp. Malaceae.

No. 3280. From Daraim, August 10, at 8,500 feet altitude. A loosely branched shrub up to 10 feet high, with bright crimson fruit. Found in rather dry situations.

126281. Rosa sp. Rosaceae.

Rose.

No. 3142. *Grilikhar*. From Faizabad, July 11, at 4,000 feet altitude. An attractive tree about 10 feet high, found on the hills. The fruit is sold in the bazar as an acid flavoring.

126282. Crataegus sp. Malaceae.

No. 3277. From Daraim, August 10, at 8,500 feet altitude. An attractive bush, 10 feet high, with orange fruits.

126283. Delphinium sp. Ranunculaceae.

Larkspur.

No. 3108. From Atinjalao, July 7, at 4,000 feet altitude. An annual delphinium 18 inches high; flowers yellow to apricot.

126284. Delphinium sp. Ranunculaceae.

Larkspur.

No. 3123. From Gandocheshma, July 10, at 6,000 feet altitude. A plant 1 inch high, with woolly leaves and pale-yellowish flowers.

126285. Delphinium sp. Ranunculaceae.

Larkspur.

No. 3269. From Daraim, August 10, at 8,500 feet altitude. An annual plant 4 feet high, with long spikes of yellow flowers.

126286. Dianthus sp. Silenaceae.

No. 3106. From Gumbaz, August 7, at 3,000 feet altitude. A plant 1 foot high, growing in clumps with white-fringed flowers about % inch across.

126287. Elaeagnaceae.

No. 3813. From Akcha, September 16, at 1,200 feet altitude. A small attractive tree 12 feet high, growing along irrigation canals. Fruit 1¼ inches long.

126288-126306. Eremurus spp. Liliaceae.

126288. EREMURUS Sp.

No. 2999. Seech. From Banzi, June 13, at 8,000 feet altitude. A plant 18 inches high, resembling a hyacinth; flowers scattered, large, pink, very attractive.

126289. EREMURUS Sp.

No. 3000. Above Kabul, June 13, at 8,000 feet altitude. Plant 4 feet high, growing in dry places, watered by melting snow; flowers probably green, edged with white; stamens brick red.

126290. EREMURUS Sp.

No. 3020. From Nozi, June 22, at 9,000 feet altitude. A broad-leaved form up to 6 feet high, with dense spikes of small white flowers.

126291. Eremurus sp.

No. 3110. From Garao, July 7, at 5,000 feet altitude. Plant up to 4 feet high, leaves 2 inches long; seed pods 5% inch across; flowers not seen.

126292. Eremurus sp.

No. 3111. From Garao, July 7, at 5,000 feet altitude. Plants up to  $3\frac{1}{2}$  feet high, with bright-yellow flowers.

126293. EREMURUS Sp.

No. 3121. Seech. From Gandocheshma, July 10, at 6,000 feet altitude. A plant 5 feet high, with leaves 2 inches broad and seed capsules 1 inch in diameter; flowers possibly pink.

126294. EREMURUS Sp.

No. 3146. Seech. From Chakaran, July 17, at 10,000 feet altitude on a damp slope. A tall species, 6 feet high, with broad leaves and rose-colored flowers.

126295. Eremurus sp.

No. 3147. Seech. From Chakaran, July 17, at 8,500 feet altitude. Plants up to 4 feet high, found on a dry slope.

126296. EREMURUS Sp.

No. 3256. From the Khash District, August 8, at 8,000 feet altitude. Plants up to 3½ feet high, found in a dry situation; flowers not seen.

126297. Eremurus sp.

No. 3257. From the Khash District, August 8, at 8,000 feet altitude. Plants up to  $3\frac{1}{3}$  feet high on a dry slope.

126298. EREMURUS Sp.

No. 3259. From the Khash District, August 8, at 8,000 feet altitude. Plants up to 3 feet high, growing on a dry slope; flowers not seen.

126299. EREMURUS SD.

No. 3260. From the Khash District, August 8, at 8,000 feet altitude. Plants over 3 feet high, found on dry slopes.

126300. Eremurus sp.

No. 3263. From Kargasi Pass, August 7, at 10,000 feet altitude. A plant with shining leaves 4 inches broad and large flowers, yellow with deeper centers,  $2\frac{1}{2}$  inches across, in dense heads. Found in a dry situation.

126301. EREMURUS Sp.

No. 3268. From Kargasi Pass, August 9, at 10,000 feet altitude. A plant 4 feet high with narrow leaves.

126302. EREMURUS Sp.

No. 3275. From Daraim, August 10, at 8,500 feet altitude. Plants up to 6 feet high with broad leaves; growing in a rather damp situation.

126303. EREMURUS SD.

No. 3294. From Daraim, August 10, at 8,500 feet altitude. A plant 3 feet high with narrow leaves.

126304. Eremurus sp.

No. 3302. From Daraim, August 11, at 6,500 feet altitude. A plant 5 feet high with spikes 2½ inches long, of whitish flowers.

126305. EREMURUS Sp.

No. 3346. Seech. From Rustak, August 17, a species 3½ feet high, with narrow leaves; probably late blooming.

126306. EREMURUS Sp.

(No number.) From Badakshan.

126307. FERULA sp. Apiaceae.

No. 3262. *Kamàl*. From Kargasi Pass, August 8, at 8,500 feet altitude. A sturdy umbellifer; grows in dry places and is watered only by winter snow. Plant 7 feet high; leaves used as forage when dry.

126308. Gentiana sp. Gentianaceae.

No. 3019. From Nozi, June 22, at 9,000 feet altitude. An annual about 1 foot high with large blue-purple flowers; growing on limestone rocks.

126309. GLAUCIUM FLAVUM Crantz. Papaveraceae.

Poppy.

No. 3199. From Krunn, July 30, at 9,000 feet altitude. A stooling annual poppy 18 inches high, with pale-yellow, madder-scented flowers. Found on dry slopes.

126310. Hyacinthus sp. Liliaceae.

No. 3008. From Gardez, June 20, at 8,000 feet altitude. A plant 1 foot high, with, probably, blue flowers; found in grain fields.

126311. HYMENOCRATER sp. Menthaceae.

No. 3017. From Nozi, June 22, at 9,000 feet altitude. A shrubby, purple-flowered mint, growing in clumps about a foot high, on dry slopes.

126312. Incarvillea sp. Bignoniaceae.

No. 3115. From Garao, July 7, at 4,500 feet altitude. A bushy plant up to 4 feet high, with large rose-colored flowers resembling those of the foxglove.

126313. Iris sp. Iridaceae.

No. 3159. From Chakaran, July 17, at 8,000 feet altitude. A clumpy iris, growing on slopes now completely dry. Leaves about % inch wide; fruit flush with the earth; clumps about 6 inches across.

126314. Juniperus excelsa Bieb. Pinaceae.

No. 2907. From above Khudikhel, May 22, at 8,000 feet altitude. Probably becomes a large tree, but the specimens seen were about 18 inches in diameter.

126315. LATHYRUS SATIVUS L. Fabaceae.

Bittervetch.

No. 3214. Patuk. From Skarzir, July 31, at 8,500 feet altitude. A common crop plant.

126316. Lepidium sativum L. Brassicaceae.

Garden cress.

No. 3598. Taratezak. From Mazarisharif, September 6, at 1,200 feet altitude. Leaves used to flavor soup.

126317. LILIUM sp. Liliaceae.

No. 3868. From Ferazhglan Pass, June 6. Bulbs of a blue-white fairy-lily, very fragrant, growing in high places.

126318. LINARIA sp. Scrophulariaceae.

No. 3117. From Gandocheshma, July 8, at 5,000 feet altitude. Growing in clumps 3 feet tall, with madder-maroon flowers.

126319. LINARIA Sp. Scrophulariaceae.

No. 3265. From Kargasi Pass, August 9, at 10,000 feet elevation. A small perennial, 1 foot high, with brown-purple flowers; margins of the mouth yellow.

126320-126324. LONICERA spp. Caprifoliaceae.

Honeysuckle.

126320. LONICERA Sp.

No. 3169. From Chakaran, July 7, at 8,000 feet altitude. A shrub 4 feet high, with scarlet berries; growing in dry rocks.

126321. Lonicera sp.

No. 3182. From Zebak, July 22, at 10,000 feet altitude. A shrub between 4 and 5 feet high, growing on a wet plain. The fruit is covered with a bluish bloom.

126322-126323. LONICERA MICROPHYLLA Willd.

From Sanglech, July 27, at 11,000 feet altitude. Found in rather dry places and along with cultivated plants. A small erect, much-branched shrub with oblong or obovate leaves  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long and small upright or nodding, yellowish-white flowers, followed by orange-red berries. Native to the Himalayan region.

126322. No. 3189.

126323. No. 3190.

126324. LONICERA SD.

No. 3197. From below Minjan Pass, July 28, at 12,000 feet altitude. A low bush, 3 feet high, with orange berries; growing on a dry slope.

126325. MALVA sp. Malvaceae.

No. 3229. From Rubat, August 1, at 8,500 feet altitude. An annual 3 feet high, with small, pale rose-purple flowers.

126326. MALVA SYLVESTRIS L. Malvaceae.

No. 3333. From Takia, August 15, at 4,500 feet altitude.

126327-126329. Medicago sativa L. Fabaceae.

Alfalfa.

126327. No. 3094. Rishka. From Khanabad, July 4, at 1,200 feet altitude. A common forage crop.

126328. No. 3127. Rishka. From Faizabad, July 11, at 4,000 feet altitude. Cultivated locally.

126329. No. 3591. Shaftal. From Mazarisharif, September 6, at 1,300 feet altitude. From the market.

126330. Melilotus officinalis (L.) Lam. Fabaceae.

Sweetclover.

No. 3153. From Chakaran, July 17, at 6,000 feet altitude. A forage crop.

126331-126332. Momordica charantia L. Cucurbitaceae.

Balsam-pear.

126331, No. 2952. Karela. From Laghman, May 26.

126332. No. 3781. Karela. From Saripul, September 13, at 1,500 feet altitude.

126333. Morina sp. Dipsacaceae.

No. 3266. From Kargasi Pass, August 9, at 10,000 feet altitude. A thistly-leaved perennial of attractive habit, with loose terminal spikes of fragrant yellow flowers.

126334. Narcissus sp. Amaryllidaceae.

No. 2977. Narghiz. From Najil, May 30. A white flower with a golden yellow eye. Bulbs.

126335. Nepeta sp. Menthaceae.

No. 3230. From Rubat, August 1, at 8,500 feet altitude. Plants, growing on dry open slopes, with velvety basal leaves and a loose inflorescence, 18 inches high, of small purple flowers.

126336. Nepeta sp. Menthacaeae.

No. 3295. From Daraim, August 10, at 8,500 feet altitude. Plants growing in large clumps 3 feet high, with an abundance of small blue-purple flowers.

126337. Oenothera lamarkiana Ser. Onagraceae.

No. 3863. From Mazarisharif, September 22, at 1,200 feet altitude.

126338. Papavera sp. Papaveraceae.

Poppy.

No. 3193. From Minjan Pass, July 28, at 13,000 feet altitude. A handsome poppy, growing in clumps, 18 inches high; flowers orange red with yellow center, fragrant.

126339. Papaver pavoninum Schrenk. Papaveraceae.

Poppy.

No. 3296. From Daraim, August 10, at 8,500 feet altitude. A bushy hairy annual up to 2 feet high, with an abundance of small scarlet flowers with black centers  $1\frac{1}{2}$  inches in diameter. Found in dry places.

For previous introduction see 107960.

126340. Phlomis sp. Menthaceae.

No. 3336. From Rustak, August 17, at 4,000 feet altitude. A bushy perennial up to 2 feet high, watered by the winter snow; bears yellow flowers until November.

126341. PISUM sp. Fabaceae.

No. 2980. From Najil, May 30.

126342. Polygonum sp. Polygonaceae.

No. 3274. From Daraim, August 10, at 8,500 feet altitude. A tall perennial up to 7 feet high, with creamy fragrant flowers.

126343. Prangos Pabularia Lindl. Apiaceae.

No. 3261. *Aghan*. From Kargasi Pass, August 8, at 8,500 feet altitude. A tall plant up to 6 feet high, with an abundance of finely dissected basal leaves which are widely gathered for winter feed. Grown on dry slopes.

126344. Prangos sp. Apiaceae.

No. 3034. From Nozi, June 24, at 9,000 feet altitude. An umbellifer growing on a dry slope; used as fodder.

126345. PRIMULA Sp. Primulaceae.

Primrose.

No. 3194. From Minjan Pass, July 28, at 13,000 feet altitude.

126346. Amygdalus eburnea Spach. Amygdalaceae.

No. 2987. Jira. From Ishpi, June 7. A low attractive bush 1 foot high, growing on the desert.

For previous introduction and description see 126251.

126347. PSORALEA Sp. Fabaceae.

No. 3447. From Rustak, August 26, at 2,000 feet altitude. A strong perennial up to 4 feet high, growing on dry ground in the fields that were planted to dry wheat and dry melons. It stays fresh and green all summer and is browsed by cattle. Of possible use as a forage plant in dry places.

126348. Reseda sp. Resedaceae.

No. 3101. From Takia, July 6, at 3,000 feet altitude. Clumps up to 3 feet high, found in dry places.

126349. RHAMNUS Sp. Rhamnaceae.

No. 2979. Nehman. From Najil, May 30. An attractive shrub up to 6 feet high, with long upright branches; fruit small, ¼ inch in diameter, blackish, rather insipid, but edible.

126350-126375. Rosa spp. Rosaceae.

Rose.

126350. Rosa sp.

No. 3047. From Shekhele, June 30, at 8,500 feet altitude. Bush 4 feet high, growing at border of a field; leaves not scented; fruit oval, small, golden yellow.

126351. Rosa sp.

No. 3205. From Krunn, July 30, at 9,000 feet altitude. Bush dense, about 8 feet high, very floriferous, leaves not scented.

126352. Rosa sp.

No. 3211. From Krunn, July 30, at 9,000 feet altitude. Bush well formed, 6 feet high, floriferous.

126353. Rosa sp.

No. 3226. From Iskarzir, July 31, at 8,500 feet altitude. A large, bushy, free-flowering shrub, 10 feet high, leaves not scented.

126354. Rosa sp.

No. 3233. From Parwara, August 1, at 8,500 feet altitude. Bush 8 feet high, with fragrant leaves.

Nos. 126355 to 126358. From Hazratsaid, August 3, at 8,000 feet altitude.

126355. Rosa sp.

126356. Rosa sp.

No. 3234. Bush 6 feet high.

No. 3235. Bush 6 feet high.

126357. Rosa sp.

No. 3236. A bush up to 4 feet high, with drooping branches.

126358. Rosa sp.

No. 3237. Bush 6 feet high; fruits bright crimson.

Nos. 126359 and 126360. From the Khash District, August 8, at 8,000 feet altitude. Bushes up to 4 feet high, growing in hedges at the edge of fields; leaves scented; flowers small, single, yellow.

126359. Rosa sp.

126360. Rosa sp.

No. 3253.

No. 3254.

Nos. 126361 to 126371. From Daraim, August 10, at 8,500 feet altitude.

126361. Rosa sp.

No. 3279. Shrub spreading from the roots, 4 feet high; flowers yellow, single.

126362. Rosa sp.

No. 3284. Bush 6 feet high with strongly scented leaves.

126363. Rosa sp.

No. 3285. Bush 4 feet high with scented leaves.

126364. Rosa sp.

No. 3286. Bush 5 feet high, leaves not scented.

126365. Rosa sp.

No. 3287. Bush 8 feet high, leaves not scented.

126366. Rosa sp.

No. 3288. Bush 4 feet high, with scented leaves.

126367. Rosa sp.

No. 3289. Bush 2 feet high, spreading from the root.

126368. Rosa sp.

No. 3290. Bush 6 feet high, with scented leaves.

126369. Rosa sp.

No. 3291. Bush 5 feet high, leaves not scented.

126370. Rosa sp.

No. 3292. Bush 8 feet high with fragrant leaves.

126371. Rosa sp.

No. 3293. A mixed sample of outstanding types.

126372. Rosa sp.

No. 3303. From Teshkan, August 11, at 6,000 feet altitude. Bush 6 feet high, leaves not scented, flowers single, pink. A common, late-flowering type.

Nos. 126373 and 126374. From Tolokhan, August 28, at 2,000 feet altitude. 126373. Rosa sp.

No. 3457. A cultivated plant 8 feet high, bushy, dense, with drooping branches.

126374. Rosa sp.

No. 3458. Bush 8 feet high, with drooping branches, differing from No. 3457 [P. I. 126373] in having fruits less elongated.

126375. Rosa sp.

No. 3710. From Shiburghan, September 10, at 1,200 feet altitude. A cultivated bush, 8 feet high; leaves not scented.

126376-126381. Salix spp. Salicaceae.

Willow.

126376. SALIX Sp.

No. 2986. From Kail, June 3. A pollarded willow.

126377. SALIX Sp.

No. 3003. Jangal. From Gardez, June 16, at 8,000 feet altitude. A pollarded willow, with small nearly linear leaves about 1½ inches long.

126378. Salix sp.

No. 3162. From Chakaran, July 17, at 6,000 feet altitude. A shrubby ornamental willow with small linear leaves.

126379. SALIX Sp.

No. 3188. From Sanglech, July 26, at 11,000 feet altitude. A small graceful tree up to 15 feet, with bushy top and pale whitish bark.

126380. Salix sp.

No. 3195. From Minjan Pass, July 28, at 12,000 feet altitude. An attractive shrub up to 8 feet high, with small linear-lanceolate leaves. Grows along streams and in dry torrent beds.

126381. SALIX Sp.

No. 3212. From Iskarzir, July 31, at 8,500 feet altitude. A dense, round-topped, handsome tree 10 feet high, growing along a river.

126382-126387. Salvia sp. Menthaceae.

Sage.

126382. Salvia moorcroftiana Benth.

No. 2906. From Mamakhel, May 24, at 4,000 feet altitude, on a dry plain. An attractive perennial 18 inches high, with gray-green leaves and pale blue-purple flowers.

For previous introduction see 118081.

126383. SALVIA Sp.

No. 2998. From Bandzi, June 13, at 8,000 feet altitude. An attractive shrub 2 feet high, growing in dry places. The flowers are large and rose purple.

Nos. 126384 and 126385. From Gandocheshma, July 9, at 5,000 feet altitude.

126384. SALVIA SPINOSA L.

No. 3118. A perennial up to  $2\frac{1}{2}$  feet high, with white flowers, the lip yellowish, rimmed with brown.

For previous introduction see 108544.

126385. Salvia verbenaca var. oblongifolia Benth.

No. 3119. A perennial up to 2 feet high, with spikes of attractive bluepurple flowers and thick rugose leaves. It prefers rather dry open ground.

For previous introduction see 118082.

126386. SALVIA DOMINICA L.

No. 3198. From Tagao-Minjan, June 29, at 9,000 feet altitude. A bushy species with numerous ascending or erect stems over 3 feet high, with triangular-ovate to triangular-oblong leaves and terminal racemes of large flowers: the hood blue-purple, lip yellow, rimmed with brown. Native to Syria.

126387. SALVIA SYLVESTRIS L.

No. 3232. From Hazratsaid, July 2, at 8,000 feet altitude. Plants found in clumps 3 feet high, with long spikes of showy purple flowers.

126388, Scabiosa sp. Dipsacaceae.

No. 3255. From the Khash District, August 8, at 8,000 feet altitude. Plants growing in clumps up to 2 feet high, with large showy heads, over 2 inches across, of rose-purple flowers.

126389. Senecio sp. Asteraceae.

No. 3267. From Kargasi Pass, August 9, at 10,000 feet altitude. A perennial 5 feet tall, with open panicles of rather large yellow flowers and large hastate leaves.

126390-126393. Tamarix spp. Tamaricaceae.

126390. Tamarix sp.

No. 3048. From Shuturjangal, June 30, at 5,000 feet altitude. An ornamental shrub up to 5 feet high, with rose-colored flowers, growing in a river bed.

Nos. 126391 and 126392. From Sofian, July 18, at 7,000 feet altitude.

126391. Tamarix sp.

No. 3166. A loose shrub up to 5 feet high, with large panicles of deeprose colored flowers; found in river bottoms in gravel.

126392. Tamarix sp.

No. 3167. A shrub up to 4 feet high, growing in gravelly river bottoms, with spikes of pale-rose flowers.

126393. TAMARIX Sp.

No. 3213. From Iskarzir, July 31, at 8,500 feet altitude. A handsome species which becomes a tree with a trunk 1 foot in diameter; flowers deep rose, fragrant, in long slender spikes. Found growing in a river bottom.

126394. Trifolium sp. Fabaceae.

No. 2969. Shaftal. From Laghman, May 27. A biennial or annual clover 18 inches high, with heads of intensely fragrant, rose-colored flowers. In this locality the clover is cut 3 to 5 times a year.

126395. Trigonella foenum-graecum L. Fabaceae.

Fenugreek. No. 3602. Ulba. From Mazarisharif, September 6, at 1,200 feet altitude. Seeds are used to flavor a sweet rice; leaves apparently not used in Afghanistan.

126396-126401. TULIPA spp. Liliaceae.

Tulip.

126396. TULIPA Sp.

No. 2908. From Mamakhel, May 24, at about 6,000 feet altitude. A small plant 3 inches high, leaves pale, pointed; flowers not seen; found growing on a d.y slope.

126397. TULIPA Sp.

No. 2983. From Daulatshah, June 1. A tulip with the form of *Tulipa stellata*, but with plain glaucous leaves 1 foot long and golden-yellow, fragrant flowers washed outside with cerise. Grows on mountain peaks and dry rocky slopes.

126398. TULIPA Sp.

No. 3007. From Gardez, May 30, at 8,000 feet altitude. A plant 1 foot high, found in grass fields.

126399. TULIPA Sp.

No. 3154. From Chakaran, July 17, at 10,000 feet altitude. A tulip 1 foot high, found in rocky soil.

126400. TULIPA Sp.

No. 3270. From Daraim, August 10, at 8,500 feet altitude. A tulip 18 inches high, found in a thicket.

126401. TULIPA Sp.

No. 3867. From Sirotai, June 20, at 8,000 feet altitude. A tulip 6 inches high; probably the common yellow species.

126402. Ungernia sp. Amaryllidaceae.

No. 3450. Sumbola. From Rustak, August 27, at 2,000 feet altitude. A plant about 2 feet high, with white flowers; growing in clumps on dry slopes which have no summer rain.

126403. Viola sp. Violaceae.

Violet.

No. 3018. From Nozi, June 22, at 9,000 feet altitude. A low form with rosettes of thick, dark-green leaves, veined lighter; growing on dry sunny slopes. Flowers not seen.

#### 126404-126467.

From Panama and Peru. Seeds collected by H. L. Blood, Bureau of Plant Industry, United States Department of Agriculture. Received December 31, 1937.

126404. Chenopolium quinoa Willd. Chenopodiaceae.

Quinoa.

No. 3. Presented by Dr. Herbert A. Giesecke, American Embassy, Lima, Peru, November 22.

126405. CHRYSANTHEMUM CORONARIUM L. Asteraceae.

No. 4. Flor del Inca. From a park in Lima, November 23, 1937. Plant 4 to 5 feet high; ray flowers white with golden yellow near the base, 2 to 3 inches in diameter.

For previous introduction see 122254.

126406. CYPHOMANDRA sp. Solanaceae.

No. 42. Tomate Chilense. From the Franciscan monastery, Ayacucho, Peru.

126407-126452. Lycopersicon spp. Solanaceae.

Tomato.

126407-126429. LYCOPERSICON ESCULENTUM Mill.

Nos. 126407 and 126408. From the market, Colón, Panama, November 11, 1937. Wild fruit.

126407. No. 1. Fruit flat and deeply ribbed.

126408. No. 2. A mixed sample.

126409. No. 33. From the market, Oroya, Peru, November 27. Cultivated fruit, 1¾ to 3¼ inches in diameter.

Nos. 126410 and 126411. From the market, Huancayo, Peru, November 28, 1937.

126410. No. 39-B. Fruit small and irregular.

126411. No. 39-C. Fruit very small.

Nos. 126412 to 126415. From the market, Ayacucho, Peru, November 30, 1937.

126412. No. 44. Fruit pink, 1½ inches in diameter.

126413. No. 46. Fruit yellow, variable in size.

126414. No. 47. Fruit flat and rough.

126415. No. 48. Fruit small, smooth, scarlet, resembling a cherry.

126416. No. 49. From the roadside, south of La Merced, Peru, December 2, 1937. A wild vine with few blossoms, no ripe fruit.

126417. No. 50. From the bank of the Perené River, Perené Colony, December 2, 1937. A vine sprawling over shrubbery. Fruit large, cherry-like, 1 to 1¾ inches in diameter, 3- to 4-celled, nugget type.

126418. No. 52. A wild cherrylike red fruit growing near a spring on the mountainside east of Perené, Peru, at 2,400 feet altitude.

126419. No. 53. From east of Perené on a mountainside, December 2, 1937. A wild fruit with rough skin.

Nos. 126420 to 126422. From the market at Tarma, Peru, December 2 and 3, 1937.

126420. No. 55. Fruit of plum type, from a miscellaneous display. Grown in the Chanchamayo Valley.

126421. No. 56. A cherrylike fruit.

126422. No. 57. A small cherrylike fruit.

Nos. 126423 and 126424. From the market at Huanuco, Peru, December 5, 1937. Cherrylike fruit, up to 1 inch in diameter.

126423. No. 59.

126424. No. 60.

126425. No. 62. From Chinchao, Peru, December 5, 1937. From the banks of a small tributary of the Rio Huallaga at 3,500 feet altitude. Fruit about the size of a cherry; plants growing wild, but the seed is scattered by the natives.

126426. No. 68. From the banks of the Rio Huallaga, south of Tingo Maria, Peru. A large rough fruit, evidently an escape from cultivation.

126427. No. 32. From the Chanchamayo Valley near Tarma, Peru. Fruits vary in size from % to 1 inch in diameter; plants growing wild.

126428. No. 61. From the market at Huancayo, Peru, December 5. Fruit small, irregular, degenerated.

126429. No. 39-A. From the market at Huancayo, Peru. Fruit 2½ to 3 inches in diameter.

126430. Lycopersicon pimpinellifolium (Jusl.) Mill. Currant tomato.

No. 8. From Carabayllo, near Lima, Peru, November 24. A wild tomato with weak, slender stems, compound leaves  $1\frac{1}{2}$  to 6 inches long, and racemes of 10 to 25 flowers, followed by red currantlike fruits, less than  $\frac{1}{2}$  incb in diameter. Native to Peru.

126431. LYCOPERSICON PERUVIANUM (L.) Mill.

No 5. From between Miraflores and Barranco, Peru, November 22, 1937. A sprawling perennial tomato up to 3 feet high, with greenish hairy fruits about ½ inch in djameter. Native to Peru.

126432-126433. Lycopersicon pimpinellifolium (Jusl.) Mill. Currant tomato.

No. 6. From Carabayllo, near Lima, Peru, November 24.

For previous introduction and description see 126430.

126432. No. 6.

126433. No. 7.

126434-126435. Lycopersicon glandulosum C. H. Muller.

From the roadside about 5 miles east of Matucana, Peru, at 7,300 feet altitude, November 26, 1937. Two types of woody perennials growing in one clump, but the plants were well intermingled. Fruits greenish white.

126434. No. 30.

126435. No. 31.

126436-126437. Lycopersicon pimpinellifolium (Jusl.) Mill.

From Carabayllo, near Lima, Peru, November 24, 1937.

For previous introduction and description see 126430.

126436. No. 9.

126437. No. 10.

126438-126443. Lycopersicon glandulosum C. H. Muller.

From the Rio Canta Valley between Yangos and Canta, Peru, November 24, 1937, between 5,600 and 8,800 feet altitude. Perennial plants with very small fruits less than 1 inch in diameter.

For previous introduction see 126434.

126438. No. 14.

126441. No. 17.

126439. No. 15.

126442. No. 18.

126440. No. 16.

126443. No. 19. From a hillside in the Rio Canta Valley, west of Canta, at 8,800 feet altitude. Similar to No. 14 [P. I. 126438] in plant habit, with coarse leaves and fruit about ½ inch in diameter.

126444-126447. Lycopersicon Hirsutum Humb, and Bonpl.

Along the Rio Canta, November 24, 1937. Large, stout, coarse, densely hirsute plants 8 to 10 feet high; leaves dark green, 6 to 10 inches long, margins crenulate, leaf lobes lanceolate; fruit hirsute, greenish, up to 1 inch in diameter.

126444. No. 20. Found at 8,000 feet altitude, plants climbing over bushes.

126445. No. 21. From the bottom of a dugway at 6,800 feet.

126446. No. 22. From the bottom of a dugway at 6,800 feet.

126447. No. 23. From the bottom of a dugway, at 6.800 feet.

126448. Lycopersicon glandulosum C. H. Muller.

No. 24. November 24, 1937. Near the Rio Canta at 6,500 feet altitude. Similar to No. 14 [P. I. 126438]. Leaves ovate sinuate, distinctly different from those of Nos. 20 to 23 [P. I. 126444-126447]; fruit smaller and less pubescent.

For previous introduction see 126438.

126449. LYCOPERSICON HIRSUTUM Humb, and Bonpl.

No. 26. November 24, 1937. Similar to No. 20 [P. I. 126444]. A mixed sample, collected along the road to Yaso, Peru, at 6,500 feet altitude.

126450. Lycopersicon glandulosum C. H. Muller.

No. 29. November 26, 1937, between Chasico and Matucana, Peru, at 3,500 feet altitude in the Rio Rimac Valley. Fruits similar to those collected in the Rio Chillon Valley.

126451-126452. Lycopersicon esculentum Mill.

Tomato.

From Ayacucho, Peru, November 30, 1937.

126451. No. 43. Purchased from an Indian woman as type of seed grown in this region.

126452. No. 45. Fruit red, very small, ½ inch in diameter.

126453. NICANDRA PHYSALODES (L.) Gaertn. Solanaceae.

No. 63. December 6, 1937. From Chinchao, Peru, on a small tributary of the Rio Huallaga, at 3,500 feet altitude. Plant 3 to 4 feet high; fruit, a so-called dry berry, enclosed in an angular husk.

126454. Physalis sp. Solanaceae.

No. 11. From a field near Carabayllo at 250 feet altitude, November 24. Plant completely dried up; seed picked from the ground.

126455. Physalis sp. Solanaceae.

No. 40. November 30, 1937. From the Franciscan monastery, Ayacucho, Peru.

126456. Physalis sp. Solanaceae.

No. 67. From Tingo Maria, Peru, December 6, 1937. Plants  $1\frac{1}{2}$  to  $2\frac{1}{2}$  feet high.

126457-126463. Solanum spp. Solanaceae.

126457. Solanum sp.

No. 13. November 24, 1937. From the Hacienda Chacas, on the Rio Chillon, at 2,000 feet altitude. A plant with yellow and green berries.

126458. Solanum sp.

No. 39. Fulmes. November 27, 1937. From Puenta Jauja, south of Oroya, at the entrance into the Jauja Valley, 10,200 feet altitude. A woody, thorny, plant about 3 feet high; leaves lanceolate and tomentose; flowers purple, 1\(\frac{1}{4}\) inches across.

126459. SOLANUM RADICANS L. f.

No. 41. From the Franciscan monastery, Ayacucho, Peru, November 30. Plant procumbent and spreading with deeply cleft leaves; fruit small, yellow, less than ½ inch in diameter.

126460. SOLANUM Sp.

No. 51. At Perené Colony, Peru, December 2, 1937. A common shrub 6 to 8 feet high, with short thorns. Collected along the roadside.

126461. SQLANUM Sp.

No. 58. December 3, 1937. East of Herbama, Peru. A coarse herbaceous plant.

126462. SOLANUM Sp.

No. 64. December 3, 1937. From the Rio Chinchao, a tributary of the Rio Huallaga, at an altitude of 3,500 feet. Plants abundant, erect, 1 to 2 feet high; leaves and aspect of plant resemble *Solanum nigrum*; fruit small and black.

126463. Solanum endlicheri Dun.

No. 65. From Tingo Maria, at the edge of a cornfield, December 6, 1937. A vine with an angular stem and oval fruit the size of a small plum; leaves white; fruit yellowish white when ripe and up to an inch long, with green stripes radiating from the stem end.

126464. SARACHA PROCUMBENS (Cav.) R. and P. Solanaceae.

No. 66. Mulyacca. From Tingo Maria, along the edge of a banana plantation, December 6, 1937. A bushy herbaceous plant 2 to  $3\frac{1}{2}$  feet tall; fruit blue black when ripe, the size and shape of a small plum.

126465. Solanum sp. Solanaceae.

No. 12. November 24, 1937. From the Hacienda Chacas, on the Rio Chillon, at 2,000 feet altitude. The blue-black berries are used to make ink.

126466. Solanum sp. Solanaceae.

No. 69. December 6, 1937. From along the Rio Huallaga just above the Tingo Maria at 2,100 feet altitude. Plant 2 to 3 feet high, resembling *Solanum nigrum* in habit and growth; fruit yellowish red, about ½ inch in diameter.

126467. Tecoma stans (L.) Juss. Bignoniaceae.

No. 25. November 24, 1937. From along the Rio Canta, between Yangos and Canta, near Yaso, at 6,400 feet altitude. A shrub from 8 to 10 feet high, with leaves like the elderberry and tubular yellow flowers.

126468-126492.

From Australia. Seeds presented by the Department of Agriculture, Sydney, New South Wales. Received December 30, 1937.

126468. Acacia aneura F. Muell. Mimosaceae.

Mulga. A tall yellow-flowered shrub which, in time of drought, is considered good forage for livestock. The wood is very hard and is valued as timber.

For previous introduction see 106673.

126469. Andropogon intermedius R. Br. Poaceae.

Grass.

Rare Blue grass. A perennial grass with a short hard rhizome and erect or ascending stems, 3 feet or more high. The linear leaves are 3 to 8 inches long, pale green or with a reddish tinge, and the obovoid panicle is 2 to 3 inches long. Native to tropical Africa.

For previous introduction see 91612.

126470. Andropogon sericeus R. Br. Poaceae.

Grass.

Queensland Blue grass. A grass, very palatable to stock, which grows over 3 feet high on good soil and never less than 1 foot on very poor soil. In Australia this grass keeps green all the year round and is scarcely affected by drought or frost.

For previous introduction see 88901.

126471. ASTREBLA LAPPACEA (Lindl.) Domin. Poaceae.

Grass.

Curly Mitchell grass. A tall perennial grass, with broad succulent leaves. Native to Australia, where it is considered an excellent pasture grass.

For previous introduction see 111876.

126472-126477. Atriplex spp. Chenopodiaceae.

Saltbush.

126472. ATRIPLEX HALIMOIDES Tineo.

Mealy or Gray saltbush. A low-growing, shrubby, robust perennial about 1 foot high, with variable ovate-lanceolate leaves which are covered with whitish, dustlike scales. It is native to the central desert regions of Australia, where it affords excellent forage for both sheep and cattle.

For previous introduction see 106695.

126473. ATRIPLEX LEPTOCARPA F. Muell.

A much-branched, trailing perennial with a glaucous bloom which covers the whole plant. The leaves are variable in shape, but are mostly oblong and from 1 to 2 inches long. In Australia it is sometimes found carpeting the ground over considerable areas; it possesses remarkable drought-resistant qualities.

For previous introduction see 90722.

126474. ATRIPLEX NUMMULARIA Lindl.

A tall shrubby perennial sometimes reaching a height of 10 feet and covered all over with downy whitish scales. The leaves are mostly round, rather thick, and toothed along the margins. In central Australia it is extensively planted and highly valued for its remarkable drought-resistant qualities; livestock are very fond of it.

For previous introduction see 106697.

126475. ATRIPLEX SEMIBACCATA R. Br.

A vigorous, rapid-growing, much-branched Australian perennial which forms a dense mat over the ground to a depth of 1 to 2 feet. The leaves are small, about 1 inch long, and coarsely toothed along the margins. The plant has been known to flourish on the poorest soil. It has great frost resistance, palatability, heavy yield, sand-binding qualities, and the habit of spreading freely.

For previous introduction see 90724.

126476. ATRIPLEX SPONGIOSA F. Muell.

A low-growing plant less than a foot high, with numerous ascending stems, more or less white mealy throughout. The rather thick, orbicular leaves are less than an inch long. Native to Australia.

For previous introduction see 106698.

126477. Sterculia diversifolia Don. Sterculiaceae. Black kurrajong.

A tall evergreen tree with shining green leaves 2 to 3 inches long, entire or 3- to 5-lobed on the same tree. The bell-shaped flowers, greenish red and white or yellowish white, are in axillary panicles. The nearly ovoid follicles, up to 3 inches long, contain about 20 seeds which, when ground, make an excellent substitute for coffee. Cattle and sheep are fond of the leaves and branches and have existed during long dry periods on scarcely anything else. It is native to Australia.

For previous introduction see 90726.

126478. Chloris ventricosa R. Br. Poaceae.

Grass.

Fall Star grass. An erect grass, 2 to 3 feet high, native to Queensland and New South Wales.

For previous introduction see 41760.

126479. Cytisus proliferus L. f. Fabaceae.

Tagasaste.

A stout leguminous shrub up to 12 feet high, of rather lax habit, with long slender branches and green trifoliolate leaves with silky pubescent lower surface. The white flowers are in axillary clusters. It is native to the Canary Islands, where it is considered an excellent drought-resistant forage plant.

For previous introduction see 104077.

126480. Danthonia semiannularis (Labill.) R. Br. Poaceae. Wallaby grass.

White Top. A perennial, fine-leaved, tussocky grass, 1 to 2 feet high, which provides feed for the greater part of the year. It is said to be a good winter grass, will stand a great amount of grazing, and its palatability both for cattle and sheep is well known.

For previous introduction see 102385.

126481. Geijera Parviflora Lindl. Rutaceae.

Wilga. A tall evergreen shrub or small tree, native to the interior of New South Wales, where it reaches a height of about 30 feet. It has slender pendulous branches, narrow leaves 3 to 6 inches long, and, when well developed, a highly ornamental appearance with something of the aspect of a weeping willow. It has remarkable drought-enduring qualities, and the leaves are often fed to sheep.

For previous introduction see 113766.

126482-126486. Medicago spp. Fabaceae.

Medick.

126482. MEDICAGO ARBOREA L.

Tree alfalfa.

For previous introduction see 90010.

126483. MEDICAGO HISPIDA DENTICULATA (illd.) Urban.

Bur-clover.

126484. MEDICAGO ORBICULARIS (L.) All.

For previous introduction see 119493.

126485. MEDICAGO SCUTELLATA (L.) Mill.

Snail medick.

For previous introduction see 120044.

126486. MEDICAGO TUBERCULATA (Retz.) Willd.

For previous introduction see 90030.

126487-126491. Panicum spp. Poaceae.

Grass.

126487. Panicum antidotale Retz.

A tall coarse grass with flaccid leaves, having much the same habit as Guinea grass,

For previous introduction see 33609.

126488. PANICUM EFFUSUM R. Br.

An erect perennial grass 1 to 2 feet high, native to Queensland and New South Wales, where it is considered excellent as forage.

126489. PANICUM JUBIFLORUM Trin.

A perennial grass with stems up to  $1\frac{1}{2}$  feet high; native to New South Wales.

126490. Panicum queenslandicum Domin.

An erect tufted perennial grass; native to Queensland.

126491. PANICUM SD.

Coolah grass.

126492. Trifolium glomeratum L. Fabaceae.

Clover.

Ball Clover. A clover which is useful because it grows fairly well in sour soils; low in phosphate content when these soils first come under cultivation and before other clovers have established themselves.

For previous introduction see 102000.

126493. Cephalostachyum sp. Poaceae.

Bamboo.

From India. Seeds presented by N. Mitra, curator, Royal Botanic Gardens, Silpur, near Calcutta. Received June 10, 1937. Numbered in December 1937.

A bamboo with thick-walled culms, pubescent in the development stage at least, and with culm sheaths densely brown-pubescent near their bases and bearing prominent clasping auricles with conspicuous bristles.

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faba, 125002, 125853. pannonica, 125678. sativa, 125003, 125679. Viola sp., 126403.

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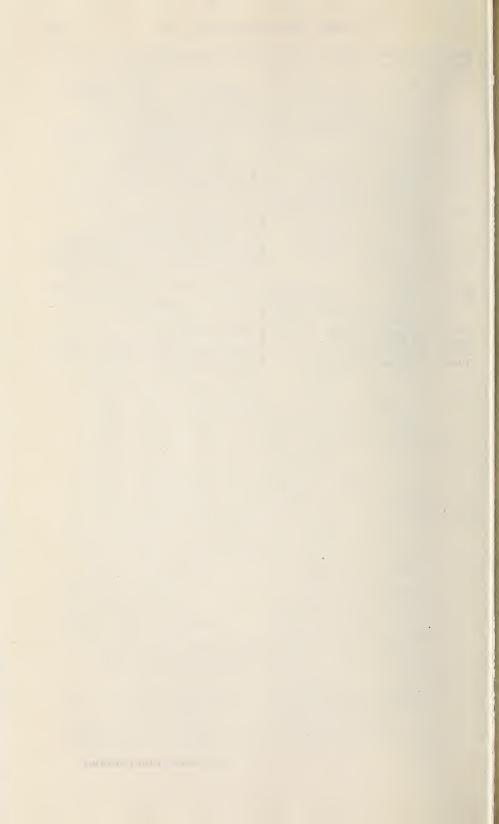
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Persian. See J. regia.
Waratah. See Telopea speciosissima.
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# Plant Inventory No. 134

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. November 1949



## PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1938 (Nos. 126494 to 128322)

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### INTRODUCTORY STATEMENT

This inventory, No. 134, is a record of the plant material (Nos. 126494 to 128322) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1938.

The extended comments on the agricultural explorations of H. L. Blood in South America and Walter Koelz in Afghanistan and India, included in the introduction to Inventory No. 133, may well apply to this inventory also; for a large proportion of the plant materials received during this period is the result of the continuing activity of the two agricultural explorers mentioned, and the nature of the material received was very largely the same.

With the special object of furnishing working material for corn breeders in the semiarid Southwest, four lots of locally developed varieties were introduced from Peru and Bolivia (*Zea mays;* Nos. 127717–127724, 127762–127770, 127892–127898, and 127901–127904).

This inventory has been prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

C. O. Erlanson,
Principal Horticulturist, in Charge,
Division of Plant Exploration and
Introduction, Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

#### 126494 to 126509.

From France. Plants purchased from Pépinières de La Maladrerie, Caen. Received January 17, 1948.

126494 to 126503. Malus sylvestris Mill. Malaceae. Apple.

126494. Belle d'Avril.126499. Passe Pomme Rouge.126495. Belle Impériale.126500. Reinette de Bailleul.

126496. Belle Joséphine. 126501. Reinette d'Espagne.

126497. Cadeau du Général. 126502. Reinette de Granville. 126498. Ma Pomme. 126503. Warner's King.

126504. Prunus avium L. Amygdalaceae. Sweet cherry.

Bigarreau Noir d'Ecully.

126505 and 126506. Prunus cerasus L. Amygdalaceae. Sour cherry. 126505. Cerise du Nord.

126506, Cerise Magnifique de Sceaux.

126507 to 126509. Pyrus communis L. Malaceae. Common pear.

126507. André Desportes. 126509. Beurré de Naghin.

126508, Beurré d'Angleterre.

## 126510 to 126521.

From Germany. Seeds presented by G. Kettermann, Freising. Received January 10, 1938.

January 10, 1938.

126510. Agrostis alba L. Poaceae. Redtop.

126511. Dactylis glomerata L. Poaceae. Orchard grass.
126512. Festuca elatior L. Poaceae. Meadow fescue.

126513. Festuca rubra L. Poaceae. Red fescue.

126514. LOLIUM PERENNE L. Poaceae. Perennial ryegrass.

126515. Medicago sativa L. Fabaceae. Alfalfa.

126516. Phalaris arundinacea L. Poaceae. Reed canary grass.

126517. Phleum pratense L. Poaceae. Timothy.

126518. Poa pratensis L. Poaceae. Kentucky bluegrass.

126519 to 126521. Trifolium spp. Fabaceae. Clover.

126519 to 126521. Trifolium spp. Fabaceae. Clover. 126519. Trifolium Hybridium L. Alsike clover.

126520. Trifolium pratense L. Red clover.

126521. Trifolium repens L. White clover.

126522. Antidesma platyphyllum H. Mann. Euphorbiaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received January 13, 1938.

An evergreen tree 20 to 30 feet high, native to the Hawaiian Islands. The rather stiff, ovate to obovate leaves are 3 to 5 inches long, and the inconspicuous flowers are followed by compressed, suboblique reddish fruits about 1/3 inch long.

For previous introduction see 124982.

## 126523 to 126534.

From Austria. Seeds purchased from Grünwald & Co., Wiener-Neustadt. January 12, 1938.

126523 to 126531. Prunus spp. Amygdalaceae.

126523. PRUNUS AVIUM L.

Mazzard cherry.

From Austria.

126524 to 126527. PRUNUS AVIUM L.

Sweet cherry.

Var. Sylvestris.

126524. From Poland.

126526. From Bulgaria.

126525. From Czechoslovakia.

126527. From Austria.

126528 and 126529. PRUNUS MAHALEB L.

Mahaleb cherry.

126528. From Dalmatia.

126529. From France.

126530 and 126531. PRUNUS DOMESTICA L.

Common plum.

126530. The common type found in Austria.

126531. Var. Juliana.

126532 to 126534. Pyrus spp. Malaceae.

126532 and 126533. PYRUS COMMUNIS L.

Common pear.

126532. From grafted trees.

126533. [No data.]

126534. PYRUS USSURIENSIS Maxim.

Ussurian pear.

126535. Senecio salignus DC. Asteraceae.

From Arizona. Seeds presented by F. Gibson, Director, Boyce Thompson Southwestern Arboretum, Superior. Received January 18, 1938.

Seed from plants growing in the arboretum, but native from the southwestern United States through Mexico and Guatemala. A glabrous shrub 4 to 8 feet high; the narrowly lanceolate, sessile leaves are 1 to 5 inches long and the bright-yellow, daisylike flowers are borne in early winter in terminal cymes. An ornamental plant of value for soil-erosion control.

For previous introduction see 80699.

#### 126536 to 126538.

From Canada. Seeds presented by Dr. William J. White, University of Saskatchéwan, Saskatoon, Saskatchewan. Received January 13, 1948.

126536. AGROPYRON TRACHYCAULUM (Link) Malte. Poaceae.

Grazier S-3.

Slender wheatgrass.

126537. AGROPYRON Sp. Poaceae.

Wheatgrass.

Mecca. S-1.

126533. Bromus inermis Leyss. Poaceae.

Smooth bromegrass.

Superior. S-9.

126539. Citrus sp. Rutaceae.

From Mexico. Scions presented by F. W. Smith, Guasave, Sinaloa. Received January 31, 1938.

126540 to 126545.

From India. Seeds presented by G. Ghose & Co., Town-End, Darjeeling. Received January 11, 1938.

126540. Iris kumaonensis Wall. Iridaceae.

A dwarf iris of the Pseudevansia section, 2 to 12 inches high, native to the western Himalayas from Kashmir to Kumaon, between 9,000 and 12,000 feet altitude. The flaccid linear leaves are 12 to 14 inches long, and the solitary flowers have a perianth tube 2 to 3 inches long. The bright-lilac falls, 1 to 2 inches long, are blotched with darker lilac, and the claw has a beard of yellow-tipped hairs on a white crest. The erect standards are 1½ inches broad.

For previous introduction see 124746.

126541. Iris sp. Iridaceae.

No. 54.

126542. LILIUM POLYPHYLLUM D. Don. Liliaceae.

Lily.

A lily with a stoloniferous white, pink-tinged bulb, a smooth green stem 4 to 5 feet high, and numerous erect, scattered linear to oblong-lanceolate leaves, 2 to 8 inches long. The fragrant nodding flowers, 2 to 12 in a lax umbel or raceme, are pale creamy yellow outside, marble-white, spotted and streaked with purple within, and are 2 to 3 inches across. Native to the western Himalays between 6,000 and 12,000 feet altitude.

For previous introduction see 124749.

126543. LILIUM THOMSONIANUM Royle. Liliaceae.

Thomson lily.

A bulbous plant with an erect stem over a foot high and narrow grasslike leaves, mostly crowded at the base of the stem. The pale-mauve or rosy, bell-shaped, drooping flowers, with deep-purple anthers, are over an inch long and in a terminal raceme containing 8 to 10 flowers. It is native to mild-wintered regions of the Himalayas from western China to northern India.

126544. Nomocharis sp. Liliaceae.

126545. Paraquilegia sp. Ranunculaceae.

126546 to 126548. Tephrosia vogelli Hook. f. (Cracca vogelii Kuntze). Fabaceae.

From Africa. Seeds from Northern Rhodesia, presented through the Royal Botanic Gardens, Kew, Surrey, England. Received January 10, 1938.

126546. From Luwingu. A form with purplish flowers.

126547. From Mporokoco. A form with white flowers.

126548. From Kasama. A form with pink flowers.

126549. Dactylis glomerata L. Poaceae.

Orchard grass.

cale

From Canada. Seed presented by J. N. Bird, Department of Agriculture, Macdonald College, Quebec. Received January 11, 1938.

Avon orchard grass.

126550. Tephrosia vogelli Hook. f. Fabaceae.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kenya Colcay. Received January 4, 1938.

A purple-flowered form.

For previous introduction see 126548.

126551 to 126559. Amygdalus persica L. Amygdalaceae. Peach.

From Maryland. Scions presented by the University of Maryland, College Park. Received August 14, 1931. Numbered in January 1938.

126551. Buttercup. 126556. Oriole. 126552. Cumberland. 126557. Radiance.

126553. Delicious. 126558. Rosebud.

126554. Marigold. 126559. Golden Jubilee.

126555. Massasoit.

126560. Amygdalus persica L. Amygdalaceae.

Peach.

From New York. Budsticks presented by Richard Wellington, Agricultural Experiment Station, Geneva. Received August 28, 1933. Numbered in January 1938.

Vaughn peach.

126561 to 126567. Amygdalus persica L. Amygdalaceae. Peach.

From Maryland. Budsticks presented by the Division of Fruit and Vegetable Crops and Diseases. Received August 28, 1933. Numbered in January 1938.

126561. Veteran. 126565. Vedette.

 126562. Halehaven.
 126566. Viceroy.

 126563. South Haven.
 126567. Wilma.

126564. Valliant.

126568 and 126569. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

From New York. Budsticks presented by H. B. Tukey, New York Fruit Testing Association, Geneva. Received August 8, 1933. Numbered in January 1938. 126568. Early Rivers. 126569. Emperor Francis.

126570. Pyrus communis L. Malaceae.

Common pear.

From Maryland. Scions presented by the University of Maryland, College Park. Received February 12, 1932. Numbered in January 1938.

Gorham pear.

126571 to 126573. Pyrus communis L. Malaceae. Common pear.

From Maryland. Scions presented by the University of Maryland, College Park. Received March 8, 1933. Numbered in January 1938.

126571. Cayuga.

126573. Pultney.

126572. Phelps.

126574. ERYTHEA ACULEATA T. S. Brandegee. Phoenicaceae.

From Mexico. Seeds collected at Los Mochis, Sinaloa, and presented by David Barry, Jr., Los Angeles, Calif. Received January 6, 1938.

A small fan palm, sometimes 20 feet high, with segmented leaves having blades about 2 feet long, slender spiny petioles over a foot long, and globular deep-brown fruits 1 inch in diameter. Native to Sinaloa, Mexico.

126575. Zea mays L. Poaceae.

Corn.

From Peru. Seeds presented by Alberto Martin Lynch, Chief, Lambayeque Experiment Station, Lambayeque. Received January 4, 1938.

Alazan corn. Native to Peru.

126576. Lupinus albus L. Fabaceae.

White lupine.

From Germany. Seeds presented by Prof. Dr. W. Heuzer, Institut für Pflanzenbau und Pflanzenzüchtung, Landsberg (Warthe). Received January 3, 1938.

A lupine which prefers a dry climate and does not thrive on a damp or too calcareous soil.

## 126577 to 126595.

From Germany. Plants purchased from the Herm. P. Mauk Obstbaumschulen, Württemberg. Received January 7, 1938.

126577 and 126578. Amygdalus persica L. Amygdalaceae. Peach.

126577. Königin der Obstgarten. 126578. Sieger.

126579. Cydonia oblonga Mill. Malaceae. Quince.

126580 to 126590. Malus sylvestris Mill. Malaceae. Apple.

126580. Aderslebener Cälvill. 126586. Potts Seedling.

126581. Brettscher Rambour. 126587. Prinz Albrecht v. Preussen.

126582. Geheimrat Dr. Oldenburg. 126588. Rhum von Kirchwarder. 126583. Geheimrat Wesener. 126589. Schöner v. Extertal.

126584. Josef Musch. 126590. Zieglerapfel.

126585. Mauk's Frühapfel.

126591 and 126592. Prunus domestica L. Amygdalaceae. Common plum.

126591. Altham (Althanns Reine Claude).

126592, Ruth Gerstetter.

126593 to 126595. Pyrus communis L. Malaceae.

Common pear.

126593. Birne a Tongern. 126595. Jos. v. Mecheln.

126594. Herzogin Elsa.

## 126596 to 126600. Nomocharis spp. Liliaceae.

From England. Seeds purchased from W. A. Constable, Southborough, Tunbridge Wells. Received January 10, 1938.

126596. Nomocharis aperta (Franch.) Smith and Evans.

An erect alpine plant about a foot high, with a slender rhizome and small lanceolate leaves, often ternate at the upper end of the stem. The pink flowers, purplish punctate within, are at first nodding, then erect. Native to high altitudes in Yunnan, China.

For previous introduction see 99945.

126597. Nomocharis mairei Lev.

A white-flowered, lilylike plant scarcely 2 feet high, with ovate, verticillate leaves. Native to southwestern China.

For previous introduction see 99957.

126598. Nomocharis pardanthina Franch.

A beautiful plant about 3 feet high; the leaves are ternate, and the large flowers, 3 inches across, are white, pink, purple, or red with deep irregular blotches and salver-shaped corollas. Native to southwestern China between 9,000 and 11,000 feet altitude.

For previous introduction see 84020.

126599. Nomocharis pardanthina farreri W. E. Evans.

A plant about 2 feet high, with whorls of dark-green lanceolate leaves and from 1 to 10 rose-pink to white flowers of variable shade, color, and spottings. Native to alpine slopes among dwarf bamboos in Upper Burma. It differs from the type in having fimbriate inner perianth segments.

For previous introduction see 95558.

126600. Nomocharis saluenensis I. B. Balf.

A tall herbaceous perennial up to 3 feet high, with lanceolate leaves about 3 inches long and racemose clusters of several large pale-rose flowers having purplish-rose spots within. Native to Yunnan Province, China.

## 126601 to 126799. EUCHLAENA MEXICANA Schrad. Poaceae. Teosinte.

From Guatemala. Seeds collected by Raymond Stadelman, Bureau of Plant Industry, United States Department of Agriculture. Received January 10, 1938.

126601 to 126741. Collected in the vicinity of Los Chilamates.

126742 to 126747. Collected in the vicinity of Jutiapa.

126748 to 126799. Collected in the vicinity of El Progreso.

## 126800. Solanum Tuberosum L. Solanaceae.

Potato.

From Ecuador. Tubers presented by the Director, Instituto de Fomento Agrícola, Cuenca. Received January 11, 1938.

Chio potato.

## 126801 to 126810. Triticum aestivum L. Poaceae. Common wheat.

From India. Seeds presented by the Imperial Economic Botanist, Imperial Agricultural Research Institute, New Delhi. Received January 11, 1938.

126801. Pusa 4.

126806. Pusa 111.

126802, Pusa 12.

126807. Pusa 114.

126803. Pusa 52.

126808. Pusa 120.

126804. Pusa 80-5.

126809, Pusa 125.

126805. Pusa 101.

126810, Pusa 165.

#### 126811 to 126818.

From Italy. Plants purchased from Arturo Ansaloni, Bologna. Received January 19, 1938.

Malaceae.

126811 to 126815. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

Common pear.

126811. Bella di Barbanti. 126812, Di Modena Precoce. 126814. Durona dell'Anella.

126813. Di Modena Tardiva.

126815. Durona di Cesena.

126816 to 126818. PYRUS COMMUNIS L.

126818. Spadoncino.

126816. Francescina.

126817. Mora.

## 126819 and 126820. Arum spp. Araceae.

From the Union of Soviet Socialist Republics. Seeds presented by Prof. A. A. Grossheim, Director, Botanic Garden, Baku. Received January 22, 1938.

126819. Arum orientale Bieb.

An arum with a discoid tuber and petioles 3 or 4 times as long as the blades, which are often black-spotted, hastate-sagittate, the lobes ovate-triangular, often obtuse. The spathe has an oblong tube  $\frac{1}{2}$  to  $\frac{1}{3}$  as long as the intensely purple or black lamina. The spadix is half as long as the spathe, with a stalk dilated into a club-shaped purplish appendix. Native to the Caucasus region.

126820. ARUM ELONGATUM Stev.

An arum about a foot high, with brownish, broadly hastate-sagittate leaves. The spathe tube is oblong-ovoid, white within, with the limb intensely black purple. Native to Asia Minor.

#### 126821. Solanum tuberosum L. Solanaceae.

From Peru. Tubers collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received January 21, 1938.

[Received without notes.]

#### 126822. Triticum aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by the Experimental Farm, Cowra, New South Wales, at the request of Dr. H. Wenholz, Department of Agriculture, Sydney. Received February 1, 1938.

Kenya Crossbred, C. 6040.

## 126823 and 126824. Prunus spp. Amygdalaceae.

From Italy. Seeds purchased from Arturo Ansaloni, Bologna. Received January 19, 1938.

126823. PRUNUS AVIUM L.

Mazzard cherry.

126824. PRUNUS MAHALEB L.

Mahaleb cherry.

#### 126825 to 126830.

From Germany. Seeds presented by G. Katterman, Freising. Received January 15, 1938.

126825 to 126828. SECALE CEREALE L. Poaceae.

Rye.

126825. Blankorn-1.

126826. Blankorn-2.

126827. Stark Behaart, 104/105/109/111.

126828. Weiheu, 0 1.

126829 and 126830. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

126829, W.R. 26-46,

126830. W.R. 48.

#### 126831 to 126845.

From Japan. Seeds purchased from Tanaka Boekibu, Osaka. Received January 18, 1938.

126831. Cassiope lycopodiodes (Pall.) D. Don. Ericaceae.

A low creeping plant with slender stems, scalelike crowded leaves, and nodding white, bell-shaped flowers borne singly on erect peduncles. Native to northeastern Asia.

For previous introduction see 103868.

126832. CLINTONIA UDENSIS Trauty. and Mey. Convallariaceae.

A low-growing, liliaceous perennial native to damp places in southeastern Siberia. The erect, broadly oblong leaves, 6 inches long, are green, paler beneath. The inconspicuous greenish-yellow flowers are borne on a scape and are followed by small deep-blue berries.

For previous introduction see 81948.

126833. Phyllodoce aleutica (Spreng.) Heller. Ericaceae.

A low deciduous shrub with imbricated linear serrulate leaves and terminal clusters of small, bell-shaped flowers. Native to the Aleutian Islands.

For previous introduction see 101384.

126834. PHYLLODOCE NIPPONICA Makino. Ericaceae.

A small evergreen bush up to 1 foot high, with numerous linear, obtuse, spinose-serrulate, rigid, glossy-green leaves ½ inch long, and pink flowers up to 1 inch long, borne near the ends of the branches. Native to Japan.

For previous introduction see 102303.

126835. PRUNELLA VULGARIS L. f. Menthaceae.

126836 to 126838. RHODODENDRON spp. Ericaceae.

126836. Rhododendron Chrysanthum Pall.

A prostrate or semiprostrate alpine shrub up to 12 feet high, with oblanceolate or obovate leaves 1 to 4 inches long and yellow flowers about 1 inch long in small clusters. Native to northeastern Asia,

#### 126831 to 126845—Continued

126837. RHODODENDRON HYMENANTHES Makino.

A shrub 12 to 15 feet high, native to Japan. The oblanceolate leaves, 2 to 5 inches long, are dark green above and gray tomentose beneath; the pale to deep rose-pink campanulate flowers, 2 to 3 inches across, are borne in loose clusters.

126838. RHODODENDRON RUFESCENS Franch.

An evergreen shrub 1 to 2 feet high, with oblong to oblong-elliptic leaves about ¾ inch long and several white to pale-blue flowers about ¾ inch long, in terminal clusters. Native to Szechwan Province, China, at altitudes of 11,000 to 13,000 feet.

126839. Rubus spectabilis Pursh. Rosaceae.

126840. Shortia sp. Diapensiaceae.

126841 to 126845. VIOLA spp. Violaceae.

Violet.

126841. VIOLA NIPPONICA Makino.

A stemless violet with many tufted ovate leaves  $\frac{1}{2}$  to 2 inches long and numerous violet-purple flowers about 1 inch across. It is probably a hybrid between *Viola japonica* and *V. phalacrocarpa*.

126842. VIOLA SYLVESTRIS Lam.

A violet, native to France, with stems 3 to 4 inches long, heart-shaped leaves, and inodorous violet or nearly white flowers on stalks longer than the leaves.

For previous introduction see 104604.

126843. VIOLA VAGINATA Maxim.

A robust, stemless violet with broad cordate leaves and large, pale-violet flowers. Native to Japan.

126844, VIOLA VERECUNDA A. Grav.

A Japanese violet closely related to Viola canadensis. The 3 or 4 kidney-shaped leaves are slender and erect, and the flowers are white with purple veins.

For previous introduction see 103899.

126845. Viola yakusimana Nakai.

A weak-stemmed perennial violet with fleshy, reniform leaves. Native to Japan.

#### 126846 to 126853.

From England. Seeds presented by Sir Lionel de Rothschild, London. Received January 18, 1938.

126846 to 126848. Berberis spp. Berberidaceae.

Barberry.

126846. Berberis hookeri Lem.

No. R. F. 1030. An evergreen barberry, native to the Himalayas, where it is a dense shrub 3 to 5 feet high, usually with 3-parted spines, dark-green, leathery, spiny-margined leaves, and cylindrical, deep-purple berries often persisting on the shrub until spring.

For previous introduction see 79508.

126847. Berberis sp.

K. W. No. 6326.

126848. Berberis sp.

F. 29042.

126849. Betula medwediewii Regel. Betulaceae.

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#### 126846 to 126853—Continued

126850. Helichrysum rosmarinifolium (Labill.) Less. Asteraceae.

A shrub up to 10 feet high, with linear, revolute-margined leaves ½ inch or longer, in dense corymbs of many small heads of white ray flowers. Native to Victoria. Australia.

126851. Nomocharis pardanthina Franch. Liliaceae.

A beautiful liliaceous plant about 3 feet high, native to southwestern China between 9,000 and 11,000 feet altitude. The leaves are ternate, and the large flowers, 3 inches across, are white, pink, purple, or red with deep irregular blotches and salver-shaped corollas.

For previous introduction see 84020.

126852. Thamnogalamus falconeri Hook. f. Poaceae.

Bamboo.

A bamboo with a cylindrical culm which, when young, has 8 to 10 branches at each node; these branches vary in length, are exceedingly slender, often purplish in color, and have 4 to 7 leaves gathered near the tips. The leaves are lanceolate,  $1\frac{1}{2}$  to 4 inches long by  $\frac{3}{16}$  to about  $\frac{3}{8}$  inch wide. The slenderness of the branches gives this bamboo a distinctive beauty.

For previous introduction see 123428.

126853. Camellia cuspidata (Kochs) Veitch. Theaceae.

An erect evergreen shrub up to about 6 feet high, with polished, ovate-lanceolate leaves 1 to 3 inches long and solitary white flowers about  $1\frac{1}{2}$  inches across. Native to western China.

#### 126854 to 126868.

From Afghanistan. Bulbs and cuttings collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 28, 1938.

Unless otherwise mentioned, the material was received as cuttings.

126854. Iris sp. Iridaceae.

No. 4330. Bulbs from Kabul, December 14, 1937, found growing in clumps 4 feet across; the numerous large flowers were wine purple.

126855. Salix sp. Salicaceae.

Willow.

No. 4332. From Paghman, December 17, 1937, at 7,000 feet altitude. A tree with small, very fragrant flowers.

126856 to 126868. Vitis spp. Vitaceae.

From Saraioe Khoja, December 17, 1937, at 6,000 feet altitude.

126856. VITIS Sp.

No. 4333.

126857. VITIS sp.

No. 4334. Khailili. One of the best.

126858. VITIS Sp.

No. 4335. Kandahari Sia.

126859. VITIS Sp.

No. 4336. Nunaka Sia.

126860. VITIS Sp.

No. 4337. Hussaini.

126861. VITIS sp.

No. 4338. Kishmish Sufed. A seedless grape.

126862. VITIS Sp.

No. 4339. Kishmish Sia. A seedless grape.

Apple.

## 126854 to 126868—Continued

126863. VITIS sp.

No. 4340. Abjosh Kandahari Sufed.

126864. VITIS sp.

No. 4341. Munaka Sufed.

126865. VITIS Sp.

No. 4342. Ghola Dani.

126866. VITIS Sp.

No. 4343. Didigao.

126867. VITIS Sp.

No. 4344. Sufed Khatta.

126868. VITIS Sp.

No. 4345. Sahibi. One of the best.

## 126869 to 126883.

From England. Plants purchased from Charles Townsend, Ltd., Fordham, Cambridgeshire. Received January 29, 1938.

126869 to 126880. Malus sylvestris Mill. Malaceae.
126869. Advance 107. 126875. Monarch.

126870. Chivers Seedling. 126876. Redcoat Grieve.

 126871. D'Arcy Spice.
 126877. Red Juneating.

 126872. Dr. Harvey.
 126878. Sanspareil.

126873. Duchess Favorite. 126879. Scarlet Nonpareil. 126874. Miller's Seedling. 126880. Worchester Pearmain.

126881 to 126883. Prunus domestica L. Amygdalaceae. Common plum.

126881. Laxton's Early. 126883. Switchin.

120001. Danton's Early.

126882. Laxton's Gage.

#### 126884 to 126893.

From England. Plants purchased from Hillier & Sons, Winchester. Received January 29, 1938.

126884 to 126889. Malus sylvestris Mill. Malaceae. Apple.

 126884. Arthur Turner.
 126887. Mr. Prothero.

 126885. Golden Spire.
 126888. Peacemaker.

 126886. Hillier's Easter Orange.
 126889. Quarrenden Red.

126890 to 126893. PRUNUS spp. Amygdalaceae.

126890. Prunus avium L. Sweet cherry.

Bedford Prolific.

126891. Prunus domestica L. Common plum.

Early Laxton.

126892 and 126893. Prunus instituta L. Plum.

126892. Merryweather.

126893. Langley. A black plum.

126894 to 126901. Hedera spp. Araliaceae. Ivy.

From England. Plants purchased from L. R. Russell, Ltd., Windlesham, Surrey. Received January 29, 1938.

126894. HEDERA CANARIENSIS Willd.

Introduced under the varietal name "azorica."

## 126894 to 126901—Continued

126895. HEDERA NEPALENSIS K. Koch.

A high-climbing tender ivy with triangular-ovate to triangular-oblong, pinnate-lebed leaves 2 to 5 inches long. Native to India.

For previous introduction see 115640.

126896. Hedera helix conglomerata Nichols.

A slow-growing variety with crowded, small, entire or 3-lobed undulate leaves.

126897. HEDERA HELIX L.

English ivy.

126898 and 126899. HEDERA HELIX MINIMA Hibb.

A variety with small, close-set, 3-lobed or pedately 5-lobed, short and spreading basal-lobed leaves which turn dull purplish brown in winter.

126898. No. 53077.

126899. Var. Russelliana.

126900 and 126901. HEDERA HELIX L.

English ivy.

126900. Var. Nigra Aurea.

126901. Var. Spectabilis Aurea.

126902. Rubus sp. Rosaceae.

From England. Plants purchased from G. T. Spinks, University of Bristol, Research Station, Long Ashton, Bristol. Received January 29, 1938.

Preussian Red raspberry.

#### 126903 to 126966.

From Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received January 21, 1938.

126903. Datura sanguinea Ruiz and Pav. Solanaceae. Red floripondio.

No. 113-A. From Huamachuca, December 18, 1937. A large treelike shrub 4 to 12 feet high, with pubescent, ovate-acuminate leaves and brilliant brickred, pendulous flowers 8 inches long. Native to Peru.

For previous introduction see 108294.

126904. Duchesnea indica (Andrews) Focke. Rosaceae. Mock-strawberry. No. 147. From Huaraz, December 26, 1937, at 10,000 feet altitude.

126905 to 126955. Lycopersicon spp. Solanaceae.

126905 to 126923. Lycopersicon esculentum Mill.

Tomato.

126905. No. 72. From the junction of the Rio Chinchao and the Rio Huallaga at 2,300 feet altitude. Fruit the shape and size of a cherry.

126906. No. 73. South of Tingo Maria at 2,000 feet altitude, December 6, 1937. Escaped from cultivation.

126907. No. 109. From Trujillo, December 17, 1937. A small rough fruit, cultivated locally.

126908. No. 110. From Trujillo, December 17, 1937. A small flat fruit, grown locally and sold in the market.

126909. No. 104. From the market at Chimbate, December 16, 1937. Fruit flat and ribbed; small for a cultivated fruit.

126910. No. 116. From the market at San Pedro, December 19, 1937. Fruit of the large cherry type.

126911. No. 117. From the market at San Pedro, December 19, 1937. Fruit flat and rough.

126912. No. 119. From the market at Pacasmayo, December 19, 1937. A mixed sample; fruits rough and flat or the smooth long cherry type.

126913. No. 121. From the market at Pacasmayo, December 19, 1937. Fruit round and smooth, large cherry type.

## 126903 to 126966—Continued

126914. No. 122. From the market at Pacasmayo, December 19, 1937. Fruit very rough and flat; selection from mixed lot.

126915. No. 125. From the market at Chiclayo, December 19, 1937. Fruit cherrylike.

126916. No. 126. From the market at Chiclayo, December 19, 1937. Fruit small, rough, and flat.

126917. No. 134. From the market at Cajamarca, December 21, 1937. Fruit variable, some round and smooth, others rough and flat.

126918. No. 150. From Huaraz, December 26, 1937. Two types; collected in the hospital garden, one rough, the other cherrylike.

126919. No. 151. From the market at Huaraz, December 26, 1937. Fruit yellow.

126920. No. 153. From the market at Huaraz, December 26, 1937. Fruit very rough and variable. Grown by the natives for a long time.

126921. No. 101. From the market at Casma, December 16, 1937, but said to have been grown at Haucho. Fruit rough and flattened, about 1 inch in diameter.

126922. No. 152. From the market at Huaraz, December 26, 1937. Cherry-formed fruit.

126923. No. 118. From the market at San Pedro, December 19, 1937. Fruit small currant type, about ½ inch in diameter.

126924 and 126925. Lycopersicon pimpinellifolium (Jusl.) Mill.

For previous introduction see 126437.

126824. No. 76. From west of Vitaste and about 10 miles east of Lima, December 8, 1937. Fruit small, red, about ½ inch in diameter.

126925. No. 82. From Pacasmayo, December 14, 1937. A climbing plant, found covering a fence, fruit less than ½ inch in diameter.

126926. LYCOPERSICON PERUVIANUM (L.) Mill.

No. 83. From Pacasmayo in a field north of the town at 100 feet altitude, December 14, 1937. A procumbent plant not over 8 inches high; fruit of white type, about ½ inch in diameter.

For previous introduction see 126431.

126927. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 84. From Pacasmayo, in a field north of the town at 100 feet altitude, in sandy soil, December 14, 1937. Found in dry sandy soil, but below an irrigation ditch. Small red fruit about ½ inch in diameter.

126928 to 126930. Lycopersicon peruvianum (L.) Mill.

Nos. 126928 and 126929. From Pacasmayo, December 14, 1937, in a field north of town, at about 100 feet altitude.

126928. No. 85. Fruits about 1 inch in diameter, violet reddish at the stem end, white at the blossom end.

126929. No. 86. Fruits about  $\frac{1}{2}$  inch in diameter, yellow at the stem end, whitish at the blossom end.

126930. No. 88. Tomate de Culebra. From Chancay, December 14, 1937, at 300 feet altitude. Fruit green over shoulder, whitish at the blossom end.

126931 to 126934. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 126931 and 126932. From the Pampa de Matacabailos La Zorra, along the roadside at 300 feet altitude, between Gramadal and Huarmey, December 5, 1937.

126931. No. 93. Plants vigorous.

126932. No. 94. Fruit ½ inch in diameter.

#### 126903 to 126966—Continued

126933. No. 95. From Huarmey, at the edge of a cottonfield at about 200 feet altitude. Fruits about ½ inch in diameter.

126934. No. 108. From the market at Trujillo, December 17, 1937, but grown at Mache. Fruit a little larger than the previous collections.

#### 126935. LYCOPERSICON ESCULENTUM Mill.

Tomato.

No. 111. From near Samne, December 17, 1937, at about 6,000 feet altitude. Fruit of white type, dark green over the shoulders, with two main stripes of darker green; about ½ inch in diameter.

126936. Lycopersicon Hirsutum Humb. and Bonpl.

No. 112. From just west of where the road forks for Otusco from the road to Huamachuca, at about 8,500 feet altitude. Plant coarse and hirsute; fruit not so hirsute as that of the coarse plant collected in the Canta Valley, and a trifle larger and more deeply colored around the stem end; about 1 inch in diameter.

126937. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 107. From the market at Trujillo, December 17, 1937, but grown at Mache. Plants not seen.

126938. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 106. From the market at Trujillo, December 17, 1937, but grown between Trujillo and Mache.

126939 to 126941. Lycopersicon pimpinellifolium (Jusl.) Mill.

126939. No. 105. From Santa, December 16, 1937. Plants growing at the border of a cottonfield. Fruit red, ½ inch in diameter.

126940. No. 103. From Huamachuca, December 16, 1937, at about 100 feet altitude. Fruit red and about ½ inch in diameter.

126941. No. 102. From fields north of Casma, December 16, 1937, at about 25 feet altitude. Plants growing in an abandoned cottonfield; fruit less than ½ inch in diameter.

126942. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 70. Collected along the Rio Huallaga, just above Tingo Maria, at about 2,000 feet altitude. Fruit small, cherrylike; evidently an escape from cultivation.

126943. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 97. From Culebras, on the border of an irrigated area in an abandoned field at 300 feet altitude, December 15, 1937. Fruit small, red, about ½ inch in diameter.

126944 to 126946. Lycopersicon peruvianum (L.) Mill.

From Culebras, between 200 and 300 feet altitude, December 15, 1937. Collected in abandoned fields on the border of an irrigated area.

126944. No. 98. Fruit white with red glow over shoulders.

126945. No. 99. Fruit yellowish white with prominent yellow glow over shoulders.

126946. No. 100. Fruit large, yellowish.

126947 and 126948. Lycopersicon pimpinellifolium (Jusl.) Mill.

126947. No. 114. From the ruins of Chan Chan, December 18, 1937, at 200 feet altitude. Fruit small, red, about ½ inch in diameter; currant type.

126948. No. 115. From the market at San Pedro, December 19, 1937. A wild plant with small pubescent fruits about ½ inch in diameter.

126949. Lycopersicon glandulosum C. H. Mull.

No. 75. From a dry cliff west of San Mateo, at 9,500 feet altitude, December 5, 1937. Fruit yellowish green.

#### 126903 to 126966—Continued

126950, LYCOPERSICON Sp.

No. 120. From the market at Pacasmayo, December 19, 1937. Fruit of cherry type, smooth, and about ½ inch in diameter.

126951. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 123. Along the roadside near Guadalupe, December 19, 1937, at 150 feet altitude. Fruit of currant type, less than  $\frac{1}{2}$  inch in diameter.

126952. LYCOPERSICON Sp.

No. 124. From along an irrigation ditch bordering the highway between Zaña and Chiclayo, December 19, 1937, at 150 feet altitude. A small delicate plant resembling *Lycopersicon humboldtii*, but more pubescent and with much more conspicuous flowers; fruit small and pubescent.

126953 to 126955. Lycopersicon Pimpinellifolium (Jusl.) Mill.

126953. No. 127. From Lambayeque, in fields of the experiment station, at 25 feet altitude, December 19, 1937.

126954. No. 128. From Lambayeque, in fields of the experiment station, at 25 feet altitude. Fruit less than ½ inch in diameter.

126995. No. 149. From Huaraz, in the garden of the hospital, December 26, 1937, at 10,000 feet altitude. Fruit plum-shaped.

126956 to 126960. Phaseolus vulgaris L. Fabaceae.

Common bean.

126956. No. 129. From the market at Casa Grande. A buff, pea-shaped bean grown in the coastal regions of Peru.

Nos. 126957 to 126960. From the market at Cajamarca, December 21, 1937. Mixed samples of beans grown in the coastal region.

126957, No. 130,

126959. No. 132.

126958, No. 131.

126960, No. 133,

126961. PRUNUS CAPULI Cav. Amygdalaceae.

Capulin.

No. 145. Capoli. From Huaraz, at 10,000 feet altitude, December 26, 1937. Fruit small and very dark purple, mottled with a lighter shade when ripe.

126962 to 126965. Solanum spp. Solanaceae.

126962. SOLANUM PSEUDOCAPSICUM L.

Jerusalem-cherry.

No. 148. Manza de Amor. From Huaraz, December 26, 1937. A plant with coarse, dark-green, herbaceous leaves, slightly undulate.

For previous introduction see 104597.

126963. SOLANUM TRIPARTITUM Dun.

No. 137. Tomate Silvestre Amarillo. From fields east of Cajamarca at 9,500 feet altitude. A yellow tomato.

126964. Solanum Corymbosum Jacq.

No. 138. Tomate Colorado. From fields east of Cajamarca, at 9,500 feet altitude.

126965. SOLANUM Sp.

No. 89. Yerba Mora. From Chancay, at 300 feet altitude. Fruit blue black, ½ inch in diameter.

126966. ATHENAEA Sp. Solanaceae.

No. 71. From Tingo Maria, on the Rio Huallaga, at about 2,000 feet altitude. The plant resembles *Solanum nigrum* var. *villosum*; berries about ½ inch in diameter, yellowish red, with the husk tight to the fruit.

# 126967 to 126973. Gossypium spp. Malvaceae.

Cotton.

From Peru. Seeds presented by Victor Marie, Superintendent, Estación Experimental Agricola de La Molina, Lima. Received January 11, 1938.

126967 to 126971. Gossypium.

126967. Semi-aspero Montaria 326-36 Zarula.

126968, Semi-aspero Piura L. M. D. 57-35.

126969. Pardo Piura L. M. 98-35.

126970. Pardo Piura L. M. 9-35.

126971, Pais Piura L. M. III, 4-8-35.

126972. Gossypium Brasiliense Macfad.

Rinon. (Kidney cotton.) L. U. Montana.

For previous introduction see 67521.

126973. Gossypium raimondii Ulbrich.

From Chilete, Peru. A shrub or small tree, native to Peru.

# 126974. Carica Pentagona Heilborn. Papayaceae.

From Ecuador. Cuttings presented by Dr. Luis A. Gattoni, Gobierno del Ecuador, Quito. Received February 1, 1938.

This is the most remarkable and valuable of the several interesting species of Carica cultivated in Ecuador, because of its large, very acid fruits, from which an excellent sauce is made, the relatively low temperatures which the plant can stand, and because of its habit of producing seedless fruits.

The plant is seen only under cultivation, where it is a small tree about 3 m. high; the leaves are glabrous, like those of *Carica chrysopetala*, but with fewer and broader lobes. The fruits are about 30 cm. long and 7 cm. to 12 cm. in diameter, truncate at the base and sharply acute at the apex. The flesh is about 1 cm. thick, white, distinctly fragrant, and very acid. It is eaten only after it is cooked. The large cavity in the center contains a quantity of white cottony substance and occasionally a few seeds. The plant is propagated by cuttings.

For previous introduction see 119268.

#### 126975 to 126977.

From Mexico. Seeds presented by T. MacDougall, San Miguel, Chimalapa, Oaxaca. Received February 2, 1938.

126975. CHAMAEDOREA Sp. Phoenicaceae.

Palm.

A palm with branched inflorescences.

126976. Chamaedorea sp. Phoenicaceae.

A palm with simple inflorescences.

126977. Zamia sp. Cycadaceae.

#### 126978. RHAPIDOPHYLLUM HYSTRIX (Pursh) Wendl, and Drude. Phoenicaceae. Needle palm.

From Georgia. Seeds collected by David Bisset, United States Plant Introduction Garden, Savannah. Received February 2, 1938.

An attractive dwarf fan palm, native to the lowlands of South Carolina, Georgia, and Florida, but very local in its distribution. It is now quite rare and appears to be approaching extinction as a wild plant. The 2- to 3-foot stems are erect or creeping, with palmate leaves, dark shiny green above and silvery gray beneath, which reach a height of 3 to 4 feet. Slender sharp black spines up to a foot long project from the trunk in every direction. The staminate and pistillate flowers are borne on separate plants.

For previous introduction see 94206.

# 126979. Agave schottii Engelm. Amaryllidaceae.

From Arizona. Seeds collected by T. H. Kearney and R. H. Peebles, Bureau of Plant Industry. Received February 2, 1938.

No. 13781. From near Ruby, Pima County, at 4,300 feet altitude, October 2, 1937. A cespitose agave, native to southern Arizona, with linear-triangular, white-marked leaves 12 to 15 inches long and curved yellowish flowers an inch or more in length, scented like Polianthes, on a stalk 6 to 7 feet high.

For previous introduction see 81095.

# 126980 to 126982. Vitis spp. Vitaceae.

Grape.

From France. Plants purchased from the Richter Nurseries, Montpellier. Received February 3, 1938.

126980.  $Colombard \times Berlandieri$ .

126981. 1202 × Riparia Martineau 196-17.

126982. Saint Jacques.

# 126983. INODES PALMETTO (Walt.) O. F. Cook. Phoenicaceae.

Cabbage palmetto.

From Georgia. Seeds collected on Wilmington Island by J. Frank Joyner, Bureau of Plant Industry, United States Department of Agriculture. Received February 4, 1938.

For previous introduction see 7773.

#### 126984 to 126988.

From England. Roots and plants purchased from Laxton Bros. Bedford, Ltd., Bedford. Received February 7, 1938.

126984. RHEUM RHAPONTICUM L. Polygonaceae.

Rhubarb.

Hawke's Champagne. Roots received.

126985 to 126988. Rubus. Rosaceae.

A collection of hybrid blackberries, received as plants.

126935. Black Diamond.

126987. Himalayan Giant.

126986. Edward Langley.

126988, Pollard.

# 126989 to 127003.

From Germany. Plants purchased from Jacob Zavelberg, Köln. Received February 7, 1938.

126989 and 126990. Amygdalus persica L. Amygdalaceae.

Peach.

126989. Kernechter vom Vorgebirge.

126990, Schorlemer.

126991 to 126998, Malus sylvestris Mill. Malaceae.

Apple.

126991. Gelber Triererweinapfel.

126992. Neue Goldparamäne.

126993. Nimmermühr.

126994. Schafsnase.

126995. Winterzitronenapfel.

126996. Winterrambour.

126997. Wintertreifling.

126998. Zigeunerinapfel.

126999. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

Cardofer Frühe.

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# 126989 to 127003—Continued

127000. Prunus insititia L. Amygdalaceae.

Plum.

Gewürzte September-Mirabelle.

127001. Prunus domestica L. Amygdalaceae.

Common plum.

Zimmers Frühe.

127002 and 127003. PYRUS COMMUNIS L. Malaceae.

Common pear.

127002. Eva Baltet.

127003. Gute Graue.

#### 127004 to 127043.

From England. Plants purchased from Laxton Bros., Bedford, Ltd., Bedford. Received February 8, 1938.

127004 to 127022. Malus sylvestris Mill. Malaceae.

Apple.

127004. Bedford Pippin. 127005. Ben's Red.

127014. Pearmain. 127015. Pioneer.

127006. Duchess of Bedford.

127016. Red Victoria.

127007. Early Crimson.

127017. Royalty.

127008. Feltham Beauty. 127009. Fortune.

127018. Schoolmaster.

127010. Houblon.

127019. The Premier. 127020. Triumph.

127011. Imperial.

127021. William Crump.

127012. Laxton's Advance.

127022. Wyken Pippin.

127013. Leader.

127023 to 127037. Prunus domestica L. Amygdalaceae.

Common plum.

127023, Black Prince.

127031. Gage.

127024. Early Laxton.

127032. Laxton's Prosperity.

127025, Laxton's Blackbird. 127026. Laxton's Blue Tit.

127033. Laxton's Supreme. 127034. Laxton's Utility.

127027. Laxton's Bountiful.

127035. Jubilee.

127028. Laxton's Cropper. 127029, Laxton's Delicious.

127036. Orleans Early. 127037. Pershore Purple.

127030. Laxton's Goldfinch.

127038 to 127043. Pyrus communis L. Malaceae.

Common pear.

127038. Laxton's Early Market.

127041. Laxton's Satisfaction.

127039, Laxton's Progress.

127042, Laxton's Victor.

127040. Laxton's Record.

127043, Laxton's Wonderful.

## 127044 to 127052.

Seeds presented by the Director, Kornik Gardens and Arboretum, Kornik. Received February 7, 1938.

127044 to 127049. ALNUS spp. Betulaceae.

Alder.

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127044. ALNUS HIRSUTA TURCZ.

Manchurian alder.

A rather handsome, medium-sized tree, native to Japan and Manchuria, with rounded-elliptic, slightly lobed leaves which are hairy beneath.

For previous introduction see 90788.

127045. Alnus Japonica Sieb. and Zucc.

Japanese alder.

A handsome pyramidal tree up to 75 feet high, with dense dark-green, elliptic-lanceolate, sharply serrate leaves. It is native to northeastern Asia.

For previous introduction see 90786.

# 127044 to 127052—Continued

127046. ALNUS MAXIMOWICZII Callier.

An alder about 30 feet high, with abruptly short, acuminate, ovate leaves, truncate or cordate at the base. Native to Japan.

127047. ALNUS NITIDA (Spach) Endl.

A large tree becoming 100 feet high, with elliptic leaves 4 to 8 inches long. Native to the western temperate Himalayan region.

127048. ALNUS ORIENTALIS Decne.

A shrub or small tree with ovate-oblong to elliptical, wedge-shaped leaves Native to Asia Minor.

127049. ALNUS RUGOSA (Ehrh.) Spreng.

Hazel alder.

127050. Betula atrata Domin. Betulaceae.

Birch.

A tall birch up to about 60 feet high, with broad ovate or ovate-rotund leaves about 3 inches long. Native to the Czechomoravian highlands.

127051. Syringa sweginzowii Koehne and Ling. Oleaceae. Chengtu lilac.

A shrub up to 10 feet high, with oblong-ovate leaves 2 to 4 inches long, deep green above and paler beneath, and reddish or pale-lilac flowers in panicles 6 to 8 inches long. Native to northwestern China.

127052. SYRINGA WOLFI C. Schneid. Oleaceae.

Lilac.

An ornamental shrub remarkable for its peculiar foliage; the elliptic oblong leaves are up to 6 inches long, cuneate, and grayish green beneath. The fragrant, dark-lilac flowers are in much-branched panicles. Native to Manchuria and Chosen.

For previous introduction see 104946.

#### 127053 to 127055.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received February 8, 1938.

127053. Canarina eminii Aschers. Campanulaceae.

A tuberous-rooted, creeping perennial up to 6 feet long, with showy bell-shaped orange-scarlet flowers 3 inches long. Native to tropical Africa.

127054. IPOMOEA Sp. Convolvulaceae.

A twining herbaceous perennial with digitate leaves and large golden-yellow flowers. Native to Lower California.

127055. Pentas coccinea Stapf. Rubiaceae.

A shrubby plant about 1½ feet high, with grayish-green ovate or ovate-oblong leaves and showy crimson flowers in umbellike clusters about 3 inches across. Native to xerophytic places in eastern tropical Africa.

#### 127056. Cocos Nucifera L. Phoenicaceae.

Coconut.

From the Philippine Islands. Seeds presented by Hilarion S. Silayan, Director of Plant Industry, Manila. Received February 11, 1938.

Macapuno.

# 127057. Pyrus communis L. Malaceae.

Common pear.

From Washington, D. C. Scions presented by the Soil Conservation Service, Washington. Received August 23, 1937. Numbered in February 1938.

Sugar pear.

127058. Prunus armeniaca L. Amygdalaceae.

Apricot.

From Iowa. Budsticks presented by the Iowa State College of Agriculture, Ames. Received August 30, 1937. Numbered in February 1938.

Variety Schick.

# 127059 to 127061.

From England. Seeds presented by the Department of Botany, The University, Manchester. Received February 8, 1938.

127059. Impatiens amphorata Edgew. Impatientaceae.

An erect branching annual with large elliptic leaves and interrupted racemes of many large rose-colored and yellow flowers with red veins. Native to the western temperate Himalayas.

127060. Bowiea volubilis Hook, f. (Ophiobostryx volubilis Skeels). Liliaceae.

An asparaguslike perennial with a globose bulb 4 to 6 inches in diameter, small erect linear leaves, and a slender twining stem 6 to 8 feet long. The numerous small greenish flowers are less than ½ inch long. Native to southern Africa.

For previous introduction see 114661.

127061. Salvia Cleistogama De Bary and Paul. Menthaceae.

An erect perennial 1 to 2 feet high, covered with long hairs, with ovate oblong irregularly pinnatifid leaves, usually about 3 inches long, and blue flowers ½ inch long in distant whorls. Native to southern Africa.

Sage.

For previous introduction see 104586.

127062. Ribes sativum Syme. Grossulariaceae. Garden currant.

From Germany. Cuttings presented by Dr. Ernst Münch, Forstbotanisches Institut, Munich. Received February 12, 1938.

Red Holland currant. Cuttings from plants grown at the Grafrath Experiment Station where, for 5 years, they have shown complete resistance to white-pine blister rust.

127063. Hymenocallis calathina (Ker) Nichols. Amaryllidaceae. Lilybasket.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Originally presented by Roy G. Pierce, Bureau of Entomology and Plant Quarantine. Numbered February 14, 1938.

A bulbous perennial, native to Peru and Bolivia, with 6 to 8 strap-shaped leaves less than 2 feet long and a 2-edged scape about 2 feet high, bearing a sessile umbel of 2 to 5 flowers. The perianth tube, 3 to 4 inches long, is green and enlarged above; the lanceolate segments, as long as the tube, are white; and the corollalike cup is green striped, with rounded fringed lobes.

For previous introduction see 93161.

127064. Rubus. Rosaceae.

From England. Plants presented by F. G. F. Glenny, Surfleet, Spalding. Received February 14, 1938.

Norfolk Giant Red raspberry.

127065. Xanthosoma sp. Araceae.

From Florida. Tubers presented by Mrs. W. D. Diddell, Jacksonville. Received February 11, 1938.

127066. PANCRATIUM ILLYRICUM L. Amaryllidaceae.

From Italy. Seeds presented by Dr. Mario Ercoli, Director, La Mortola, Ventimiglia. Received February 12, 1938.

A southern European pancratium with 5 or 6 strap-shaped leaves and 6 to 12 white flowers about 1 inch long, in an umbel borne on a scape 1 foot or more long. Native to the Mediterranean region.

127067. Syzygium syzgioides (Miq.) Merr. and Perry. Myrtaceae.

From the Canal Zone. Seeds presented by Walter R. Lindsay, Acting Director, Canal Zone Experiment Gardens, Summit. Received February 14, 1938.

A large evergreen shrub or tree with ovate leaves about 3 inches long and compact cymes of small whitish flowers, followed by deep-purple berries about the size of peas. Native to the Indo-Malayan region.

127068. Rhapidophyllum hystrix (Pursh) Wendl. and Drude. Phoenicaceae. Needle palm.

From Georgia. Plants collected by David Bisset, H. H. Hill, Ralph W. Bailey, and Thomas Higgs, Bureau of Plant Industry, Plant Introduction Garden, Savannah. Received February 14, 1938.

From the woodlands adjacent to the Ogeechee Road, north of the Plant Introduction Garden.

For previous introduction and description see 126978.

# 127069 to 127112.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 16, 1938.

127069 to 127072. Hordeum vulgare L. Poaceae.

Barley

127069. No. 4208. Jau. From Chechaktu, November 15, 1937, at 4,000 feet altitude. Probably spring-sown.

127070. No. 3995. From Khalat, October 14, 1937, at 8,000 feet altitude. Said to be spring-sown and irrigated.

127071. No. 4135. Jau. From Farah, October 21, 1937. Irrigated and probably fall-sown.

127072. No. 4195. Jau. From Herat, October 13, 1937, at 3,000 feet altitude. Said to be spring-sown and irrigated.

127073 to 127078. ORYZA SATIVA L. Poaceae.

Rice.

127073. No. 4040. From Sardeh, October 18, 1937, at 5,000 feet altitude. A wet land rice, harvested in the fall.

Nos. 127074 to 127078. From Kandahar, October 23, 1937, at 5,000 feet altitude.

127074. No. 4053. Seré Meré. Harvested in October.

127075. No. 4054. Balkhi.

127077. No. 4056. Meragha.

127076. No. 4055. Spin Meré.

127078, No. 4057.

127079 to 127107. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

Nos. 127079 to 127081. From Ghazni, October 7 and 8, 1937, at 8,000 feet altitude.

127079. No. 3932. Sarda. Probably irrigated.

127080. No. 3944. Said to be Luchak.

127081. No. 3945. Said to be Garma, irrigated.

127082. No. 3999. From Khalat, October 14, 1937, at 8,000 feet altitude. Said to be irrigated and fall-sown.

127083. No. 4139. *Mori*. From Kang, November 8, 1937, at 1,700 feet altitude. Said to be the best grown here.

127084. No. 4002. From Khalat, October 14, 1937, at 8,000 feet altitude. Grown without irrigation.

127085. No. 4045. From Sardeh, October 18, 1937, at 5,000 feet altitude. Probably fall-sown and irrigated.

## 127069 to 127112—Continued

127086. No. 4051. From Kandahar, October 23, 1937, at 5,000 feet altitude. Said to be an irrigated, fall-sown wheat.

Nos. 127087 to 127089. From Girishk, October 28, 1937. Said to be an irrigated, fall-grown wheat.

127087. No. 4091. Dandan-i-shutur.

127088, No. 4092.

127089. No. 4093.

Nos. 127090 to 127096. From Kang, November 3 to 6, 1937, at 1,700 feet altitude. Sown in the fall and irrigated.

127090. No. 4138. Siahdas.

127091. No. 4140. Kalah.

127092. No. 4141. Surkh Khosha.

127093. No. 4142. Kabuli.

127094. No. 4143. Nishki.

127095. No. 4154. An unnamed mixture.

127096. No. 4155. An unnamed mixture.

127097. No. 4157. From Farah, November 7, 1937. Fall-sown and irrigated.

127098. No. 4171. Sufedak. From Herat, November 12, 1937, at 3,000 feet altitude. Probably fall-sown; irrigated.

127099. No. 4200. *Gaudum*. From Karokh, November 13, 1937, at 3,500 feet altitude. Said to be sown in the fall and irrigated.

127100. No. 4201. From Kala Nao, November 14, 1937, at 4,500 feet altitude.

127101. No. 4202. From Bala Murghab, November 15, 1937, at 2,500 feet altitude. If fall-grown it is irrigated.

127102. No. 4207. From Chechaktu, November 15, 1937, at 4,000 feet altitude.

Nos. 127103 to 127105. From Maimana, November 19, 1937, at 2,000 feet altitude.

127103, No. 4240.

127104. No. 4241. Probably sown in the fall and irrigated.

127105. No. 4242. Probably spring-sown and not irrigated.

Nos. 127106 and 127107. From Andkhin, November 22, 1937, at 1,500 feet altitude.

127106. No. 4260. Dandan-i-shutur (camel's tooth).

127107. No. 4261. Probably fall-sown and irrigated.

127108 to 127112. ZEA MAYS L. Poaceae.

Corn.

127108. No. 4052. From Kandahar, October 23, 1937, at 5,000 feet altitude. A random sample from a farmer's crop.

127109. No. 4282. From Balkh, November 30, 1937. Bears ears at each node, beginning at the ground, and on 1 to 3 suckers.

127110. No. 4301. From Andkhin, November 23, 1937. Turkoman corn.

Nos. 127111 and 127112. From Charikar, December 11, 1937. Typical corn. The red is not often seen; the yellow pops satisfactorily.

127111. No. 4313.

127112. No. 4313-A.

# 127113. Fragaria sp. Rosaceae.

Strawberry.

From England. Plants presented by C. J. Gleed, Botley Experiment Fruit Station, Hampshire, through the Horticultural Superintendent, The Castle, Winchester. Received February 18, 1938.

Early Cambridge.

# 127114 and 127115. PANCRATIUM spp. Amaryllidaceae.

From England. Bulbs purchased from the Hocker Edge Gardens, Cranbrook, Kent. Received February 21, 1938.

127114. PANCRATIUM ILLYRICUM L.

For previous introduction and description see 127066.

#### 127115. PANCRATIUM MARITIMUM L.

A bulbous perennial with 5 to 6 strap-shaped, evergreen leaves and 5 to 10 large fragrant white flowers on a compressed scape, blooming throughout the summer. Native to the Mediterranean region.

For previous introduction see 93488.

# 127116. Juglans Nigra L. Juglandaceae.

Black walnut.

From Michigan. Seeds presented by N. A. Cardinell, Michigan State College, East Lansing. Received February 21, 1938.

# 127117. DIGITARIA Sp. Poaceae.

Grass.

From the Union of South Africa. Seeds presented by D. Meredith, African Explosives & Industries, Ltd., Johannesburg. Received February 18, 1938.

Pongola. A strain of woolly fingergrass.

# 127118. Solanum sp. Solanaceae.

From Peru. Tubers collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received February 25, 1938.

A wild potato, collected among the ruins of Pisac, at 12,500 feet altitude.

# 127119 to 127310. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 18, 1938.

This material was all collected in the autumn of 1937.

127119. No. 4083. From Girishk, October 28. Fruit globose, 7 inches in diameter, yellow with broad orange stripes; rind % inch thick; flesh pale rose.

Nos. 127120 and 127121. From Haibak, September 24, at 2,000 feet altitude.

127120. No. 2888. Fruit globose, 10 inches in diameter, very dark green; rind ½ inch thick; flesh rose, of good texture, sweet.

127121. No. 3889. Fruit 13 by 9 inches, pale green, vermiculations darker; rind 1 inch thick; flesh rose, of good texture and flavor.

Nos. 127122 to 127128. From Kabul, September 26 to October 6, at 7,000 feet altitude.

127122. No. 3893. Fruit 17 by 10 inches, pale green with traces of slightly darker blotched stripes; rind ¾ inch thick; flesh pink, good but rather firm.

127123. No. 3895. Fruit globose, 10 inches in diameter, pale green; rind ½ inch thick; flesh pink, good.

127124. No. 3896. Fruit globose, 10 inches in diameter, greenish white with obsolescent stripes of darker green; rind ½ inch thick; flesh pink, good.

127125. No. 3903. Fruit globose, 10 inches in diameter; greenish white, with traces of darker green stripes; rind ½ inch thick; flesh pink, good.

127126. No. 3904. Fruit 15 by 7 inches, pale green with irregular stripes of grass green; rind ½ inch thick; flesh rose, of good texture, but low in sugar content.

- 127127. No. 3910. Fruit globose, 8 inches in diameter, pale green, striped and vermiculated with lighter green; rind ¼ inch thick; flesh rose, good texture, medium sugar content.
- 127128. No. 3911. Fruit 14 by 10 inches, pea green, handsomely striped with very dark green; rind hard,  $\frac{1}{2}$  inch thick; flesh rose, of good texture, but low in sugar.
- 127129. No. 3912. From Haibak, October 5. Fruit globose, 10 inches in diameter, very dark green, of good quality.
  - Nos. 127130 and 127131. From Kabul, October 6, at 7,000 feet altitude.
- 127130. No. 3917. Fruit globose, 9 inches in diameter, pea green, vermiculated; rind ½ inch in diameter; flesh pink, good.
- 127131. No. 3918. Fruit 12 by 9 inches, vermiculated and with narrow stripes of very dark green, rind ½ inch thick; flesh rose, of good texture, but low in sugar.
- 127132. No. 3919. From Shaikhabad, October 6, at 8,000 feet altitude. Fruit globose, 6 inches in diameter, tasteless.
  - Nos. 127133 to 127139. From Ghazni, October 7 and 8, at 8,000 feet altitude.
- 127133. No. 3921. Fruit globose, 10 inches in diameter, pale green, flecked with darker green and with narrow irregular stripes of grass green; rind ½ inch thick, flesh pink, of good texture, firm, sweet; probably a good keeper.
- 127134. No. 3922. Fruit globose, 10 inches in diameter, grass green with narrow stripes of very dark green; rind ½ inch thick; flesh rose, sweet but slightly stringy.
- 127135. No. 3924. Fruit globose, 8 inches in diameter, grass green with narrow stripes of very dark green; rind ½ inch thick; flesh yellow, good texture, sweet.
- 127136. No. 3926. A mixture of end-of-the-season small fruits.
- 127137. No. 3933. Fruit globose, 10 inches in diameter, pale green with narrow stripes of grass green; rind ½ to ¾ inch thick; flesh pink, firm, good texture, sweet, probably keeps well.
- 127138. No. 3934. Fruit globose, 8 inches in diameter, pale green with netribbing of darker green; rind ½ inch thick; flesh yellow, of good texture, and sweet.
- 127139. No. 3935. Fruit 12 by 8 inches, pea green, vermiculated; rind ½ inch thick; flesh yellow, good texture, fairly sweet.
- 127140. No. 3936. From Kabul, October 7, at 7,000 feet altitude. Fruit 15 by 12 inches, whitish green; rind 3/4 inch thick; flesh pink, firm, sweet, with air spaces in the heart, unusual in Afghan melons.
  - Nos. 127141 to 127144. From Mukkur, October 10, at 8,500 feet altitude.
- 127141. No. 3952. Fruit globose, 10 inches in diameter, equal stripes of light and grass green, the light green more or less flecked with darker green; rind ½ inch thick; flesh pink, firm, of good texture, sweet, even so late in the season.
- 127142. No. 3950. A mixture of yellow-fleshed varieties.
- 127143. No. 3951. A mixed sample of pink-fleshed varieties.
- 127144. No. 3953. Fruit globose, 10 inches in diameter, with equal stripes of light and grass green, the light green flecked with darker green; rind ½ inch thick; flesh yellow, melting, sweet, even so late in the season.
- 127145. No. 3957. From Chahjui, October 12, at 8,000 feet altitude. A mixed sample of both pink-fleshed and yellow-fleshed varieties.
  - Nos. 127146 to 127177. From Khalat, October 12 to 15, at 8,000 feet altitude.
- 127146. No. 3961. Fruit 12½ by 9½ inches, pale green, with medium stripes of grass green; rind ½ inch thick; flesh pink, of good texture, very sweet.

- 127147. No. 3962. Fruit globose, 10 inches in diameter, green with narrow stripes of grass green; rind ½ inch thick; flesh pink, good texture, very sweet, first class.
- 127148. No. 3963. Fruit 16 by 7 inches, very dark green with narrow irregular stripes of paler green; rind ½ inch thick; flesh pink, good texture, sweet.
- 127149. No. 3964. Fruit 12 by 11 inches, pea green with ribs of reticulated darker green; rind ½ inch thick; flesh pink, some fiber, sweet.
- 127150. No. 3965. Fruit 11½ by 9 inches, pea green and very dark green in nearly equal irregular stripes; rind ¾ inch thick; flesh pink, good texture, sweet.
- 127151. No. 3966. Fruit somewhat pear-shaped, 11 inches high and 10 inches across, pea green, with faintly indented ribs; rind ¾ inch thick; flesh deep pink, somewhat stringy, very sweet.
- 127152. No. 3967. Fruit 18 by 8½ inches, grass green with broad net of very dark green; rind 1 inch thick; flesh pink, good texture, very sweet.
- 127153. No. 3968. Fruit grass green, 20 by 8 inches; rind  $3\!\!/_4$  inch thick; flesh pink, good texture, very sweet.
- 127154. No. 3969. Fruit 13 by 11 inches, very dark green; rind ¾ inch thick, flesh pink, good texture, somewhat stringy, very sweet.
- 127155. No. 3970. Fruit 12 by 13 inches, very dark green; rind ¾ inch thick; flesh pink, a little stringy, very sweet.
- 127156. No. 3971. Fruit 19 by 9 inches, deep green with heavy clouding and netting of very dark green; rind ½ to ¾ inch thick; flesh pink, of good texture, very sweet.
- 127157. No. 3973. Fruit 20 by 9 inches, pea green, reticulated; rind ¾ inch thick; flesh bright pink, a little stringy, very sweet.
- 127158. No. 3972. Fruit 12 by 11 inches, deep grass green; rind ¾ inch thick; flesh rose, somewhat stringy, sweet.
- 127159. No. 3974. Fruit 12 by 10 inches, sea green; rind ¾ inch thick; flesh pink, somewhat stringy, sweet.
- 127160. No. 3975. Fruit 13 by 10 inches, pea green; rind \( \) inch thick; flesh pink, good texture, sweet.
- 127161. No. 3977. Fruit 10 by 14½ inches, deep green with reticulations of very dark green; rind ½ inch thick; flesh pink, of good texture, sweet.
- 127162. No. 3978. Fruit 14 by 11 inches, grass green; rind ¾ inch thick; flesh pink, good texture, very sweet.
- 127163. No. 3979. Fruit 21 by 9 inches, grass green, heavily netted and fretted with black; rind 1 inch thick; flesh pink, somewhat stringy, very sweet.
- 127164. No. 3982. Fruit bell-shaped, 12 inches high, pea green, faintly indented ribs; rind ¾ inch thick; flesh pink, of good texture, very sweet.
- 127165. No. 3980. Fruit 20 by 9 inches, grass green, heavily obscured by fretting of darker green; rind ½ to ¾ inch thick; flesh pink, somewhat stringy, very sweet.
- 127166. No. 3981. Fruit 18 by 8 inches, grass green, heavily clouded and netted with very dark green; rind ½ inch thick; flesh rose pink, somewhat stringy, sweet.
- 127167. No. 3983. Fruit bell-shaped, 12 inches high, grass green, heavily mottled and fretted with very dark green; rind ½ inch thick; flesh pink, a little stringy, sweet.
- 127168. No. 3989. Fruit 16 by 8 inches, grass green, mottled and veined with darker green; rind ¾ inch thick; flesh pink, somewhat stringy, very sweet.
- 127169. No. 3984. Fruit 14 by 10 inches, pale green, faintly reticulated; rind 5% inch thick; flesh pink, of good texture, very sweet.

- 127170. No. 3985. Fruit very dark green with some clouding of paler green, usually in the form of broken stripes; rind ½ inch thick; flesh pink, of good texture and sweet.
- 127171. No. 3986. Fruit 15 by 9 inches, very dark green, with some clouding of lighter green; rind % inch thick; flesh pink, somewhat stringy, very sweet.
- 127172. No. 3987. Fruit 18 by 8 inches, very dark green, with fretting and clouding in elongate patches; rind ½ inch thick; flesh pink, good texture, sweet.
- 127173. No. 3988. Fruit 18 by 9½ inches, grass green, mottled with darker green; rind 5% inch thick; flesh pink, good texture, sweet.
- 127174. No. 3994. Fruit 19 by 9 inches, grass green; rind ½ inch thick; flesh pink, of good texture, very sweet.
- 127175. No. 4000. Fruit 21 by 10 inches, greenish white; rind ¾ inch thick; flesh pale rose, of good texture, low in sugar.
- 127176. No. 4001. Fruit 20 by 8½ inches, grass green; rind ¾ inch thick; flesh deep pink, of good texture, very sweet, few seeds.
- 127177. No. 4010. Fruit 12 by 8 inches, gold with lengthwise blotches of paler gold; rind \% inch thick; flesh pale rose, fair texture, sweet.
  - Nos. 127178 to 127183. From Kandahar, October 16, at 5,000 feet altitude.
- 127178. No. 4018. Fruit subglobose, 11 inches in diameter, pea green with rib lines of darker green; rind 1 inch thick; flesh deep pink, of poor texture, sweet, seedy.
- 127179. No. 4019. Fruit globose, 10 inches in diameter, whitish green, obscurely flecked with darker green; rind 3/4 inch thick.
- 127180. No. 4025. Fruit globose, 8 inches in diameter, equal streaks of yellow and golden brown; rind \% inch thick; flesh very pale rose; of good structure, but insipid.
- 127181. No. 4026. Fruit subglobose, 9 inches in diameter, gold and golden brown; rind ¼ inch thick; flesh rose, of good texture, fairly sweet, seedy.
- 127182. No. 4027. Fruit 14 by 9 inches, sea green, mottled with darker green and with narrow broken irregular ribs of black; rind ½ inch thick; flesh pink, of good texture, sweet.
- 127183. No. 4028. Fruit 14 by 8 inches, grass green with elongate cloudings of paler green.
- 127184. No. 4041. From Sardeh, October 18, at 5,000 feet altitude. A mixture of local varieties, well grown, usually 10 by 12 inches, often sweet but generally with a queer flavor and often with a hollow heart.
  - Nos. 127185 to 127188. From Yakhchal, October 26; grown in great heat.
- 127185. No. 4063. Fruit 18 by 9 inches, pea green; rind \(^3\)4 inch thick.
- 127186. No. 4064. Fruit 19 by 9 inches, very dark green; rind 1¼ inches thick; flesh pink, insipid; very little heart.
- 127187. No. 4065. Fruit 10 by 15 inches, pea green with narrow, irregularly spaced and irregular very dark green stripes; rind 1 inch thick; flesh pink, of good texture, sweet.
- 127188. No. 4066. Fruit globose, 12 inches in diameter, pea green; rind  $\frac{3}{4}$  inch thick,
- 127189. No. 4067. From Khushkibakhud, October 26. A mixed sample; grown under great heat.
  - Nos. 127190 to 127203. From Girishk, October 27 and 28.
- 127190. No. 4068. Fruit globose, 10 inches in diameter, pale green, reticulated with darker green; rind  $\frac{1}{2}$  inch thick; flesh pink.
- 127191. No. 4069. Fruit globose, 10 inches in diameter; pale green and pea green in equal lengthwise blotched stripes; rind ½ inch thick; flesh pink.

- 127192. No. 4070. Fruit globose, 11 inches in diameter, yellow green; rind tough,  $\frac{1}{2}$  inch thick; flesh pink.
- 127193. No. 4071. Subglobose, 12 inches in diameter, pale green, vermiculated with line stripes of darker green.
- 127194. No. 4072. Fruit subglobose, 11 inches in diameter, indented ribs of grass green, the rest of the surface pea green; rind 1 inch thick.
- 127195. No. 4073. Fruit 18 by 10 inches, pea green with broad irregular stripes of darker green.
- 127196. No. 4074. Fruit 16 by 10 inches, grass green with narrow irregular stripes of very dark green; flesh apricot.
- 127197. No. 4076. Fruit 19 by 9 inches, pea green, vermiculated; rind  $\frac{1}{2}$  inch thick; flesh pink.
- 127198. No. 4077. Fruit 20 by 9 inches, pea green with irregular narrow stripes of very dark green; rind 1 inch thick; flesh pink.
- 127199. No. 4078. Fruit 16 by 9 inches, sea green; rind  $\frac{3}{4}$  inch thick; flesh pink.
- 127200. No. 4079. Fruit globose, 12 inches in diameter, very dark green; flesh pink.
- 127201. No. 4080. Fruit 12 by 6 inches, yellow, broadly striped with orange; flesh pale pink, insipid. A runt and out of season.
- 127202. No. 4081. Fruit 13 by 7 inches, yellow with broad orange stripes; rind ½ inch thick; flesh pale pink, insipid. A runt.
- 127203. No. 4082. Fruit globose, 8 inches in diameter, yellow striped with orange; rind ½ inch thick; flesh pale rose, insipid. A runt.
- 127204. No. 4298. From Mazar-i-sharif, December 5. Fruit globose, 12 inches in diameter, sea green with vermiculated ribs; rind 1¼ inches thick; flesh pink, sweet, some string. A good keeper.
  - Nos. 127205 to 127209. From Girishk, October 28.
- 127205. No. 4087. Fruit globose, 8 inches in diameter, yellow with orange stripes; rind ¾ inch thick; flesh pale rose, insipid.
- 127206. No. 4085. Fruit globose, 10 inches in diameter, yellow with broad orange stripes; rind ½ inch thick; flesh pale pink, insipid.
- 127207. No. 4086. Fruit globose, 7 inches in diameter, with orange stripes; rind ½ inch thick; flesh pink.
- 127208. No. 4087. Fruit globose, 6 inches in diameter, yellow with orange stripes; rind % inch thick; flesh pink.
- 127209. No. 4088. Fruit globose, 10 inches in diameter, yellow with broad orange stripes; rind  $\frac{1}{2}$  inch thick; flesh pale pink, insipid.
  - Nos. 127210 to 127219. From Farah, October 30.
- 127210. No. 4099. Fruit flattened, 9 by 10 inches, with faintly indented ribs of dark green, otherwise pea green; rind ½ inch thick; flesh rose, of fair texture and fair sugar content. Grown in great heat.
- 127211. No. 4100. Fruit 12 by 9 inches, pea green with irregular stripes of darker green; rind ½ inch thick; flesh pale rose, of fair texture, sweet.
- 127212. No. 4101. Fruit 8 by 14 inches, sea green; rind ½ inch thick; flesh apricot pink, of fair texture, sweet.
- 127213. No. 4102. Fruit 9 by 13 inches, pea green; rind 5% inch thick; flesh apricot pink, of good texture.
- 127214. No. 4103. Fruit 7 by 9 inches, flattened, grass green; rind  $\frac{1}{2}$  inch thick; flesh apricot pink.
- 127215. No. 4104. Fruit 8 by 8 inches, pale green with indented ribs; rind ½ inch thick; flesh apricot pink; of good texture, but insipid.

- 127216. No. 4105. Fruit slightly flattened, 9 by 10 inches,  $\frac{1}{2}$  inch thick; flesh apricot pink, of good texture and sweet.
- 127217. No. 4106. Fruit 14 by 10 inches, whitish green with lengthwise cloudings of darker green; rind ½ inch thick; flesh of good texture, apricot pink, little sugar.
- 127218. No. 4108. Fruit globose, 10 inches in diameter, whitish green with narrow stripes of pea green; rind % inch thick; flesh rose, of good texture, low in sugar.
- 127219. No. 4112. Fruit globose, 11 inches in diameter, dark green with stripes of darker green; rind % inch thick; flesh rich apricot pink, of good texture, sweet.
- Nos. 127220 to 127228. From Kang, November 1, at 1,700 feet altitude. The melons of this district are noted for their size and sweetness. These are the remnants of the crop that was harvested a month or two earlier. Grown in great drought.
- 127220. No. 4113. Fruit subglobose, 11 inches in diameter, slightly flattened, grass green; rind ½ to % inch thick; flesh deep apricot pink, of good texture, but low in sugar.
- 127221. No. 4114. Fruit globose, 11 inches in diameter, sea green with broken vermiculations; rind \( \frac{5}{8} \) inch thick; flesh deep apricot pink, of good texture and sweet.
- 127222. No. 4115. Fruit globose, 10 inches in diameter, deep green; rind ½ inch thick; flesh pink, tinged apricot, of good texture, fairly sweet.
- 127223. No. 4116. Fruit globose, 8 inches in diameter, sea green with narrow stripes of very dark green; rind ½ inch thick; flesh apricot pink; of good texture, but insipid.
- 127224. No. 4117. Fruit globose, 8 inches in diameter, pea green; rind % inch thick; flesh apricot pink.
- 127225. No. 4118. Fruit globose, 8 inches in diameter, whitish green with rib lines of darker green; flesh pink, tinged apricot, of fair texture and sweet.
- 127226. No. 4119. Fruit globose, 10 inches in diameter, yellow green, rind % inch thick; flesh bright pink.
- 127227. No. 4120. Fruit globose, 10 inches in diameter, deep green; rind % inch thick; flesh apricot pink.
- 127228. No. 4121. Fruit globose, 11 inches in diameter, pea green; rind ½ inch thick; flesh pink, of good texture, fairly sweet.
- 127229. No. 4123. From Milikirki, November 1, at 1,700 feet altitude. A mixed sample of seed grown in great heat and said to be of good quality.
- Nos. 127230 to 127248. From Kang, November 2 to 4, at 1,700 feet altitude. [See note under 127220 to 127228.]
- 127230. No. 4124. Fruit globose, 8 inches in diameter, equally striped with grass green and sea green; rind ½ inch thick; flesh pink, insipid.
- 127231. No. 4125. Fruit 14 by 7 inches, grass green; rind ½ inch thick.
- 127232. No. 4126. Fruit 13 by 6 inches, grass green with peeping stripes of light green; rind  $\frac{1}{2}$  inch thick.
- 127233. No. 4127. Fruit globose, pale green with narrow stripes of darker green; rind ½ inch thick.
- 127234. No. 4128. Fruit globose, 10 inches in diameter, equal stripes of sea green and grass green; rind % inch thick; flesh apricot pink.
- 127235. No. 4129. Fruit globose, 10 inches in diameter, deep green with noticeable stripes of darker green; rind % inch thick; flesh bright pink; of good texture, but insipid.
- 127236. No. 4130. Fruit globose, 10 inches in diameter, grass green with darker vermiculations; rind ½ inch thick; flesh apricot pink.

- 127237. No. 4131. Fruit globose, 11 inches in diameter, sea green; rind % inch thick; flesh\_bright pink; of good texture, but insipid.
  - 127238. No. 4132. Fruit globose, 10 inches in diameter, dark green; rind ½ inch thick; flesh apricot pink, of good texture.
  - 127239. No. 4133. Fruit globose, 10 inches in diameter, equal stripes of pea green and grass green; rind ½ inch thick; flesh apricot pink.
  - 127240. No. 4134. Fruit globose, 10 inches in diameter, pea green with more or less striping of darker green; rind ½ inch thick; flesh bright pink, of good texture, sweet.
  - 127241. No. 4144. Fruit 13 by 7 inches, pale green, rind  $\frac{1}{2}$  inch thick; flesh pink; of good texture, but low in sugar.
  - 127242. No. 4145. Fruit globose, 11 inches in diameter, pale green with narrow very dark green stripes; rind % inch thick; flesh pink, of good texture, fairly sweet.
  - 127243. No. 4146. Fruit globose, 10 inches in diameter, with equal stripes of grass green and lighter green; rind ½ inch thick; flesh pink; of good texture, but low in sugar.
  - 127244. No. 4147. Fruit 12 by 7 inches, whitish green with irregular narrow blotched stripes of pea green; rind ½ inch thick; flesh apricot pink, of fair texture, sweet.
  - 127245. No. 4149. Fruit globose, 12 inches in diameter, deep green with broken vermiculations; rind 5% inch thick; flesh deep apricot pink, of good quality.
  - 127246. No. 4150. Fruit globose, 12 inches in diameter; grass green; rind ½ inch thick; flesh apricot pink, of good quality.
  - 127247. No. 4151. Fruit globose, 12 inches in diameter, pale green with handsomely irregular stripes of grass green; rind % inch thick; flesh rich apricot pink, of good quality.
  - 127248. No. 4156. Fruit globose, 10 inches in diameter, grass green with stripes of darker green; rind ½ inch thick; flesh pink, of good quality.
    - Nos. 127249 to 127253. From Herat, November 12, at 3,000 feet altitude.
  - 127249. No. 4163. Fruit  $1\overline{2}$  by 9 inches, greenish white; rind  $\frac{1}{2}$  inch thick; flesh pink, of good quality; probably a good keeper.
  - 127250. No. 4173. Fruit 14 by 9 inches, sea green; rind % inch thick; flesh pink, of good texture, low in sugar; probably a good keeper.
  - 127251. No. 4174. Fruit 12 by 10 inches, sea green; rind  $\frac{3}{2}$  to  $\frac{1}{2}$  inch thick; flesh deep rose, of good texture and fair sugar content; a good keeper.
  - 127252. No. 4176. Fruit globose, 11 inches in diameter, grass green with narrow stripes of darker green; rind ½ inch thick; flesh apricot pink, of good quality.
  - 127253. No. 4177. Fruit globose, 10 inches in diameter, very dark green; rind ¼ inch thick; flesh pink, of good quality.
  - 127254. No. 4196. *Tabuza* or *Henduwana*. From Karokh, November 12, at 3,500 feet altitude. Fruit globose, 10 inches in diameter, very dark green; rind ½ inch thick; flesh of good quality.
  - 127255. No. 4204. From Bala Murghab, at 2,000 feet altitude, November 15. Fruit 12 by 8 inches, pea green with grass-green stripes; rind ½ inch thick; flesh yellow.
  - Nos. 127256 and 127257. From Chechaktu, November 15, at 4,000 feet altitude.
  - 127256. No. 4209. Fruit globose, 10 inches in diameter, pale green; rind  $\frac{1}{2}$  inch thick; flesh bright pink, of good quality.
  - 127257. No. 4210. Fruit pear-shaped, 12 inches high, pale green; rind ½ inch thick; flesh bright pink, of good quality. The narrow stem end of the fruit is almost seedless, and the rest of the fruit has very few seeds.
  - Nos. 127258 to 127267. From Maimana, November 15 to 19, at 2,000 feet  ${f altitude}$ .

- 127258. No. 4211. Fruit 12 by 10 inches, pale green; rind  $\frac{1}{2}$  inch thick; flesh pink.
- 127259. No. 4224. Fruit globose, 10 inches in diameter, pea green with narrow chain stripes of very dark green; rind ½ inch thick; flesh pink, of fair texture, very sweet.
- 127260. No. 4225. Fruit globose, 10 inches in diameter, pale green with narrow chain stripes of grass green; rind % inch thick; flesh rose, very sweet, of good texture.
- 127261. No. 4226. Fruit 12 by 7 inches, very dark green with paler green stripes; rind % inch thick; flesh deep pink. A first-class fruit.
- 127262. No. 4227. Fruit globose, 10 inches in diameter, pale green with chain stripes of very dark green; rind ½ inch thick; flesh rose-colored, of good quality.
- 127263. No. 4233. Fruit globose, 8 inches in diameter, pale green with irregular narrow stripes of darker green; rind ½ inch thick; flesh pink, of fair texture, very sweet.
- 127264. No. 4234. Fruit 12 by 10 inches, pale green; rind ½ inch thick; flesh pink, of fair texture, sweet.
- 127265. No. 4236. Fruit 12 by 10 inches, pea green, heavily clouded and mottled with darker green; rind ½ inch thick; flesh pink, of fair texture, very sweet.
- 127266. No. 4237. Fruit globose, 10 inches in diameter, dark green; rind ½ inch thick; flesh bright pink, of good quality.
- 127267. No. 4244. Fruit pear-shaped, 12 inches long, greenish white; rind ½ inch thick; flesh pink, sweet, not inclined to be seedless.
- 127263. No. 4245. From Daulatabad, November 19, at 1,500 feet altitude. Fruit sea green, globose, 10 inches in diameter, ribs distinctly indented; rind ½ inch thick, flesh pink, of good texture, very sweet.
- Nos. 127269 to 127282. From Andkhin, November 20 to 23, at 1,500 feet altitude.
- 127269. No. 4246. Fruit subglobose, 12 inches in diameter, sea green with traces of vermiculations; rind  $\frac{1}{2}$  inch thick.
- 127270. No. 4247. Fruit 18 by 10 inches, grass green with stripes of lighter green; rind ¾ inch thick; flesh pink, of good texture and very sweet.
- 127271. No. 4248. Fruit 18 by 10 inches, irregularly elongate, grass green with cloudy stripes of lighter green; rind 3/4 inch thick; flesh pink, very sweet.
- 127272. No. 4249. Fruit 15 by 10 inches, sea green with traces of vermiculation; rind 5% inch thick; flesh bright pink, very sweet.
- 127273. No. 4250. Fruit 12 by 10 inches, pea green, vermiculated with darker green; rind ½ inch thick; flesh bright pink, of fair texture and fair sugar content.
- 127274. No. 4251. Fruit 15 by 10 inches, very dark green; rind 3/4 inch thick; flesh apricot pink, of fair texture and sweet.
- 127275. No. 4252. Fruit 15 by 10 inches; very dark green; rind 34 inch thick.
- 127276. No. 4253. Fruit 14 by 12 inches, grass green and very dark green in equal cloud stripes; rind 3/4 inch thick; flesh apricot pink.
- 127277. No. 4254. Fruit 13 by 10 inches, very dark green with cloudings of lighter green; rind 1 inch thick, ribbed.
- 127278. No. 4255. Fruit 15 by 12 inches, grass green with cloudings of very dark green; rind ¾ inch thick; flesh bright pink, of good texture and sweet.
- 127279. No. 4257. Fruit 14 by 10 inches, very dark green with cloudings of slightly lighter green; rind ¾ inch thick; flesh rose, of fair texture, sweet.
- 127280. No. 4258. Fruit flattened, 14 by 10 inches, with conspicuously indented ribs, very dark green; rind 1 inch thick; flesh rose, of fair texture, sweet.

- 127281. No. 4259. Fruit 18 by 10 inches, irregularly elongate, mottled grass green; rind  $^3$ 4 inch thick; flesh bright rose, of good quality.
- 127282. No. 4265. Fruit 15 by 10 inches, ribbed, reticulated, pea green; rind 5% inch thick; flesh apricot pink, of good quality.
  - Nos. 127283 to 127299. From Balkh, November 28 to December 3.
- 127283. No. 4275. Fruit 18 by 10 inches, pea green, vermiculated with darker green; rind ½ inch thick; flesh pink, of good quality.
- 127284. No. 4276. Fruit 12 by 10 inches, very dark green; rind % inch thick; flesh deep rose, of good quality.
- 127285. No. 4277. Fruit globose, 12 inches in diameter, ribbed, sea green and vermiculated with darker green; rind ¾ inch thick; flesh pink; sweet, but slightly stringy.
- 127286. No. 4278. Fruit flattened, 12 by 10 inches, grass green, vermiculated with darker green; rind ½ inch thick; flesh pink, very sweet, of fair texture.
- 127287. No. 4279. Fruit 13 by 8 inches, very dark green with faint elongate blotches; rind ½ inch thick; flesh pink, of good quality.
- 127288. No. 4280. Fruit 10 by 8 inches, very dark green; rind ½ inch thick; flesh pink, of good quality.
- 127289. No. 4281. Fruit 15 by 10 inches, very dark green; rind ¾ inch thick; flesh pink, very sweet, of good texture.
- 127290. No. 4283. Fruit globose, 14 inches in diameter, sea green with a vermiculated chain rib; rind ½ inch thick; flesh pink, of excellent quality.
- 127291. No. 4284. Fruit 16 by 10 inches, dark green; rind ½ inch thick; flesh rose, of excellent quality.
- 127292. No. 4285. Fruit 15 by 10 inches, with equal blotch stripes of very dark green and paler green; rind 5% inch thick; flesh pink, of good quality.
- 127293. No. 4287. Fruit globose, 12 inches in diameter, very dark green; rind ¾ inch thick; flesh deep rose, of good quality.
- 127294. No. 4289. Fruit 12 by 10 inches, with equal stripes of pea green and grass green, ribbed; rind ¾ inch thick; flesh pink, of good quality.
- 127295. No. 4292. Fruit globose, 12 inches in diameter, very dark green, clouded with paler green; rind \( \frac{5}{8} \) inch thick; flesh of good texture and fair sugar; apricot colored next to the rind, shading to peach pink toward the heart.
- 127296. No. 4294. Fruit pear-shaped, 12 inches long, pea green, vermiculated; rind ½ to 5% inch thick; flesh bright peach pink, of excellent quality. This form tends to have few seeds.
- 127297. No. 4295. Fruit globose, 11 inches in diameter, very dark green, deeply ribbed; rind ¾ inch thick; flesh pink, sweet, rather stringy.
- 127298. No. 4296. Fruit globose, 12 inches in diameter, very dark green with paler stripes; rind ¾ inch thick; flesh pink, of good quality.
- 127299. No. 4297. Fruit globose, 12 inches in diameter, grass green, ribbed; rind ¾ inch thick; flesh rose, sweet, rather stringy.
- 127300. No. 4299. From Mazar-i-Sharif, December 5. Fruit globose, 11 inches in diameter, pea green, vermiculated with darker green; rind ¼ inch thick; flesh pink, sweet, somewhat stringy.
  - Nos. 127301 to 127305. From Pul-i-Kumri, December 8.
- 127301. No. 4303. Fruit globose, 13 inches in diameter, grass green with narrow dark green stripes; rind 34 inch thick; flesh pink, sweet but slightly stringy.
- 127302. No. 4304. Fruit globose, 11 inches in diameter, with equal stripes of grass green and pea green; rind % inch thick; flesh pink, of good quality.
- 127303. No. 4305. Fruit globose, 10 inches in diameter, very dark green; rind ½ inch thick; flesh pink, of good quality.

127304. No. 4306. Fruit 16 by 9 inches, sea green with coarse vermiculations; rind  $\frac{1}{2}$  inch thick; flesh pink, of good quality.

127305. No. 4307. Fruit 15 by 10 inches, grass green; flesh pink, of good quality; rind  $\frac{5}{8}$  inch thick.

Nos. 127306 to 127308. From Doshi, December 9.

127306. No. 4308. Fruit globose, 10 inches in diameter, grass green; rind ½ inch thick; flesh pink, of good quality.

127307. No. 4309. Fruit globose, 10 inches in diameter, pea green with broken vermiculations; rind ½ inch thick; flesh pink, of good texture and quality.

127308. No. 4310. Fruit globose, 8 inches in diameter; rind ½ inch thick; flesh pale rose, of fair quality.

Nos. 127309 and 127310. From Doao, December 12.

127309. No. 4311. Fruit globose, 10 inches in diameter, sea green, fretted with darker green and with narrow grass green stripes; rind ½ inch thick; flesh yellow, of good quality.

127310. No. 4312. Fruit globose, 8 inches in diameter, pea green with broken vermiculations; rind  $\frac{1}{2}$  inch thick; flesh yellow, of good quality, but seedy.

#### 127311 to 127318.

From France. Plants purchased from Pepinières LePage et Cie., Angers, Maineet-Loire. Received February 21, 1938.

127311 to 127316. Malus sylvestris Mill. Malaceae.

Apple.

127311. Amère de Berthecourt.

127314. Fertile de Falaise.

127312. Belle du Désert.

127315. Médaille d'Or.

127313. Eliza Radtke.

127316. Reinette de Champagne.

127317 and 127318. Pyrus communis L. Malaceae.

Common pear.

127317. Président Loubet.

127318. Suprême de Quimper.

127319. Pelagodoxa Henryana Beccari. Phoenicaceae. Palm.

From the Society Islands. Seeds presented by Harrison W. Smith, Tahiti. Received February 23, 1938.

An unarmed palm with a trunk 18 to 24 feet high and 5 to 7 inches in diameter which grows on stilt roots like a pandanus; the blades are 6 to 9 feet long and petioles about 3 feet long. The large spherical fruits are in racemes of 12 to 16. The palm requires shade and is of very striking appearance. Native to the Marquesas Islands.

#### 127320 to 127349.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 9, 1938.

Unless otherwise noted, this material was all obtained through Chamba Tsering, of Kampuk, Nubra, Kashmir State, December 31, 1937.

127320. ALLIUM CEPA L. Liliaceae.

Onion.

No. 4353. Tsong. Grown in Yarkand.

127321. Amaranthus gangeticus L. Amaranthaceae. Ganges amaranth.

No. 4249. A potherb; from Yarkand.

127322. Amygdalus persica L. Amygdalaceae.

Peach.

No. 4365. From Yarkand.

127323. Amygdalus persica L. Amygdalaceae.

Peach.

No. 4378. Received January 4, 1938, from I. M. Shah, of the North West Frontier Province, Department of Agriculture, at Serai Naurang, Bannu District. A yellow-fleshed, local variety.

# 127320 to 127349—Continued

127324 to 127328. Capsicum frutescens L. Solanaceae. Common redpepper.

127324. No. 4369. Merch. From Mathura, Chamba State, December 29, 1937; originally from somewhere in the Himalayan foothills. Fruit orange, 2 by % inches; hot.

Nos. 127325 to 127328 were received January 4, 1938, from the Superintendent, Botanical Substation, Pusa, Bihar.

127325. No. 4374. Pusa Type No. 41.

127326. No. 4375. Pusa Type No. 51.

127327. No. 4376. Pusa Type No. 4.

127328. No. 4377. Pusa Hybrid 2-54-1 T 29  $\times$  T 14.

127329. Chenopodiaceae.

No. 4359. Paltara.

127339. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

No. 4364. Said to have come from Yarkand.

127331. Crataegus sp. Malaceae.

No. 4379. Lakot. Received January 4, 1938, from Skardo, Baltistan. An attractive tree which is used as a stock for quinces.

127332. Cucumis melo L. Cucurbitaceae.

Muskmelon.

No. 4367. From Yarkand.

127333. Cucurbita Maxima Duchesne. Cucurbitaceae.

Squash.

No. 4366. From Yarkand.

127334. GNETUM SCADENS ROXD. Gnetaceae.

No. 4381. January 4, 1938. Presented by the District Forest Officer, Mangalore. A stout woody climber with a compressed trunk 4 or 5 feet in girth and smooth, shining oblong or ovate leaves about 6 inches long. Native to eastern India and the Malayan region.

127335. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

No. 4360. Dum. From Yarkand.

127336. Medicago sativa L. Fabaceae.

Alfalfa.

No. 4348. Oal. From Yarkand.

127337. Medicago sativa L. Fabaceae.

Alfalfa.

No. 4362. Reshka or Oal. From Yarkand.

127338. Populus sp. Salicaceae.

No. 4350. A locally grown tree.

127339. Punica granatum L. Punicaceae.

Pomegranate.

No. 4363.

127340. Punica granatum L. Punicaceae.

Pomegranate.

No. 4368. Bedana. Collected at Mathura, India, December 29, 1937, but the fruit probably came from Afghanistan. Fruit 4 inches in diameter; shell dry, pinkish; Juice pink, sweet; pericarp not acrid, soft.

127341. Rosa sp. Rosaceae.

Rose.

No. 4357.

127342. Rosa sp. Rosaceae.

Rose.

No. 4361.

127343 to 127346. Salix spp. Salicaceae.

Willow.

There are several different handsome willows at Kampuk; some resemble Buxus and some Tamarix.

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# 127320 to 127349—Continued

127343. SALIX SD.

No. 4352.

127344. SALIX Sp.

No. 4354.

127345. SALIX SD.

No. 4356.

127346. SALIX Sp.

No. 4358.

127347 and 127348. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

From Sanchi Bhopal, January 3, 1938.

127347. No. 3470. Pici. One of the best of Indian wheats, now 3 to 4 inches high; it grows in winter in a region of less than 30 inches of rain and is very drought-resistant.

127348. No. 4371. Gao. Like No. 3470 [P. I. 127347], but a poorer quality. 127349. Zea mays L. Poaceae.

Corn.

December 21, 1937. Received from the Secretariat of the Chamba State: said to have come from Tarlognath, Chamba, at about 9,000 feet altitude.

#### 127350 to 127385.

From France. Plants bought from Pépinières Baltet Frères, Troyes (Aube). Received February 21, 1938.

127350 to 127353. Amygdalus persica L. Amygdalaceae.

Peach.

127350. Gaillard-Girerd II.

127352, Madame Grande Clement.

127351. Madame Girerd.

127353. Veloutée de Champagne.

127354 to 127370. Malus sylvestris Mill. Malaceae.

Apple.

127354. Belle-fleur.

127363. Impériale.

127355. Calville Duquesne.

127364. Ménagère.

127356. Calville Rouge d'Cullins.

127365. Nez de Chat.

127357. D'Averolles.

127366, Tambour d'Himbsel.

127358. De Flandres.

127367. Reinette du Vigan.

127359. Double Rose.

127368. Reinette Grise Parmentier.

127360. Faro.

127369, Reinette Jules Labitte.

127361. Géante d'Exposition.

127370, Teint Frais.

127362. Gros Locard.

127371 to 127380. Prunus avium L. Amygdalaceae.

127376. Guigne Pourpré Hâtive.

127371. Espéren. 127372. Gros Noir.

127377. Guigne Précoce de Tarascon.

127373, Grosse Transparente.

127378. Hâtif Burlat. 127379. Luizet.

127374. Guigne Choque. 127375, Guigne d'Annonay.

127380. Marmotte.

127381 to 127385. Pyrus communis L. Malaceae.

Common pear.

Sweet cherry.

127381. Beurré Baltet Père.

127382. Beurré Gris d'Amboise.

127383. Calebasse Madame Charles Furst.

127384. Fondante de Croncels.

127385. Virginie Baltet.

#### 127386 to 127388.

From California. Seeds presented by Mrs. Edith V. A. Murphey, Potter Valley, Mendocino County. Received February 23, 1938.

127386. Amygdalus persica L. Amygdalaceae.

Peach.

A peach grown by the Indians of this area.

127387. Phaseolus coccineus L. Fabaceae.

Scarlet runner bean.

Aztec beans, hardy, drought-resistant; will bear the second year from the old root.

127388, Phaseolus vulgaris L. Fabaceae.

Common bean.

Pinto beans, from Schmidtlein's ranch.

127389 to 127392. Fragaria spp. Rosaceae.

Strawberry.

From Scotland. Plants presented by the Department of Agriculture for Scotland, Edinburgh. Received February 6, 1938.

Strawberry seedlings grown at the West Scotland Experiment Station, Auchincruive, Ayr.

127389. Selection C. C. 18.

127391. Selection B. K. 48.

127392, Selection B. K. 52.

127390. Selection B. K. 46.

127393 to 127395. Prunus spp. Amygdalaceae.

From Hungary. Scions presented by Dr. A. P. Bunzlau, Experiment Station, Kecskemet. Received February 28, 1938.

127393. PRUNUS ARMENIACA L.

Apricot.

Rozsabarack. A very large late variety.

127394. Prunus sp.

A cherry [received without notes].

127395. Prunus sp.

A cherry [received without notes].

## 127396 to 127398.

From Mexico. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry, United States Department of Agriculture. Received February 24, 1938.

127396. Bomarea Oligantha Baker. Amaryllidaceae.

No. 9085-A. January 5, 1938. From Petlacala, Minas Sierra Madre del Sur, Guerrero, at about 4,000 feet altitude, in mountain forest. A bomarea with slender elongate sarmentose stems, thin, lax, oblong leaves 3 to 4 inches long, and 6 to 8 flowers in simple umbels. The perianth segments are about 1 inch long, the outer, oblanceolate duli red outside, the inner, cuneate-clawed, bright yellow with brown spots. Native to the Peruvian Andes.

127397. Dioscorea sp. Dioscoreaceae.

No. 8716-A. Bejuco Costillude Huaco. November 1, 1938. From Barranca de la Julia, Adama Temisco, north of Rio Balsas, Guerrero. A vine with thickened roots, found climbing over small trees near streams.

127398. CLITORIA TERNATEA L. Fabaceae.

No. 8717-A. November 1, 1937. Manga de Niño. From Temisco, Adama, Guerrero, in the gardens of the mining building at about 1,000 feet altitude. A vine up to 7 feet long with deep-blue flowers.

For previous introduction see 117390.

#### 127399 to 127415.

From Germany. Plants purchased from the Wile. Teickner Baumschulen, Gernrode-Harz. Received March 1, 1938.

## 127399 to 127415—Continued

127399 to 127415. Prunus spp. Amygdalaceae.

127399 to 127401. Prunus avium L.

Sweet cherry.

127399. Ampfurter Schiv. Knorpelkirsche.

127400. Badeborner Dunkelbraun Knorpelkirsche.

127401. Braunaur.

127402 and 127403. PRUNUS CERASUS L.

Sour cherry.

127402. Diemitzer Amarelle.

127403. Excellenz von Hindenburg.

127404 to 127409. PRUNUS AVIUM L.

Sweet cherry.

127404. Fromms Herzkirsche.

127405. Frühe Französische.

127406. Frühe Werdersche.

127407. Grosse Prinzessenkirsche.

127408. Grosse Schwarze Knorpelkirsche.

127409. Kunzes Kirsche.

127410. PRUNUS CERASUS L.

Sour cherry.

Leitzkauer Pressauerkirsche.

127411 to 127413. PRUNUS AVIUM L.

Sweet cherry.

127411. Schneiders Späte Knorpelkirsche.

127412. Teickners Schwarze Knorpelkirsche.

127413. Harzer Gebirgsvögelkirsche.

127414 and 127415. PRUNUS DOMESTICA L.

Common plum.

127414. Bühler Frühzevetsche.

127415. Wagenheims Frühswetsche.

127415. Pyrus communis L. Malaceae.

Common pear.

Okra.

Onion.

Gernroder Winterbirne.

#### 127416 to 127486.

From India and Afghanistan. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 15, 1938.

Unless otherwise mentioned, the material was collected in Afghanistan and received as seeds.

127417. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae.

No. 4110. From Farah, October 31, 1937. Fruit 4 to 5 inches long.

127418 to 127422. Allium CEPA L. Liliaceae.

127418. No. 3004. Piyaz. From Gardez, June 16, 1937, at 8,000 feet altitude. A red globe onion.

127419. No. 3939. *Piyaz*. From the market at Ghazni, October 8, 1937, at 8,000 feet altitude. A flat, purple-red and white onion, 4 inches in diameter.

127420. No. 3997. *Piyaz*. From the market at Khalat, October 14, 1937, at 8,000 feet altitude. A white or purple-red onion, much flattened and up to 4 inches across.

127421. No. 4166. *Piyaz*. From the market at Herat, November 12, 1937, at 3,000 feet altitude. A flat onion, about 3 inches across, purple-red, rarely white; the white ones are rather mild.

127422. No. 4269. From the market at Andkhin, November 25, 1937. A flat onion, usually about 5 inches across, white or red; of good quality, grown in a hot climate.

127423 and 127424. ALLIUM SATIVUM L. Liliaceae.

Garlic.

127423. No. 4272. Sio. Bulblets from Andkhin, November 25, 1937. Climate very hot in summer.

127424. No. 4328. Bulb from Charikar, December 25, 1937.

127425. Spinacia oleracea L. Chenopodiaceae.

Common spinach.

No. 4192. Palak. From Herat, October 13, 1937, at 3,000 feet altitude.

Nos. 127426 to 127428. From Londa, Bombay Presidency, India, January 23, 1938, at 2,000 feet altitude.

127426. Gentiana sp. Gentianaceae.

A plant with nymphaealike leaves about 6 inches across and an abundance of fragrant white flowers about 1 inch across with yellow centers. The petals are delicately dissected; one of the handsomest of aquatics.

127427. Nymphaeaceae.

No. 4385. The large white flowers, 4½ inches across, rather coarse, but extremely fragrant, are borne 6 inches above the surface in ponds 4 feet deep. They bloom in the daytime in the cold season.

127428. NYMPHAEA Sp.

No. 4386. The very fragrant, pale-pink flowers, 3 inches across, are borne about 5 inches above the surface in shallow ponds. A day bloomer.

127429 to 127433. Amygdalus persica L. Amygdalaceae.

Peach.

Nos. 127429 to 127432. Shaftalu. From Kabul, October 6, at 7,000 feet altitude.

127429. No. 3913. Fruit globose, 3 inches in diameter, mostly crimson; flesh cream; a clingstone of good flavor.

127430. No. 3914. Fruit globose, 1¾ inches in diameter, yellow; flesh yellow; a freestone of good flavor.

127431. No. 3915. Fruit subglobose, 1¾ inches in diameter, nearly two-thirds crimson; flesh yellow, a clingstone of good flavor.

127432. No. 3916. Fruit globose, 1¾ to 2¼ inches in diameter, green yellow with red cheek; flesh white, stained red at the pit; a freestone.

127433. No. 3942. From Ghazni, October 8, 1937, at 8,000 feet altitude. A clingstone 2 inches high, yellow with a crimson cheek; flesh cream of good flavor.

127434. Amygdalus sp. Amygdalaceae.

No. 4318. From Kabul, December 12, 1937. Said to have come from the Hindu Kush Range nearby; fruit edible; plant possibly ornamental.

127435 to 127437. Beta vulgaris L. Chenopodiaceae. Common beet.

127435. No. 3940. Lablabu or Chakundur. From the market at Ghazni, October 8, 1937, at 8,000 feet altitude. A red beet, in form like a mangel-wurzel.

1279436. No. 4181. Chakundur. From Herat, October 13, 1937, at 3,000 feet altitude. A long red beet.

127437. No. 4221. *Chakundur*. From Maimana, October 16, 1937, at 2,000 feet altitude. A mixed sample of red and white beets.

127438 to 127441. Brassica spp. Brassicaceae.

127438. Brassica oleracea capitata L.

Cabbage.

No. 4188. Karm. From Herat at 3,000 feet altitude, November 13, 1937. Heads small, round, of good quality; probably adapted to heat.

127439. Brassica cleracea gongylodes L. Kohlrabi.

No. 4189. From Herat, at 3,000 feet altitude, November 13, 1937.

127440 and 127441. BRASSICA RAPA L.

Turnip.

127440. No. 4006. Shelgam. From Khalat, October 14, 1937. A purplered globe turnip. Those in the fields are sweet and tender.

127441. No. 4170. Shelgam. From Herat, at 3,000 feet altitude, November 12, 1937. A top-shaped yellowish turnip of good quality.

127442 to 127445. Capsicum frutescens L. Solanaceae. Common redpepper.

127442. No. 3925. From Ghazni, October 7, 1937, at 8,000 feet altitude. Cherrylike peppers, hot.

127443. No. 4047. From Kandahar, October 18, 1937, at 5,000 feet altitude. Fruit scarlet crimson, bullnose, 3 by 2 inches, hot.

127444. No. 4109. From Farah, October 31, 1937, at 2.000 feet altitude. Fruit pointed,  $3\frac{1}{2}$  inches long by  $1\frac{1}{2}$  inches at the base, crimson and mildly hot.

127445. No. 4232. From Maimana, November 18, 1937, at 2,000 feet altitude. Fruit bullnosed, 4 by 2 inches, scarlet to crimson and hot.

127446 to 127454. DAUCUS CAROTA L. Apiaceae.

Carrot.

127446. No. 3937. Zardak. From Ghazni, October 8, 1937, at 8,000 feet altitude. A long yellow carrot with no fiber and little sugar.

127447. No. 4148. Zardak. From the market at Kang, November 3, 1937, at 1,700 feet altitude.

127448. No. 3976. From Khalat, October 12, 1937, at 8,000 feet altitude. A long reddish carrot.

127449. No. 4049. Zardak. From the market at Kandahar, October 19, 1937. A deep reddish-purple carrot.

127450. No. 4090. From Girishk, October 28, 1937. A long pale-yellow, fairly sweet carrot of good texture. Sown for fall and winter use.

127451. No. 4169. Zardak. From Herat, November 12, 1937.

127452. No. 4186. Zardak. From Herat, November 13, 1937, at 3,000 feet altitude. Probably a mixed sample of pale yellow and long red carrots.

127453. No. 4222. Zardak. From Maimana. A mixture of smooth, long yellow and purple-red carrots. Some have fiber and others none; good.

127454. No. 4270. Zardak. From the market at Andkhin, October 25, 1937. A long smooth, yellow carrot.

127455 to 127457. Figure spp. Moraceae.

Fig.

127455, Figure 80.

No. 3826. From Balkh, September 19, 1937, at 1,200 feet altitude. A shrub with an unbranched or little divided stem for 6 to 10 feet, growing in clumps. Fruit  $1\frac{1}{2}$  inches in diameter, reddish purple, good. The shrub tolerated 3 months of snow and ground freezing a few inches.

127456. Figure sp.

No. 3898. From Kabul, September 27, 1937, at 7,000 feet altitude. Fruit  $1\frac{1}{2}$  inches in diameter, red-purple, insipid. The shrub grows here in subzero temperatures.

127457. Figure sp.

No. 4095. From Girishk, October 28, 1937. Said to be local. Shrub 15 feet high, with trunks 3 inches through, growing in clumps. Will tolerate below-freezing temperatures.

127458 to 127461. Juglans regia L. Juglandaceae.

Persian walnut.

Charmaghz. Trees tolerate sub-zero temperatures.

127458. No. 3929. From Ghazni, October 7, 1937, at 8,000 feet altitude.

127459. No. 4322. From Paghman, December 13, 1937.

127460. No. 4323. From Paghman, December 13, 1937.

127461. No. 4324. From Paghman, December 13, 1937. These nuts have thinner shells than Nos. 4322 and 4323 [P. I. 127459 and 127460].

127462 and 127463. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

127462. No. 3956. From Mukkur, October 10, 1937, at 8,500 feet altitude. An ornamental fruit 1 foot long.

127463. No. 4185. *Chobkadu*. From Herat, November 13, 1937, at 3,000 feet altitude.

127464 to 127466. Luffa acutangula (L.) Roxb. Cucurbitaceae.

Singkwa towelgourd.

127464. No. 4021. Tori. From Kandahar, October 16, 1937, at 5,000 feet altitude. Fruit 1 foot by 5 inches.

127465. No. 4193. Tori. From Herat, November 13, 1937.

127466. No. 4274. From Andkhin, November 25, 1937. The fresh young fruits are esteemed as a vegetable.

127467 to 127469. Lycopersicon esculentum Mill. Solanaceae. Tomato.

127467. No. 4107. From Girishk, October 29, 1937. Fruits red, elongate to globose, 2 by 3 inches. Grown under high temperatures.

127468. No. 4111. From Farah, October 31, 1937. Fruits red globose, 1½ inches in diameter. The plants are extraordinarily vigorous and productive, tolerate great heat, and all are healthy.

127469. No. 4182. Benjanerunie. From Herat, November 13, 1937, at 3,000 feet altitude.

127470. Phaseolus vulgaris L. Fabaceae.

Common bean.

No. 4329. From Kabul, December 14, 1937. Possibly an introduced variety. 127471 to 127477. Prunus spp. Amygdalaceae.

127471 to 127475. PRUNUS ARMENIACA L.

Apricot.

Nos. 127471 to 127474. From Kandahar, October 17, 1937, at 5,000 feet altitude.

127471. No. 4031. Dried fruit of good quality, 1 by 1¼ inches, apparently pale yellow when fresh, very sweet, seed edible.

127472. No. 4032. Dried fruit, apparently yellow when fresh,  $1\frac{1}{4}$  by  $1\frac{1}{2}$  inches, very sweet and fleshy; seed edible.

127473. No. 4033. A mixed sample.

127474. No. 4034. Dried fruit, apparently yellow when fresh; 1½ by 1¼ inches, very sweet and fleshy; seed edible.

127475. No. 4036. From Sardeh, October 18, 1937, at 5,000 feet altitude. A mixed sample.

127476 and 127477. PRUNUS DOMESTICA L.

Common plum.

127476. No. 3920. From Ghazni, October 7, 1937, at 8,000 feet altitude. Fruit ellipsoid, 1¼ inches long, blue; flesh yellow, tender, good, a freestone.

127477. No. 4030. From Kandahar, October 7, 1937. at 5,000 feet altitude. Dried fruit, like medium dried prunes in size and color; sour.

127478 to 127480. Raphanus sativus L. Brassicaceae. Radish.

127478. No. 4183. *Muli.* From Herat, November 13, 1937, at 3,000 feet altitude. A long radish; probably white or red.

127479. No. 4190. *Muli.* From Herat, November 13, 1937, at 3,000 feet altitude. A white, top-shaped radish.

127480. No. 4271. Muli. From Andkhin, November 25, 1937. A large winter type of radish.

127481. Rubus sp. Rosaceae.

No. 4044. From Sardeh, October 18, 1937, at 5,000 feet altitude. A blackberry bush 6 feet high or, becoming scandent, it may reach 10 feet; leaves deeply notched, 2½ by 2½ inches; fruits in a long loose raceme over 6 inches long, rather abundant; raspberry shaped, ¼ inch across, black, no bloom, pleasantly acid, retaining placenta in blackberry fashion.

127482 to 127485. Solanum melongena L. Solanaceae. Eggplant.

127482. No. 3938. Banjan. From Ghazni, September 8, 1937, at 8,000 feet altitude. A long purple variety.

127483. No. 4020. Banjan. From Kandahar, October 16, 1937, at 5,000 feet altitude. Fruit elongate, 8 by 4 inches, tapered; greenish to purple.

127484. No. 4191. Banjan. From Herat, November 13, 1937, at 3,000 feet altitude. A long purple variety.

127485. No. 4264. Banjan. From Andkhin, November 23, 1937.

127486. VITIS VINIFERA L. Vitaceae.

European grape.

No. 3943. Lal. From Ghazni, October 8, 1937, at 8,000 feet altitude. Introduced probably from Kabul or Kandahar; fruit apricot-cheeked, pink, cranberry texture, sweet and well-flavored.

# 127487 to 127511. Zea mays L. Poaceae.

Corn.

From Czechoslovakia. Seeds presented by the Ministry of Agriculture, Prague. Received March 3, 1938.

# 127512. Agropyron trachycaulum (Link) Malte. Poaceae. Slender wheatgrass.

From Canada. Seeds presented by the Division of Forage Plants, Central Experimental Farm, Ottawa, Ontario, at the request of Dr. M. O. Malte, University of Alberta, Edmonton, Alberta. Received March 1, 1938.

Fura S.2.

# 127513. Crinum podophyllum Hook. Amaryllidaceae.

From Surinam. Bulbs collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received January 15, 1935. Numbered in March 1938.

No. 2945-A. A crinum with a rosette of 5 or 6 spreading, undulate, lanceolate leaves about a foot long and a scape about as long, with several large milk-white flowers. The perianth limb, about 3 inches long, is tinted with green outside. Native to western tropical Africa.

#### 127514 to 127517. Melilotus alba Desr. Fabaceae.

White sweetclover.

Cowpea.

From Canada. Seeds presented by the Dominion Forage Crops Laboratory, University of Saskatchewan, Saskatoon, Saskatchewan. Received March 1, 1938.

127514. S-30-58-82. Mottled seed; plant ordinary sweetclover type.

127515. S-30-58-97. Mottled seed; plant dwarf branching type.

127516. S-268 (selfed); a late-flowering type.

127517. S-26-11-2-4. White sepals; plant dwarf branching type.

# 127518. Vigna sinensis (Torner) Savi. Fabaceae.

From Australia. Seeds presented by Robert Veitch, Chief, Bureau of Plant

Research, Department of Agriculture, Brisbane, Queensland. Received March 1, 1938.

A black-seeded, drought-resistant variety.

#### 127519 to 127621.

From India and Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 18, 1938.

Unless otherwise mentioned, the material was collected in Afghanistan in 1937.

127519 to 127584. Cucumis spp. Cucurbitaceae.

127519 to 127578. CUCUMIS MELO L.

Muskmelon.

127519. No. 3005. From Gardez, June 16, at 8,000 feet altitude.

127520. No. 3001. From Madagha, June 15.

Nos. 127521 to 127541. From Haibak, September 24, at 2,000 feet altitude.

- 127521. No. 3869. Fruit 10 by 7 inches, hard shell, pale yellow, mottled green with traces of coarse net; flesh 1% inches thick, green, good.
- 127522. No. 3870. Like No. 3869 [P. I. 127521], but with creamy white flesh.
- 127523. No. 3871. Fruit obovoid, 6 inches in diameter, with faintly indented ribs of pale green, feather-edged black, and with pale-green islands; nearly smooth; flesh 2 inches thick, creamy green, good.
- 127524. No. 3872. Fruit obovoid, 9 inches in diameter, pale green with narrow irregular stripes and spots of very dark green; flesh 1¾ inches thick, creamy white, good.
- 127525. No. 3873. Fruit elongate-ovoid, 7 inches in diameter, pale green with leaf-green ribs, feather-edged with black; flesh  $1\frac{1}{2}$  inches thick, salmon, insipid.
- 127526. No. 3874. Fruit subglobose, 6 inches in diameter, white, blotched green and a little orange; flesh creamy-colored, good.
- 127527. No. 3875. Fruit elongate, tapered, 8 by 5 inches, smooth, yellow with broken and split ribs of green or orange; flesh 1¾ inches thick, creamy white, good.
- 127528. No. 3876. Fruit flattened, 5 by 4 inches, heavily netted, ribs ½ inch wide, light lead, the rest pale green dotted and spotted with darker green; flesh 1½ inches thick.
- 127529. No. 3877. Fruit ovoid, 6 inches in diameter, pale green, heavily dotted and with split ribs of dark green, no netting; flesh 2 inches thick, green, good.
- 127530. No. 3878. Fruit tapered, 8 by 5 inches, yellow, heavily dotted with green and splashed green or orange, smooth; flesh 2 inches thick, white, good.
- 127531. No. 3879. Fruit globose, 6 inches in diameter, pale green, clouded with darker green, smooth; flesh 1¾ inches thick, white, unripe.
- 127532. No. 3880. Fruit globose, 6 inches in diameter, coarse netting, green rib lines, body pale green, dotted with darker green; flesh 1½ inches thick, creamy green, not good.
- 127533. No. 3881. Fruit ovoid, 8 inches in diameter, orange fretted with paler orange, smooth rib lines broad, lead green; flesh 13/4 inches thick, creamy green, good.
- 127534. No. 3882. Fruit 6 by 4 inches, smooth, pale yellow, dotted with grass green; flesh 1¼ inches thick, immature.
- 127535. No. 3883. Fruit obovoid, 6 inches in diameter, pale green with peagreen islands, faintly indented ribs, feather edged with very dark green, little netting; flesh 2 inches thick, creamy green, good.
- 127536. No. 3884. Fruit 8 by 6 inches, smooth, pale yellow with green rib lines; flesh creamy green, 1¾ inches thick, good.

- 127537. No. 3885. Fruit greenish white, clouded with darker green, smooth, 10 by 8 inches; flesh creamy green, good.
- 127538. No. 3886. Fruit ovoid, 8 inches in diameter, smooth yellow dotted and splashed with green; flesh 2 inches thick, creamy white, very good.
- 127539. No. 3887. Fruit tapered, 8 by 5 inches, smooth, yellow with broken and split ribs of orange and green; flesh  $1\frac{1}{4}$  inches thick, bright green, fair.
- 127540. No. 3890. Fruit globose, 6 inches in diameter, smooth, pale green, dotted with darker green and splashed with orange; flesh 2 inches thick, white, good.
- 127541. No. 3891. Fruit 10 by 7 inches, smooth, green, heavily dotted with very dark green, faintly indented ribs of green; flesh 2 inches thick, creamy green, pear flavor, fine.
- 127542. No. 3892. From Doao, September 24, 1937, at 5,000 feet altitude. Fruit globose, 6 inches in diameter, smooth whitish green splashed with grass green; flesh  $1\frac{1}{2}$  inches thick, salmon, sweet.

Nos. 127543 to 127546. From Kabul, September 24 to October 4, 1937, at 7,000 feet altitude.

- 127543. No. 3894. Fruit 10 by 6, dark green, netted, with nearly smooth, broad, pale-green stripes; flesh 2 inches thick, green, crisp, sweet.
- 127544. No. 3897. Fruit 13 by 7 inches, yellow, heavily netted; flesh 21/4 inches thick, white, sweet; a good keeper.
- 127545. No. 3899. Probably elongate, pale yellow, netted.
- 127546. No. 3905. [No description.]

Nos. 127547 to 127550. From Ghazni October 7, at 8,000 feet altitude.

- 127547. No. 3827. A mixed sample.
- 127548. No. 3928. Fruit 10 by 6 inches, pale yellow, dotted with darker yellow and with broken split stripes of very dark green; flesh 2 inches thick, salmon, good.
- 127549. No. 3930. Fruit 12 by 8 inches, furrowed, yellow, more or less very dark green, no netting; flesh 2 inches thick, white, flavor like the Honey Dew melon; a good keeper.
- 127550. No. 3931. Fruit 12 by 8 inches, smooth, yellow, blotched more or less with grass green; flesh 2 inches thick, white, flat.

Nos. 127551 and 127552. From Khalat, October 14, at 8,000 feet altitude. Mixed samples of end of the season runts, representing about 10 varieties.

127551. No. 3996. 127552. No. 3998.

Nos. 127553 to 127558. From Kandahar, October 16 to 26, at 5,000 feet altitude.

- 127553. No. 4013. Fruit 7 by 5 inches, yellow, netted; flesh 1¾ inches thick, salmon, crisp, sweet; winter keeper.
- 127554. No. 4014. Fruit 10 by 7 inches, tapering to blossom end, irregular, yellow with indented ribs; flesh white to green near the rind, crisp sweet, 2 inches thick; a good keeper.
- 127555. No. 4015. Fruit 10 by 6 inches, yellow, netted; flesh 17/s inches thick, creamy white, crisp, sweet; a good keeper.
- 127556. No. 4016. Fruit 10 by 7 inches, tapered to blossom end, yellow, heavily dotted and streaked with very dark green, netted; flesh green, sweet, crisp, 2 inches thick; a good keeper.
- 127557. No. 4017. Fruit globose, 5 inches in diameter, dark green, netted; flesh 2 inches thick, green, crisp, insipid; a good keeper.
- 127558. No. 4062. Fruit 9 by 6 inches, yellow and very dark green, the green in broad irregular bands, no netting; flesh 1¾ inches thick, cream, insipid.

127559. No. 4122. From Mil-i-Kirki, November 1. A mixed sample. Melons grown in high temperatures.

127560. No. 4136. From Farah, October 31. Sample without notes. Fruit not seen.

Nos. 127561 to 127564. From Herat, November 12 and 13, at 3,000 feet altitude.

127561. No. 4164. Fruit 10 by 6 inches, pointed at both ends, green, dotted more or less with yellow, traces of broken netting; flesh 1¾ inches thick, bright salmon, of good quality.

127562. No. 4172. Fruit 10 by 6 inches, orange yellow, obscurely netted; flesh 1½ inches thick, white, firm, of good quality; keeps well.

127563. No. 4175. Fruit 15 by 6 inches, tapered, mottled green with broad ribs of darker green; flesh  $1\frac{1}{2}$  inches thick, greenish white.

127564. No. 4187. Kharbuza. A mixed sample. The dried flesh has a honey flavor.

Nos. 127565 and 127566. From Karokh, November 13, at 3,500 feet altitude.

127565. No. 4197. Kharbuza. A mixed sample.

127566, No. 4199, Kharbuza, Fruit not seen,

Nos. 127567 and 127568. From Maimana, November 16, at 3,000 feet altitude.

127567. No. 4214. Fruit elongate, 10 by 7 inches, yellow with more or less broken stripes of green; flesh 1¾ inches thick, creamy white, good.

127568. No. 4216. Fruit 10 by 7 inches, yellow green with broad broken stripes of very dark green; surface rough; flesh 2 inches thick, creamy, good.

Nos. 127569 to 127572. From Almar, November 15.

127569. No. 4217. Fruit 16 by 8 inches, green slightly marked with orange, heavy coarse netting; flesh 2 inches thick, green, good.

127570. No. 4218. Fruit 10 by 6 inches, yellow, more or less clouded with green, no netting; flesh 2 inches thick, white, good.

127571. No. 4219. Fruit globose, 10 inches in diameter, orange, netting obsolescent; flesh 2 inches thick, white, good.

127572. No 4220. Fruit 10 by 6 inches, smooth, yellow; flesh 2 inches thick, creamy white, good.

Nos. 127573 to 127575. From Maimana, November 18 and 19, at  $2{,}000$  feet altitude.

127573. No. 4235. Fruit 10 by 8 inches, yellow clouded with green, coarsely netted; flesh 2 inches thick, creamy white, good.

127574. No. 4238. Fruit 10 by 6 inches, golden yellow, heavily furrowed; flesh 1¾ inches thick, whitish, very good.

127575. No. 4239. Fruit 10 by 7 inches, yellow, heavily sprinkled with green, and raised warts of green, surface rough; flesh 1¾ inches thick, greenish white, good.

Nos. 127576 to 127578. From Andkhin, November 21 to 25, at 1,500 feet altitude.

127576. No. 4256. Fruit 14 by 8 inches, orange with broad broken stripes of green; netting heavy; flesh 2 inches thick, whitish; not one of the best keepers.

127577. No. 4266. Fruit oval, 16 by 8 inches, yellow, deeply furrowed, finely and closely sprinkled with green; flesh 3 inches thick, white, delicious. Though harvested 6 or 8 weeks ago, this melon is still fresh. One of the best in quality and the best keeper so far seem.

127578. No. 4273. Istanbul. Fruits kept for their fragrance; carried in the hand.

127579 to 127584. Cucumis sativus L.

Cucumber.

- 127579. No. 4384. From Londa, Bombay Presidency, January 1, 1938, at 5,000 feet altitude. An "everlasting" wild cucumber, annual. Of possible interest to breeders.
- 127580. No. 3948. Badrang. From Ghazni, October 8, at 8,000 feet altitude. Fruit 10 by 4 inches, russet brown when ripe.
- 127581. No. 4004. Badrang. From Khalat, October 14, at 8,000 feet altitude. Fruit not seen.
- 127582. No. 4097. From Ghazni, October 8. Fruit 6 by 3½ inches, russet and coarsely netted when ripe; a common Afghan type.
- 127583. No. 4167. Badrang. From Herat, November 12, at 3,000 feet altitude. Fruit not seen.
- 127584. No. 4262. Badrang. From Andkhin, November 22, at 1,500 feet altitude. Fruit 10 by 41/2 inches, deep russet.

# 127585 to 127590. Cucurbita maxima Duchesne.

Squash.

- 127585. No. 4037. From Sardeh, October 18, at 5,000 feet altitude. Fruit flattened, 14 by 9 inches, orange red, spotted with paler red, ribs widely spaced and deep with irregular narrow lines of green; flesh 21/4 inches thick, orange.
- 127586. No. 3947. From Ghazni, October 8, at 8,000 feet altitude. Fruit flattened, 12 by 8 inches, coral red, more or less splashed with green, rib lines often bordered with greenish white; flesh 1¾ inches thick, pale yellow.
- 127587. No. 3955. From Mukkur, October 10, at 8,500 feet altitude. Fruit 10 inches long, brown green with obsolescent dull-gray rib lines, ribs faintly indented, some splashing of coral red; flesh 2 inches thick, orange yellow.

Nos. 127588 and 127589. Shir Kadu. From Khalat, October 13, at 8,000 feet altitude.

- 127588. No. 4991. Fruit top-shaped, 12 inches high, brownish green with overlaced netting of darker green and clear broken streaks of dull gray green and splashes of orange red; flesh 2 inches thick, cream orange.
- 127589. No. 3992. Fruit subglobose, 12 inches in diameter, creamy white; flesh 1½ to 2 inches thick, creamy orange.
- 127590. No. 4319. From Kabul, November 12. Fruit 21 by 10 inches, orange red, faintly and broadly ribbed; flesh yellow, 2 inches thick, of good texture.

#### 127591 to 127603. Cucurbita moschata Duchesne.

Cushaw.

- 127591. No. 3990. *Pilau Khuri*. From Khalat, October 13, at 8,000 feet altitude. Fruit 18 inches in diameter, orange brown spotted with paler brown; flesh yellow and orange.
- Nos. 127592 to 127594. From Kandahar, October 16, at 5,000 feet altitude.
- 127592. No. 4022. *Kadu*. Fruit 18 by 12 inches, yellow buff, spotted with yellow and deeply ribbed; flesh 134 inches thick, orange, texture good.
- 127593. No. 4023. *Kadu*. Fruit with a neck, buff brown, 1 foot long, ribbed; flesh orange, 1½ inches thick, of good texture.
- 127594. No. 4024. *Kadu*. Fruit subglobose, 10 inches in diameter, buff brown spotted with paler brown, deeply ribbed; flesh 1½ inches thick, orange; a good keeper.
- 127595. No. 4038. From Sardeh, October 18, at 5,000 feet altitude. Fruit 12 by 4 inches with a hard cream-buff shell; flesh cream, 1 inch thick.
- 127596. No. 4061. From Kandahar October 26, at 5,000 feet altitude. Fruit flattened, 12 by 10 inches, pink buff, spotted and mottled with cream, ribs deeply indented, about 1½ inches apart; flesh ½ to 2 inches thick, orange yellow.

127597. No. 4165. *Pilau Kadu*. From Herat, November 12, at 3,000 feet altitude. Fruit with neck, 12 inches long, pink buff with more or less clouding of green, ribs indented; flesh orange, 1 inch thick, texture good.

Nos. 127598 to 127602. From Maimana, October 15 to 18, at 2,000 feet altitude.

- 127598. No. 4212. Pilau Kadu. Fruit with neck, 18 inches long, buff pink, blotched with paler pink; flesh orange.
- 127599. No. 4213.  $Pilau\ Kadu$ . Fruit triangular spheroid, 12 inches in diameter, orange buff, blotched with paler buff, ribs deep and irregular; flesh orange,  $1\frac{1}{2}$  inches thick.
- 127600. No. 4215. Tambal Kadu. Fruit subglobose, 12 inches in diameter, gray green, indented at stem end; ribs obscure; flesh 2 inches thick, bright orange.
- 127601. No. 4228. Makai Kadu. Fruit 16 by 14 inches, gray green, ribs broad and deep; flesh  $2\frac{1}{2}$  inches thick, bright orange.
- 127602. No. 4231. Fruit 15 by 14 inches, pale coral pink with some greenish blotchings; rib stripes of light green; flesh 2½ inches thick, orange.
- 127603. No. 4029. From Kandahar, October 23, at 5,000 feet altitude. Fruit subglobose, 4 inches in diameter; shell hard, orange, slightly warty; flesh orange to green next the rind, not bitter and said to be edible, probably when young and tender.

#### 127604 to 127621. CUCURBITA PEPO L.

Pumpkin.

- 127604. No. 3946. From Ghazni, October 8, at 8,000 feet altitude. Fruit 12 by 7 inches, cream; ribs obscurely indented; flesh 1½ to 3 inches thick, creamy white, texture good.
- 127695. No. 3954. From Mukkur, October 10, at 8,500 feet altitude. Fruit yellow with confused and overlapping netting of green; rib lines green, more or less clearly marked; flesh 1¼ inches thick, pale yellow.

Nos. 127606 and 127607. From Andkhin, October 23 and 24, at 1,500 feet altitude.

- 127606. No. 4263. Fruit 10 by 5 inches, orange mottled with paler orange and striped with yellow, shell hard; flesh orange, 1¼ inches thick.
- 127607. No. 4268. Fruit 12 by 6 inches; shell hard, other, mottled with yellow; flesh  $1\frac{1}{2}$  inches thick, orange.
- 127608. No. 3923. *Kadu*. From Ghazni, October 7, at 8,000 feet altitude. Fruit 12 by 10 inches, whitish and heavily hairlined with grass green; ribs broadly spaced and faintly indented, often broken; flesh pale orange yellow, 2½ inches thick, not sweet; texture good.
- 127609. No. 3960. From Chahjui, October 12, at 8,000 feet altitude. Fruit 12 by 8 inches, orange red, rib stripes narrow, greenish; flesh 1 inch thick, yellow.
- 127610. No. 3993. *Kabuli Kadu*. From Khalat, October 13, at 8,000 feet altitude. Fruit 20 by 11 inches, orange red with narrow and broken streaks of yellow; ribs obscurely indented, belly green; flesh yellow, 1½ inches thick on belly to 3 inches thick on back.
- 127611. No. 4058. From Kandahar, October 23, at 5,000 feet altitude. Fruit acorn-shaped, 1 foot across, splashed and rib lined with green, ribs obscure; flesh orange, 13/4 inches thick, texture good.
  - Nos. 127612 and 127613. From Girishk, October 27.
- 127612. No. 4075. Fruit 18 by 9 inches, orange with narrow, often incomplete stripes, rather regular and whitish; belly gray green; flesh 2 inches thick, yellow.

127613. No. 4089. Fruit globose, 8 inches in diameter, orange red, ribs cream, faintly indented, the whole fruit more or less blotched with gray green; flesh 1 inch thick, pale yellow.

Nos. 127614 and 127615. From Kang, November 4 and 5, at 1,700 feet altitude.

127614. No. 4152. Fruit 10 inches across, creamy white, ribs obscurely indented; flesh  $2\frac{1}{2}$  inches thick, yellow, texture good.

127615. No. 4153. Fruit 18 by 7 inches, body green, washed with orange and blotched with whitish stripes; ribs obscure; flesh orange, 1½ inches thick.

Nos. 127616 and 127617. From Maimana, November 18, at 2,000 feet altitude.

127616. No. 4229. Fruit 12 by 9 inches with indented stem, coral pink with gray green blotching; flesh 2½ inches thick, bright orange.

127617. No. 4230. Tamba Kadu. Fruit flattened, 14 by 10 inches, brown green, flecked with paler green, ribbed and rib lined with lead green; flesh orange, 2½ inches thick.

Nos. 127618 and 127619. From Kabul, December 12 and 13.

127618. Fruit flattened, 10 by 14 inches, cream tinged pink, ribs deep; flesh orange, 2 inches thick, texture good.

127619. No. 4321. Fruit pear-shaped, 10 inches high, orange, very warty; eaten while immature.

Nos. 127620 and 127621. From Herat, November 12 and 13, at 3,000 feet altitude.

127620. No. 4162. Fruit 10 by 5 inches, whitish green with a soft rind; flesh 11/4 inches thick, creamy white.

127621. No. 4184. Said to be white.

# 127622. Brachiaria dictyoneura (Fig. and De Not.) Stapf. Poaceae. Grass.

From Transvaal, Union of South Africa. Seeds presented by D. Meredith, African Explosives and Industries, Ltd., Johannesburg. Received February 28, 1938.

A tufted perennial with ascending stems 1½ to 3 feet high. Native to tropical Africa. The grass grows well on very poor soils, forming a dense, fairly palatable sward, and has the advantage that it can be readily established from seed.

# 127623 to 127632.

From Scotland. Seeds presented by Sir William Wright Smith, Regius Keeper, Royal Botanic Garden, Edinburgh. Received February 26, 1938.

127623. Colchicum sp. Melanthiaceae.

Received under the name "fimbriatum," for which a place of publication has not been found.

Snapweed.

127624. Impatients roylei Walp. Impatientaceae.

An erect annual 4 or 5 feet high, with ovate to ovate-lanceolate leaves and dark-purple, short-spurred flowers on long stalks. Native to the temperate slopes of the western Himalayas from Nepal to Marri, India, between 6,000 and 8,000 feet altitude.

For previous introduction see 28221.

127625. LILIUM LANKONGENSE Franch. Liliaceae.

A Martagon lily with rigid stem up to 4 feet high, many scattered oblong to oblong-lanceolate leaves crowded on the basal half of the stem, and fragrant white flowers flushed with rose purple, solitary, paired, or in racemes of 2 to 12. Native to alpine and subalpine regions of western China.

127626. Nomocharis nana (Klotzsch) Wilson. Liliaceae.

A Himalayan lily about 6 inches high, with grasslike leaves 3 inches long and a small white nodding flower over an inch across.

For previous introduction see 99959.

127627 to 127632. Rhododendron spp. Ericaceae.

127627. RHODODENDRON PENTAPHYLLUM Maxim.

Fiveleaf azalea.

A deciduous shrub up to 25 feet high with, usually, five elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves which turn orange or crimson in the autumn. Native to Japan.

For previous introduction see 117069.

127628. Rhododendron prunifolium (Small) Millais.

127629. Rhododendron smirnowii Trauty.

Smirnow rhododendron.

A shrub or small tree about 20 feet high, with dark-green leaves, gray hairy beneath, and compact heads of rose-red flowers each about 3 inches across. Native to the Caucasus region.

For previous introduction see 114518.

127630. Rhododendron tschonoskii Maxim.

A forest shrub native to Japan, with flaky bark, elliptic leaves 1/3 inch long, and heads of one to four small white flowers.

For previous introduction see 117075.

127631 and 127632. Rhododendron Yunnanense Franch.

Yunnan rhododendron.

A low shrub, 6 feet or less high, with narrowly elliptic somewhat hairy leaves and few-flowered clusters of broadly funnel-shaped flowers, white with the upper lobes spotted blood red. Native to Yunnan, China.

For previous introduction see 98481.

127633 to 127652. Lupinus spp. Fabaceae.

Lupine.

From Germany. Seeds presented by Dr. W. Rudorf, Direktor, Kaiser-Wilhelm Institut für Züchtungsforschung, Müncheberg/Mark. Received February 28, 1938.

127633 to 127637. LUPINUS ALBUS L.

White lupine.

From Seelow. An annual lupine which prefers a dry climate and does not thrive on a damp or too calcareous soil.

For previous introduction see 126576.

127633, No. 4642,

127536. No. 4677.

127634, No. 4673.

127637. No. 4679.

127635. No. 4674.

127638 to 127642. LUPINUS ANGUSTIFOLIUS L.

For previous introduction see 89840.

For previous introduction see cocas.

127638. No. 8394. From Rublitz, Pommern.

127639. No. 8396. From Stuhm, West Prussia.

127640. No. 8402. From Neu Karpkuth, Kr. Ortelsburg, East Prussia.

127641. No. 8407. From the vicinity of Soldin, Mark.

127642. No. 8409. From Reiffeisen, Mecklenburg.

127643 to 127648. LUPINUS LUTEUS L. European yellow lupine.

A yellow-flowered lupine, native to Europe.

For previous introduction see 99822.

127643. No. 8369. From the vicinity of Militsch.

127644. No. 8370. From Klein Stoffin, Kr. Stolp.

127645, No. 8373, From the vicinity of Angerburg, East Prussia.

127646. No. 8379. From Beeskow, Mark.

127647. No. 8387. From Wittenberg, Sachsen.

127648. From Sarona, near Jaffa, Palestine.

127649. Lupinus pilosus Murray.

From Deir el Belleh, Palestine. A hairy annual 2 to 4 feet high, with compound leaves of 9 to 11 oblong-lanceolate leaflets and a raceme of rose-colored flowers arranged in whorls. It is native to southern Europe.

For previous introduction see 89546.

127650 to 127652. Lupinus pilosus  $\times$  palaestinus.

127650. 378/37. From Kur, Palestine.

127651, 379/37. From Ramin, Palestine.

127652, 380/37. From the vicinity of Salame, Palestine.

127653 to 127678, Rhododendron, Ericaceae.

From Japan. Plants purchased from the Chugai Nursery Co., Yamamoto, near Kobe. Received March 8, 1938.

Reported to be hybrids of Rhododendron simisii and R. indicum.

127653, Adzuma-no-hana,

127666. Gunsei.

127654. Bunkwa.

127667. Gyokurin.

127655, Chichibu.

127668. Gyokushin.

127656. Chojuraku.

127669. Gyokuyo.

127657. Eikwan.

127670. Hatsu Gasumi.

127658. Eiten.

127671. Heiwa-no Hikari.

127659, Fuii-no-koshi,

127672. How-Raku.

127660. Fukuju.

127673. How-Zan.

127674. Jindai.

127661. Fuku-musume.

127675. Joh-Ga.

127662. Fukurokuju. 127663. Gosho Zakura.

127676. Kagetsu.

127664, Gunbi.

127677. Kai-Getsu.

127665, Gunrei.

127678. Keisetsu.

127679 to 127684.

From Austria. Seeds presented by Dr. W. Ripper, Hadersdorf-Weidlingau. ceived March 8, 1938.

127679. Bromus inermis Leyss. Poaceae.

Smooth bromegrass.

127680 to 127682. Festuca spp. Poaceae.

Fescue.

127680. Festuca elatior arundinacea (Schreb.) Wimm.

For previous introduction see 111971.

127681. FESTUCA ELATIOR L.

Meadow fescue.

127682. FESTUCA RUBRA L.

Red fescue.

127683. Malva verticillata L. Malvaceae.

Alfalfa.

127684. Medicago sativa L. Fabaceae.

127685. Asparagus acutifolius L. Convallariaceae.

From Yugoslavia. Seeds presented by Dr. Z. Arnold, Botanical Garden, Zagreb. Received March 11, 1938.

A dark-green shrubby dioecious asparagus, with zigzag branches, becoming about 5 feet high, with a habit resembling that of a juniper. The small yellow flowers are followed by waxy olive-green berries. It is native to the Mediterranean region.

For previous introduction see 99387.

#### 127686 to 127716.

From South Dakota. Scions presented by N. E. Hansen, Experiment Station, Brookings. Received March 9, 1938.

127686 to 127713. MALUS spp. Malaceae.

Apple.

127687. MALUS SYLVESTRIS X IOENSIS.

Bismer Crab.

127686. MALUS IOENSIS X BACCATA.

Amsib Crab.

127688. MALUS SYLVESTRIS X (BACCATA X SYLVESTRIS).

Bison Crab. (Jonathan X Sylvia.)

127689. MALUS.

Caputa Crab. (Ivan Crab × Kentucky Mammoth.)

127690. MALUS SYLVESTRIS Mill.

Caramel Crab.

127691. MALUS.

Chance.

127692. MALUS SYLVESTRIS X IOENSIS.

Chinook.

127693. MALUS Sp.

Elk River Crab. A wild crabapple.

127694. MALUS Sp.

Giant. A wild crabapple.

127695. MALUS SYLVESTRIS Mill.

Goldo.

127696. MALUS SYLVESTRIS X IOENSIS.

Izo. (Fluke No. 10 × Yellow Transparent.)

127697. MALUS IOENSIS X SYLVESTRIS.

Kola. (A wild crab from Elk River, Minn.,  $\times$  Oldenburg.)

127698. MALUS SYLVESTRIS X BACCATA.

Lina.

127699. MALUS.

Maga. Possibly a Malus sylvestris hybrid.

127700. MALUS.

Mercer. A wild crabapple.

127701. MALUS IOENSIS X SYLVESTRIS.

Nevis Wild Crab.

## 127686 to 127716—Continued

127702. Malus sylvestris × baccata var. mandshurica.

Olga Crab. (Oldenburg X Siberian Crab.)

127703. MALUS SYLVESTRIS Mill.

Oxbo.

127704. MALUS SYLVESTRIS Mill.

Sereda.

127705. Malus toensis X sylvestris.

Shoko. (Wild crab from Elk River, Minn., X Alexander.)

127706. MALUS SYLVESTRIS Mill.

Tolmo. ( $Tolman \times Oldenburg.$ )

127707. Malus ioensis × sylvestris.

Tipi. (Wild crab from Elk River, Minn., × Oldenburg.)

127708. Malus sieboldii (Regel) Rehder.

Toringo crab.

For previous introduction see 55744.

127709. MALUS.

Volga. Possibly a Malus sylvestris hybrid.

127710. MALUS.

Waubay Crab. A Malus sylvestris hybrid.

127711. MALUS IOENSIS X SYLVESTRIS.

Waublee Crab.

127712. Malus ioensis × sylvestris.

Zapta. (A wild crab from Elk River, Minn., × Bismarck.)

127713. Malus ioensis × sylvestris.

Zaza. A crab with red wood.

127714 to 127716. PYRUS.

127714. Finland.

127716. Sladky.

127715. Krylov.

# 127717 to 127724. ZEA MAYS L. Poaceae.

Corn.

From Peru. Seeds presented by Dr. Cesar Vargas, University of Cuzco, Cuzco. Received March 9, 1938.

A collection of corn from the Urubamba Valley.

127717. Amarillo. From Tucay.

Nos. 127718 to 127721. From Urquillos.

127718. Amarillo.

127720. Huacca-Mullu.

127719. Culli.

127721. Paraccay.

Nos. 127722 and 127723 came from Tucay.

127722. Paraccay.

127723. Saccsa.

127724. Saccsa. From Urquillos.

#### 127725 to 127761.

From Afghanistan. Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 17, 1938.

Unless otherwise mentioned, this material was all collected as seeds in the autumn of 1937.

#### 127725 to 127761—Continued

127725. ACHILLEA Sp. Asteraceae.

No. 4011. Zawal. From Khalat-i-Gluljai, October 15, at 8,000 feet altitude. A desert plant found growing in clumps 6 inches high, with yellow flowers. The seeds and flowers are used locally as a stomach medicine.

127726. Artemisia sp. Asteraceae.

No. 4178. From Herat, November 12, at 3,000 feet altitude. A bush 18 inches high, growing abundantly on the desert over a wide range of altitude. An important winter pasture plant.

127727. ASTER ALTAICUS Willd. Asteraceae.

No. 4098. From Girishk, October 28. An attractive perennial with slender green stems 2 to 3 feet high and solitary or subcorymbose heads of lavender flowers about an inch across. Native to eastern Asia.

127728. Berberis sp. Berberidaceae.

Barberry.

No. 4206. From Zermast Pass, November 14, at 7,000 feet altitude. Wellformed bushes 8 feet high, found along a stream; attractive red fruits and holly-like leaves.

127729. CLEMATIS Sp. Ranunculaceae.

No. 4005. From Khalat, October 14, at 8,000 feet altitude. A woody climber, up to 10 feet, found in thickets along a watercourse. Flowers probably small, but the fruit is attractive.

127730. Crataegus sp. Malaceae.

No. 3855. From Balkh, October 20, at 1,200 feet altitude. An ornamental tree up to 12 feet high with crimson fruits % inch in diameter.

127731. Crataegus sp. Malaceae.

No. 4046. From Sardeh, October 18, at 5,000 feet altitude. A small well-formed tree about 15 feet high, with edible maroon fruits % inch in diameter.

127732. CYNODON DACTYLON (L.) Pers. Poaceae.

Bermuda grass.

No. 4161. From Farah, November 7, at about 1,700 feet altitude. Crabgrass, often used here for lawns where nothing else will grow.

127733. Eremurus sp. Liliaceae.

No. 4198. Seech. From Zermast Pass, November 14, at 7,000 feet altitude. Plants 3 feet high, growing on a dry slope.

127734. Fraxinus sp. Oleaceae.

Ash.

No. 4043. From Sardeh.October 15, at 5,000 feet altitude. A quick-growing tree with compound leaves having 3 to 5 dark-green pinnate leaflets and abundant fruits which persist until winter. The tree will tolerate alkaline soil and subzero weather.

127735. Fraxinus sp. Oleaceae.

Ash.

No. 4327. From Kabul, November 14, at 7,000 feet altitude. A quick-growing tree that is used here for shade. As it retains its fruits, it is probably attractive to birds.

127736. Hyacinthus sp. Liliaceae.

No. 4007. From Khalat, October 14, at 8,000 feet altitude.

127737. Iris sp. Iridaceae.

No. 3907. From Kabul, October 5, at 7,000 feet altitude. Found in cultivated clumps with blossom stalks 4 feet high; flowers usually 5 on a stalk, probably rose and blue. Most flowers do not produce seed.

127738. Malva sylvestris mauritiana (L.) Boiss. Malvaceae.

No. 4267. From Andkhin, November 24, 1937. A cultivated plant 2 feet high; flowers rose purple, about 1 inch across.

## 127725 to 127761—Continued

127739. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

No. 4223. Rishka. From Maimana, November 17, at 2,000 feet altitude.

127740. Mentha sp. Menthaceae.

No. 4012. Shenshob. From Khalat, October 5, at 8,000 feet altitude. Leaves used as greens, as medicine, and for flavoring sour milk.

127741. PISTACIA CABULICA Stocks. Anacardiaceae.

No. 4060. From Kandahar, October 23, at 5,000 feet altitude. A tree about 1 foot in diameter and 20 feet high, bushy and covered with racemes of small pink fruits.

For previous introduction see 125588.

127742. Poa bulbosa L. Poaceae.

No. 4203. From Bala Murghab, November 15, at 3,000 feet altitude. An important pasture grass, growing on gumbo hills over a wide range of altitude.

127743 to 127755. Rosa spp. Rosaceae.

Rose.

127743. Rosa sp.

No. 3839. From Balkh, September 20, at 1,200 feet altitude. A free-flowering bush 6 feet high, from the border of a field, with orange-red fruits and leaves without scent.

127744. Rosa sp.

No. 3901. From Bagrami, near Kabul, October 3, at 7,000 feet altitude. A nearly thornless floriferous bush 5 feet high, growing on the open plain.

Nos. 127745 to 127748. From Kabul, October 5, at 7,000 feet altitude.

127745. Rosa sp.

No. 3902. A thorny bush 6 feet high, spreading from the root.

127746. Rosa sp.

No. 3906. A bush 6 feet high with white fragrant flowers, 1½ inches across, in clusters.

127747. Rosa sp.

No. 3908. A bush 8 feet high, with yellow to bronze flowers. The stems are sometimes fasciated.

127748. Rosa sp.

No. 3909. A cultivated rose of subarborescent habit, with drooping branches like a weeping willow; the numerous flowers are about 2 inches across. Seen only in Kabul.

127749. Rosa sp.

No. 3941. From Ghazni, October 8, at 8,000 feet altitude. A bush 4 feet high, spreading from the roots; the white fragrant flowers, 1½ inches in diameter, are in clusters.

127750. Rosa sp.

No. 3949. From Ghazni, October 8, at 8,000 feet altitude. A bush 8 feet high, with scented leaves, growing at the edge of a field. The fragrant white flowers 1½ inches across are in clusters.

127751. Rosa sp.

No. 4039. From Sardeh, October 18, at 5,000 feet altitude. A cultivated bush 6 feet tall.

127752. Rosa sp.

No. 4205. From Zermast Pass, November 14, at 7,000 feet altitude. A well-formed bush, 8 feet high, growing along a stream.

127753. Rosa sp.

No. 4243. From Maimana, November 19, at 2,000 feet altitude. A subscandent bush 5 feet high, growing in a hedgerow.

## 127725 to 127761—Continued

127754. Rosa sp.

No. 4286. From Balkh, December 3. A mixed sample from bushes about 6 feet high, found growing in a thicket.

127755. Rosa sp.

No. 4326. A very floriferous bush 6 feet high, of rather open growth.

127756. SACCHARUM ARUNDINACEUM Retz. Poaceae.

No. 4293. From Balkh, December 3, at 1,200 feet altitude. A tall grass, related to sugarcane, growing in clumps 8 to 12 feet high, with attractive purplered plumes.

127757. Tamarix sp. Tamaricaceae.

No. 4179. From Kang, November 6, at 1,700 feet altitude. A common bush or small tree on the desert where water collects in summer. Useful as a windbreak, withstanding hot winds.

127758. Trifolium sp. Fabaceae.

No. 4137. Shafbal. From Kang, November 3, at 1,700 feet altitude. A forage crop.

127759. Tulipa sp. Liliaceae.

No. 4008. From Khalat, October 14, at 8,000 feet altitude. Bulblets from a field.

127760. TULIPA Sp. Liliaceae.

No. 4288. From Balkh, November 3. Bulblets taken from a pheasant's crop.

127761. VITEX NEGUNDO L. Verbenaceae.

No. 4059. From Kandahar, October 23, at 5,000 feet altitude. Plants 3 to 4 feet high growing in clumps; found in a river bed.

For previous introduction see 109602.

## 127762 to 127770. Zea mays L. Poaceae.

Corn.

From Peru. Seeds presented by Dr. S. P. Vallejo, Agronomist in Chief, Estación Agrícola de Ancash, Huaraz. Received March 10, 1938.

127762 to 127764. From Callejón de Huaylas, Department of Ancash.

127762. Maiz Negro, black corn.

127763. Maiz Blanco Común, common white corn.

127764. Maiz Terciopelo, velvet corn.

127765. Maiz Alazán, sorrel corn. From the Department of Lambayeque.

127766. Maiz Blanco del Cuzco, white corn from Cuzco.

127767. Maiz Hhira, yellow corn from Cuzco.

127768 to 127770. From Callejón de Huaylas, Department of Ancash.

127768. Maiz Amarillo, yellow corn.

127769. Maíz Huarutambo.

127770. Maiz Blanco del Cuzco, white corn.

#### 127771 to 127782.

From Norway. Seeds presented by the Botanic Garden, Oslo. Received March 7, 1938.

127771 to 127779. ALLIUM spp. Liliaceae.

127771. ALLIUM FISTULOSUM L.

Welsh onion.

127772. ALLIUM NUTANS L.

A Siberian species with narrow leaves, all radical, and two nodding heads of rosy white flowers.

For previous introduction see 110774.

#### 127771 to 127782—Continued

127773. ALLIUM GALANTHUM Kar. and Kir.

An allium with hollow, somewhat inflated stems up to 16 inches high, few cylindrical leaves, and an umbel of whitish flowers. Native to the Tian Shan region, Asia, and allied to *Allium cepa*.

127774 and 127775. ALLIUM NUTANS L.

For previous introduction and description see 127772.

127776. ALLIUM ANGULOSUM L.

An onion originally from Tonkin, French Indo-China, the leaves of which are used like chives.

For previous introduction see 110765.

127777. ALLIUM ODORUM L.

127778. ALLIUM STRICTUM Schrad.

An allium native to Siberia, with several linear leaves on a stem over a foot high and an umbel of rose-colored flowers.

For previous introduction see 110783.

127779. ALLIUM VICTORIALIS L.

Onion.

One of the most distinctive of the European alliums, with stems about 2 feet high, leaves resembling those of the lily-of-the-valley, and white to greenish-white flowers.

For previous introduction see 122058.

127780 to 127782. Impatients spp. Impatientaceae.

127780. IMPATIENS BALSAMINA L.

Garden balsam.

127781. IMPATIENS ROYLEI Walp.

Snapweed.

An erect annual 4 or 5 feet high, with ovate to ovate-anceolate leaves and dark-purple, short-spurred flowers on long stalks. Native to the temperate slopes of the western Himalayas from Nepal to Marri, India, between 6,000 and 8,000 feet altitude.

For previous introduction see 127624.

127782. Impatiens scabrida DC.

Snapweed.

An annual up to 5 feet high, with ovate to lanceolate leaves; flowers golden yellow with red spots, on long stems near the end of the branches. Native to the temperate Himalayas of northern India from 6,000 to 10,000 feet altitude.

For previous introduction see 28222.

#### 127783 to 127850.

From Peru and Bolivia. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received February 24, 1938.

Unless otherwise mentioned, this material was all collected in Peru.

127783. Alonsoa acutifolia Ruiz and Pav. Scrophulariaceae.

No. 174. January 1938, from hills above Pisac at 12,000 feet altitude. A stout bushy plant about 2 feet high, with broadly lanceolate, sharp-tooth leaves and showy cinnabarred flowers. Native to Peru; grown as an annual outside the Tropics.

For previous introduction see 99787.

127784. Capsicum pubescens R. and P. Solanaceae.

No. 176. Crato. From the market at Pisac, January 9, 1938. A pepper that resembles a red tomato in shape and appearance, about 3 inches in diameter.

127785. Cucurbita Maxima Duchesne. Cucurbitaceae.

Squash.

No. 166. Zapallo. From the market at Arequipa, January 4, 1938, but probably grown at Tasma. Fruit variable in color, bluish gray or greenish gray with orange markings.

127786. CYPELLA HERBERTII Herbert. Iridaceae.

No. 225. From Cuzco, presented by Dr. C. Vargas, January 16, 1938. A plant with a bulbous base and linear leaves about 1 foot long. The erect, branched stalk, 2 to 3 feet high, bears 5 or 6 flowers, each about 3 inches across; the petals are orange red with green markings at base. Native to southern Brazil, Uruguay, and northern Argentina.

For previous introduction see 119818.

127787. DALECHAMPIA ARISTOLOCHIAEFOLIA H. B. K. Euphorbiaceae.

No. 203. Found growing along and over rock fences near Abancay, January 15, 1938. A slender woody climber with ovate leaves about 3 inches long and small flowers with showy violet bracts. Native to Ecuador.

127788. DATURA SANGUINEA Ruiz and Pav. Solanaceae. Red floripondio.

No. 192. From above Limatambo, January 14, 1938. A large treelike shrub 4 to 12 feet high, with pubescent, ovate-acuminate leaves and brilliant brickred, pendulous flowers 8 inches long. Native to Peru.

For previous introduction and description see 126903.

127789. Datura stramonium L. Solanaceae.

For previous introduction see 116246.

127790. Fragaria Chiloensis (L.) Duchesne. Rosaceae. Chiloe strawberry.

No. 186. Frutilla. From Macchu Picchu, along the Urubamba River, at about 4,000 feet altitude.

For previous introduction see 121799.

127791. LAVATERA ASSURGENTIFLORA Kellogg. Malvaceae.

California treemallow.

No. 113. From Huamachuco, December 19, 1937. A shrub 3 to 4 feet high, freely branched at the base, with round, deeply cleft leaves 3 inches across and axillary, purplish flowers 2 inches across. Native to southern California islands.

127792. Lantana sp. Verbenaceae.

No. 195. Found among rocks just above and west of Curahausi at about 6,025 feet altitude. A low ornamental shrub of spreading habit with yellow flowers.

127793. Loasa cuzcoensis Killip. Loasaceae.

No. 224. From near Cuzco, January 16, 1938. A stout annual about 2 feet high, with ovate, subpinnately lobed leaves 2 to 6 inches long and white flowers about 1 inch across. Native to Peru.

127794 to 127833. Lycopersicon spp. Solanaceae.

Tomato.

127794 to 127804. Lycopersicon esculentum Mill.

127794. No. 154. From the market at Huaraz, December 26, 1937, but grown at Caras. Fruit smooth, but flat and ribbed.

127795. No. 155. From the market at Yungay, December 26, 1937. Fruit extremely variable, many very rough.

127796. No. 155-A. From the market at Huarmey, December 29, 1937. A mixed sample of various rough fruits.

Nos. 127797 and 127798. From the market at Huacho, December 30, 1937.

127797. No. 156. Fruit rough and flat.

127798. No. 157. Fruit flat, but smooth and slightly 2-celled.

Nos. 127799 to 127801. January 2, 1938. From the market at Mollendo, but grown at Tambo.

127799. No. 158. Fruit small, round, variable.

127800. No. 159. Fruit small, flat, 2- to 5-celled.

127801. No. 160. Fruit flat and very rough.

Nos. 127802 to 127804. From the market at Areguipa, January 5, 1938.

127802. No. 163. Fruit large, rough and pink, grown at Tacna.

127803. No. 164. Fruit small, flat. Grown at Camana.

127804. No. 165. Fruit rough and coarse. Grown in the south.

Nos. 127805 and 127806. From the Hacienda Maranura, south of Quillabamba, at about 3,660 feet altitude, January 11, 1938.

127805. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 180.

For previous introduction and description see 126954.

127806. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 181. Fruit red, less than ½ inch in diameter.

127807. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 182. From the Hacienda Chinche, near Quillabamba, at about 3,800 feet altitude, January 11, 1938.

For previous introduction and description see 126954.

127808 to 127824. Lycopersicon esculentum Mill.

127808. No. 190. From Thomas Payne's farm, Urco, January 12, 1938. Fruit rough; grown locally for 20 years.

127809. No. 196. Along the roadside above Curahause, January 14, 1938, at 6,075 feet altitude. A small plant growing under unfavorable conditions.

Nos. 127810 to 127813. From the market at Abancay, January 15, 1938.

127810. No. 198. Fruit small, pear-shaped.

127811. No. 199. Fruit small, round, red.

127812. No. 200. Fruit small round, bluish scarlet.

127813. No. 201. Fruit small, round, scarlet pink.

127814. No. 202. Growing among debris bordering a rock wall near Abancay, January 15, 1938. Fruit small, round, red.

Nos. 127815 to 127818. From the market at Cuzco, January 16, 1938.

127815. No. 219. Fruit small, round, 2-celled.

127816. No. 220. Fruit flat, red, 3- to 4-celled.

127817. No. 221. Fruit red, pear-shaped, from the Lares Valley.

127818. No. 222. Fruit red, size of large peas; from the Lares Valley.

Nos. 127819 to 127822. From the market at Chulumani, Bolivia, January 20, 1938.

127819. No. 232. Fruit rough, many-celled; grown in this district for many years.

127820. No. 233. Fruit red, small, round; grown in this district for many years.

127821. No. 234. Fruit small, round, scarlet.

127822. No. 235. Fruit small, round, yellow.

Nos. 127823 and 127824. From the market at La Paz, Bolivia, January 23, 1938.

127823. No. 243. Fruit small, rough, yellow, cultivated in Rio Bajo.

127824. No. 244. Fruit small, about 1 inch in diameter, red; cultivated in Rio Bajo.

127825. Lycopersicon peruvianum var. humifusum C. H. Mull.

No. 184. *Ceoilo-chuma*. Collected along a river near Piscacucho, January 12, 1938. A perennial vine with large woody stems, growing among shrubbery. Used medicinally by the natives.

127826 and 127827. Lycopersicon Hirsutum Humb. and Bonpl. From Cajamarca, December 21, 1937.

127826. No. 135. From fields along a canal bank at 12,000 feet altitude. Plant coarse, hirsute; fruit green or yellowish with dark-green stripes radiating from the stem end.

127827. No. 136. Found growing along the walls adjoining the Indian baths.

127828. Lycopersicon peruvianum var. humifusum C. H. Mull.

No. 141. Along the road between Cajamarca and San Juan at 8,500 feet altitude. Plant dark green; stems very dark; flowers large; foliage conspicuous; fruit green type, but resembles the red type in delicacy.

127829. Lycopersicon peruvianum var. humifusum C. H. Mull.

No. 142. Along the road between San Juan and Magdalena, December 23, 1937.

127830. Lycopersicon peruvianum var. dentatum Dun.

No. 161. January 3, 1938. From a dry hillside above Mollendo, at about 1,000 feet altitude. Fruit yellowish green.

127831. Lycopersicon peruvianum var. dentatum Dun.

No. 168. From near Sabandia, January 5, 1938, at 8,000 feet altitude. Fruit yellowish green streaked with violet, less than ½ inch in diameter; calyx long.

127832. Lycopersicon peruvianum var. dentatum Dun.

No. 169. From Sacabaya, in a creek bed west of Arequipa, at 8,000 feet altitude, January 5, 1938. Fruit yellowish, streaked with violet, less than  $\frac{1}{2}$  inch in diameter, calyx long.

127833. Lycopersicon pimpinellifolium (Jusl.) Mill.

No. 179. From Quillabamba, January 11, 1938. Fruit small, red, oval, less than  $\frac{1}{2}$  inch in diameter.

127834. NICANDRA PHYSALODES (L.) Gaertn. Solanaceae.

No. 218. From Limatambo, January 16, 1938. A blue-flowered Peruvian annual with the fruit enclosed in a husk, as in Physalis.

For previous introduction see 111187.

127835. Phaseolus lunatus L. Fabaceae.

Lima bean.

No. 167. Pallases. From the market at Areguipa, January 5, 1938.

127836. Physalis sp. Solanaceae.

No. 185. From Macchu Picchu, at 4,500 feet altitude, January 12, 1938. Fruit very large, yellow.

127837. Physalis sp. Solanaceae.

No. 140. Tomate Cimarron. Along the yucca fence line near the aviation field.

127838. Salvia oppositiflora Ruiz and Pav. Menthaceae.

No. 223. From near Cuzco, January 16, 1938. Presented by Dr. C. Vargas. An erect shrubby perennial about 2 feet high, with ovate, obtuse, crenate leaves and terminal spikes of many scarlet flowers. Native to Peru.

127839. SARACHA CONTORTA Ruiz and Pav. Solanaceae.

No. 191. From fields above Limatambo, at 12,500 feet altitude, January 14, 1938. An annual with ovate leaves and small clusters of campanulate, paleyellow flowers. Native to Peru.

127840 to 127849. Solanum spp. Solanaceae.

127840 and 127841. Solanum Tuberosum L.

Potato.

Paysas. From Yuscay, at 9,660 feet altitude, January 13, 1938.

127840. No. 188. Purple flowers.

127841. No. 189. White flowers.

127842. Solanum sp.

No. 139. Yerba Morra. South of Cajamarca, December 21, 1937. A plant with purple flowers; used medicinally.

127843. SOLANUM Sp.

No. 144. Yerba Santa. From Huaraz, December 26, 1937 at 10,000 feet altitude. A large shrub with scented foliage; leaves entire, linear, 4 to 6 inches long; flowers purplish white.

127844. SOLANUM Sp.

No. 170. From Sacabana, west of Arequipa, at 8,000 feet altitude, January 5, 1938. A shrubby plant with yellowish-green fruits.

127845. SOLANUM Sp.

No. 173. From the hills above Pisac, about 12,000 feet altitude, January 9, 1938.

127846. SOLANUM Sp.

No. 205. From Abancay, January 13, 1938. A shrub 6 to 8 feet high, with tomentose yellow berries.

127847. SOLANUM SD.

No. 211. Along the river bed below Limatambo, at 8,700 feet altitude. A shrub with green fruits.

127848. SOLANUM Sp.

No. 236. From Chulumani, Bolivia, at 6,000 feet altitude, January 21, 1938. A small tree with few thorns; fruits dark blue to black.

127849. SOLANUM Sp.

No. 242. From above La Paz, Bolivia, at 13,500 feet altitude, January 21, 1938. A bush covered with cherry-red fruits, less than ½ inch in diameter.

127850. Stenolobium arequipense Sprague. Bignoniaceae.

No. 207. From Abancay, at 9,700 feet altitude, January 15, 1938. An erect shrub to 6 feet high, with slender 4-angled branches and pinnate leaves 4 to 5 inches long. The funnel-shaped orange flowers are 2 to 3 inches long and are borne in terminal racemes 4 to 8 inches long. Native to Peru.

## 127851. Rubus sp. Rosaceae.

From Germany. Plants purchased from Wilhelm Pfitzer, Stuttgart. Received March 14, 1938.

St. Walfried raspberry.

#### 127852 to 127872.

From Maryland. Plants growing at the United States Horticultural Station, Beltsville. Numbered in February 1938.

127852. Atalantia missionis (Wight) Oliver. Rutaceae.

A small tree much resembling an orange tree in habit, with pale-gray bark and branches armed with short stiff spines, rather large stiff elliptic leaves with indistinct veining, and small white flowers. The very sweet fruit is like a small dark orange; and the pale yellow-white wood is close grained, smooth, and suitable for cabinet work.

For previous introduction see 98731.

## 127852 to 127872—Continued

127853. Feroniella oblata Swingle. Rutaceae.

Krassan.

A spiny tree up to 65 feet high, native to forests in Cambodia and Cochin-China. The leaflets of the pinnate leaves are oval with rounded or flattened tips, and the fragrant white flowers appear in panicles on the branches of the previous year's growth. The small fruits, less than 2 inches in diameter, are borne in clusters and have a pronounced orange flavor when young. The edible pinkish pulp is subacid and is used as a condiment in sauces.

For previous introduction see 109763.

127854. Murraya koenigii (L.) Spreng. (Chalcas koenigii (L.) Kurz.). Rutaceae.

A small tropical tree found chiefly in the dry region of the Jaffna Peninsula, northern Ceylon. The fruits ripen generally during April. The tree prefers light rich soil, and, with cultivation, will thrive at an altitude of 2,000 feet. The dried leaves are used in curries, soups, etc.

For previous introduction see 93880.

127855. PISTACIA MEXICANA H. B. K. Anacardiaceae.

Originally received from Mexico as seeds, July 1, 1912. A slender shrub or small tree with pinnate leaves composed of 11 to 29 oblique-oblong leaflets and small, nearly dry fruits with edible seeds. Native to Mexico and Guatemala.

For previous introduction see 109779.

127856 to 127865. CITRUS spp. Rutaceae.

127856. CITRUS.

Cleopatra.

127857. CITRUS BERGAMIA RISSO.

Bergamot.

127858. CITRUS GRANDIS (L.) Osbeck.

Grapefruit.

127859. CITRUS.

Temple Orange.

127860. CITRUS.

Suen Kat.

127861. CITRUS GRANDIS (L.) Osbeck.

Grapefruit.

Inman.

127862. CITRUS.

Tim Shan, or wild Indian lemon.

127863. CITRUS.

Tim Shan, or wild Indian lemon.

127864. CITRUS.

Morton's Citrange.

127865. CITRUS.

Chao Chou T. T. No. 10, orange.

127866. GLYCOSMIS PENTAPHYLLA (Retz.) Correa. Rutaceae.

An unarmed shrub with evergreen leaves and panicles of small white fragrant flowers and white berries. Said to be very hardy in dry places. Native to China.

127867 to 127871. PISTACIA spp. Anacardiaceae.

Pistache.

127867. PISTACIA ATLANTICA Desf.

Mount Atlas pistache.

A tree, native to northern Africa, up to 50 feet high, with many woody branches which form a dense head. The blue, somewhat fleshy drupes are about the size of peas. A resinous gum flows from the bark of the trunk

## 127852 to 127872—Continued

and branches at various times of the year, especially in summer, and hardens to a pale yellow color. This gum has a pleasant aromatic odor and taste and thickens in plates covering the branches. The Arabs collect this substance in autumn and winter, and chew it to whiten the teeth and sweeten the breath.

For previous introduction see 95415.

127868. PISTACIA INTEGERRIMA Stewart.

A large tree up to 60 feet high, native to the warm slopes of the Himalayas in northern India. The aromatic, pinnate leaves are made up of 4 or 5 pairs of lanceolate leaflets with an oblique base. The small inconspicuous flowers are in racemose clusters and are followed by the bright-green drupes which are about 1/4 inch across. This tree yields the famous zebrawood of India.

For previous introduction see 107621.

127869. PISTACIA TEREBINTHUS L.

False terebinth.

For previous introduction see 98174.

127870. PISTACIA TEREBINTHUS X VERA.

127871. PISTACIA.

127872. Punica protopunica Balf. f. Punicaceae.

A small tree native to the island of Socotra, on the east coast of Africa, where it grows abundantly on the plateau sloping southward from the Hagier Peaks. In general habit it is not unlike the pomegranate, but its leaves are larger and coarser. The flowers are somewhat smaller, and the fruit is very much smaller.

For previous introduction see 26919.

#### 127873 to 127875.

From Germany. Seeds presented by the Director, Botanic Gardens, Berlin-Dahlem. Received March 10, 1938.

127873. ACANTHORHIZA ACULEATA (Liebm.) Wendl. Phoenicaceae.

Rootspine palm.

A palm, native to Mexico, with a trunk 30 to 40 feet high, armed at the base with spines formed of the thickened aerial roots. The orbicular fan-shaped leaves are about 5 feet in diameter on stalks 4 feet long; the flowers are dark creamy pink.

For previous introduction see 120279.

127874. Impatiens scabrida DC. Impatientaceae.

Snapweed.

For previous introduction and description see 127782.

127875. VIOLA ATHOIS W. Becker. Violaceae.

A violet with leafy stems 4 to 7 inches high, lower leaves orbicular, upper leaves oblong, and large violet flowers. Allied to *Viola gracilis* and native to northern Greece.

# 127876 to 127887. Prunus armeniaca L. Amygdalaceae. Apricot.

From South Dakota. Scions presented by N. E. Hansen, State College Experiment Station, Brookings. Received March 15, 1938.

 127876. Anda.
 127882. Ninguta.

 127877. Chow.
 127883. Sansin.

 127878. Hulan.
 127884. Sing.

 127879. Lalin.
 127885. Sino.

 127880. Manchu.
 127886. Tola.

 127881. Mandarin.
 127887. Zun.

#### 127888 to 127891.

From Washington, D. C. Plants growing in the United States Department of Agriculture greenhouses. Numbered March 15, 1938.

127888. Inodes neglecta (Beccari) O. F. Cook. Phoenicaceae. Palm

C. A. 233. Grown from seeds collected on Mount Rouis, Haiti, November 6, 1931. A large palmetto, about 20 feet high, with a smooth trunk, large fanlike leaves, and large more or less drooping flower clusters.

For previous introduction see 88183.

127889. Paurotis wrightii (Griseb.) Britton. Phoenicaceae. Palm.

No. C. A. 262. Plants from seeds collected by O. F. Cook at Fort Meyers, Fla., in 1928. A palm often with several erect trunks 25 to 40 feet high, native to southern Florida and the West Indies. The half-orbicular, fanshaped leaves, which spread in all directions, are yellow green above and blue green beneath, and the segments are linear lanceolate. The drooping spadix, 3 to 5 feet long, bears yellow-green flowers followed by lustrous black fruits ½ inch in diameter.

127890. Sabal sp. Phoenicaceae.

No. C. A. 257. This palm grows wild near Boerne, Tex., an elevated district northeast of San Antonio, and appears to be one of the hardiest of the palms. The leaves are borne on a short burrowing rootstock, no trunk being formed above the ground. It is one of the dwarf or scrub palmettos related to Sabal Minor of the Southeastern States, but with smaller leaves, shorter and more rigid leaf segments, and larger fruits.

127891. Seaforthia sp. Phoenicaceae.

Palm.

C. A. 215.

## 127892 to 127898. ZEA MAYS L. Poaceae.

Corn.

From Bolivia. Seeds presented by Eduardo Romecin, La Paz. Received March 17, 1938.

From the Cochabamba Valley, at 2,250 meters altitude. These are dry-land varieties.

127892. Common white corn.

127893. Common yellow corn.

127894. Chuspille.

127895. Culli Morado. This is used for preparing a very refreshing drink.

127896. Gris de Tostar. Used for roasting and has a large amount of flour.

127897. Morocho.

127898. Wilcaparu. A low-growing variety.

## 127899 and 127900. Cannabis sativa L. Moraceae.

Hemp.

From Czechoslovakia. Seeds presented by the Director, Botanic Garden, Tabor. 127899. Common type. 127900. Var. *Himalayana*.

#### 127901 to 127904. Zea mays L. Poaceae.

Corn.

From Peru. Seeds presented by Alberto Martin Lynch, Chief, Lambayeque Experiment Station, Lambayeque. Received March 18, 1938.

A collection of corn from Sasape, Departmento Lambayeque.

127901. Alazan.

127903. Colorado.

127902. Blanco.

127904. Pagaladroga.

## 127905. Evodia meliaefolia (Hance) Benth. Rutaceae.

From India. Seeds presented by the Forest Research Institute, Dehra Dun, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received March 14, 1938.

A small, much-branched tree native to India. The pinnately compound leaves are made up of 3 to 5 pairs of obliquely lanceolate leaflets 3 to 4 inches long, and the small white flowers are in cymes 8 inches across.

For previous introduction see 123003.

## 127906. Solanum tuberosum L. Solanaceae.

Potato.

From Argentina. Tubers collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received March 21, 1938.

No. 369. Papa Silvestre. From the "Sierra Grande," Cordoba Hills, February 19, 1938. Found in moist, coarse, sandy soil.

#### 127907 to 127945.

From Minnesota. Scions presented by the Fruit Breeding Farm, Excelsior. Received March 22, 1938.

127907 to 127922. MALUS spp. Malaceae.

Apple.

127907 to 127917. MALUS SYLVESTRIS Mill.

127907. Beacon. 127913. Wedge.

127908. Bruce. 127914. Minnesota Jonathan.

 127909. Folwell.
 127915. No. 714.

 127910. Malinda.
 127916. No. 724.

127912, Red Duchess.

127918 to 127920. Malus baccata (L.) Moench. Siberian crab.

127917. No. 1007.

127918. Dolgo. 127920. Hyslop.

127919, Flame.

127911. Melba.

127921. MALUS BACCATA X SYLVESTRIS.

Piotosh.

127922. MALUS BACCATA (L.) Moench.

Siberian crab.

Pear.

No. 240.

127923 to 127940. PRUNUS. Amygdalaceae.

 127923. Ember.
 127932. Tonka.

 127924. Kaga.
 127933. Underwood.

 127925. La Crescent.
 127934. Waneta.

 127926. Melander.
 127935. Winona.

 127927. Monitor.
 127936. Wisconsin No. 25.

 127928. Mound.
 127937. Minnesota No. 2.

 127929. Pembina.
 127938. Minnesota No. 101.

127930. Radisson. 127939. Minnesota No. 101. 127930. Radisson.

127931. Superior. 127940. Minnesota No. 177.

127941 to 127945. Pyrus. Malaceae.

 127941. Parker.
 127944. Minnesota No. 7.

 127942. Minnesota No. 3.
 127945. Minnesota No. 6.

127943. Minnesota No. 5.

127946 and 127947. Malus sylvestris Mill. Malaceae. Apple.

From England. Scions purchased from Hillier & Sons, Winchester. Received March 22, 1938.

127946. Castle Major.

127947. Cockle Pippin.

127948 to 127952. Impatients spp. Impatientaceae.

From Java. Seeds presented by the Director, Botanic Garden, Buitenzorg. Received March 15, 1938.

127948 and 127949. IMPATIENS BALSAMINA L.

Garden balsam.

127948. Common type.

127949. Rose-colored flowers.

127950. Impatiens platypetala Lindl.

A succulent perennial with strong branching stems, usually reddish purple, whorled lanceolate or oval leaves, and large axillary rose-colored flowers. Native to Java.

127951. Impatiens sp.

Flore Niveo.

127952. Impatiens sultani Hook. f.

Sultan snapweed.

127953 to 127956. Cannabis sativa L. Moraceae.

Hemp.

From Rumania. Seeds presented by Prof. T. Savulescu, Director, Rumanian Research Institute, Bucharest. Received March 16, 1938.

127953. From Cenad, Department of Timis.

127954. From Cluj, Department of Cluj.

127955. From Vasile Lupu, Department of Lasi.

127956. From Spantov, Department of Ilfov.

127957 to 127959.

From Canada. Seeds presented by the Dominion Forage Crops Laboratory, University of Saskatchewan, Saskatoon. Received March 15, 1938.

127597. AGROPYRON DASYSTACHYUM (Hook.) Scribn. Poaceae. Thicksp

Thickspike wheatgrass.

A perennial grass up to 2 feet high with creeping rhizomes.

For previous introduction see 125039.

127958. BOUTELOUA GRACILIS (H. B. K.) Lag. Poaceae.

Grass.

For previous introduction see 106422.

127959. STIPA VIRIDULA Trin. Poaceae.

Grass.

A tufted perennial grass with stems 2 to 3 feet high. Native to North America.

127960 to 128156. Euchlaena Mexicana Schrad. Poaceae. Teosinte.

From Guatemala. Seeds collected in Todos Santos Cuchumatán by Raymond Stadelman, Bureau of Plant Industry, United States Department of Agriculture. Received March 24, 1938.

Received without notes.

128157 and 128158. Prunus besseyi Bailey. Amygdalaceae.

Bessey cherry.

From South Dakota. Scions presented by N. E. Hansen, State College, Brookings. Received March 24, 1938.

128157. Keyapaha.

128158. Tepee.

128159. Prunus armeniaca L. Amygdalaceae. Apricot.

From Indiana. Scions presented by W. H. Replogle, Hagerstown. Received March 24, 1938.

Harris.

## 128160 to 128162.

From Austria. Seeds purchased from Grünwald & Co., Wiener-Neustadt. Received March 22, 1938.

128160. Malus sylvestris Mill. Malaceae.

Apple.

A wild apple.

128161. Prunus domestica L. Amygdalaceae.

Common plum.

Damascena.

128162. Prunus Mahaleb L. Amygdalaceae.

Mahaleb cherry.

From Bulgaria.

## 128163. Carya ovata (Mill.) Koch. Juglandaceae.

From Canada. Scions presented by G. H. Corsan, "Echo Valley," Islington, Ontario. Received March 25, 1938.

Neilson. The Neilson hickory nut is an Ontario variety discovered some years ago by the late James A. Neilson, State College, Mich., and by him temporarily designated as "Woodley." The name Neilson was later applied by Mr. Corsan. It is a true shagbark; the nuts are very large and have a thin shell which cracks easily. The tree is 70 feet tall with a spread of 35 feet and withstands a temperature of -40° F.

For previous introduction see 115663.

#### 128164 and 128165.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg, Manitoba. Received March 23, 1938.

128164. Avena sativa L. Poaceae.

Oats.

Vanguard oats.

128165. Triticum aestivum L. Poaceae.

Common wheat.

Renown wheat.

#### 128166 to 128170.

From Uruguay. Seeds presented by Bernardo Rosengurtt, Montevideo. Received March 19, 1938.

128166 and 128167. BOUTELOUA MEGAPOTAMICA (Spreng.) Kuntze. Poaceae.

Grass.

An erect, cespitose, perennial grass, with narrow spikelike panicles. Native to Brazil and Uruguay.

For previous introduction see 62034.

128166. Collected in Paysander by Mr. Garmendia, Escuela de Agronomía, December 1937.

128167. Cerro Largo. From Rio Negro y Palleros.

128168 and 128169. Briza Triloba Nees. Poaceae.

Grass.

A perennial grass with stems about 6 inches high. Native to Brazil.

128168. From Fimote, Florida.

128169. From Rio Santa Lucia-Paso Cuello.

128170. Manisuris selloana (Hack.) Kuntze. Poaceae.

A cespitose, suberect grass, common in Uruguay. The slender stems are about 12 inches high.

For previous introduction see 62044.

#### 128171 and 128172.

From New Zealand. Seeds presented by H. H. Allan, Government Botanist, Wellington. Received March 25, 1938.

128171. MIDA SALICIFOLIA A. Cunn. Santalaceae.

A small slender tree with extremely variable foliage and inconspicuous flowers. The wood is hard, dense, very strong, and durable. Native to New Zealand.

128172. OLEA CUNNINGHAMII Hook, f. Oleaceae.

Olive.

A handsome flowering shrub with whitish branches, downy young shoots, linear-oblong, leathery leaves 3 to 5 inches long, and small, greenish-white flowers in dense erect racemes. The drupes are  $\frac{1}{2}$  inch long. Native to North Island, New Zealand.

For previous introduction see 48169.

#### 128173. SACCHARUM. Poaceae.

Sugarcane.

From the Fiji Islands. Cuttings presented by the Colonial Sugar Refining Co., Rarawai Mill. Received March 29, 1938.

28-N.G.-269.

## 128174 to 128179.

From Guatemala. Seeds collected by Raymond Stadelman, Bureau of Plant Industry, United States Department of Agriculture. Received March 23, 1938.

128174 to 128178. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

128174. No. 18. From San Juan Atitán, Departamento Huehuetenango, February 28, 1938, at 7,500 feet altitude.

128175. No. 19. Tomate Extranjero. From San Martin Cuchumatán, Departamento Huehuetenango, February 25, 1938, at 7,000 feet altitude.

Nos. 128176 to 128178. From Jacaltenango, February 12, 1938, at about 4,000 feet altitude.

128176. Variety Pera.

128178. Variety Manzana.

128177. Variety Riñon.

128179. NICOTIANA TABACUM L. Solanaceae.

Tobacco.

From Santiago Chimaltenango, Departamento Huehuetenango, August 1937, at about 7,500 feet altitude. A mixed sample, 2 varieties, white flowered and red flowered.

128180 to 128182. GLYCINE MAX (L.) Merrill. Fabaceae. Soybean.

From Canada. Seeds presented by the Central Experimental Farm, Ottawa, Ontario. Received March 24, 1938.

128180. Kabott.

128181. Mandarin.

128182. Poland Yellow.

#### 128183 to 128185.

From South Dakota. Scions presented by N. E. Hansen, State College, Brookings. Received March 29, 1938.

128183 and 128184. MALUS. Malaceae.

128183. Red Flesh Crab.

128184. Zelma Crab.

128185. Pyrus. Malaceae.

Pear.

Ming pear.

128186. GLADIOLUS WATSONIUS Thunb. Iridaceae.

From the Union of South Africa. Bulbs presented by W. S. Duke & Co., Cape Town. Received February 3, 1926. Numbered in March 1938.

A gladiolus with a single linear-subulate rigid basal leaf a foot long and a slender stem 1 to  $1\frac{1}{2}$  feet long, with 2 to 4 bright-red flowers in a lax secund spike. Native to South Africa.

#### 128187 to 128189.

From California. Seeds collected by E. C. Auchter and H. P. Traub, Bureau of Plant Industry, United States Department of Agriculture. Received March 24, 1938.

128187. CEREUS Sp. Cactaceae.

Presented by the Huntington Botanical Gardens, San Marino. A cactus said to be promising for its edible fruits.

128188. Penstemon sp. Scrophulariaceae.

Collected in the Santa Rosa Mountains, September 10, 1937.

128189. Penstemon sp. Scrophulariaceae.

Collected in the Santa Rosa Mountains, September 10, 1937. A species with blue flowers.

128190. Paspalum paniculatum L. (P. galmarra F. M. Bailey).
Poaceae. Grass.

From the Fiji Islands. Seeds presented by Richard B. Howard, Navua, via Suva. Received March 23, 1938.

Russell River grass. A purely tropical pasture grass with about the same nutritional value as Paspalum dilatatum. It seeds abundantly, has an abnormal carrying capacity, and all kinds of stock eat it greedily.

128191. Musa fehi Bert. Musaceae.

Fei plantain.

From Hawaii. Rootstocks presented by the Hawaii Agricultural Experiment Station, Honolulu. Received March 30, 1938.

An upright-fruiting Hawaiian variety with red fruits. The young shoots are very long and slender.

For previous introduction see 58432.

128192. Bromus catharticus Vahl. Poaceae.

Grass.

From Australia. Seeds presented by William Ewart, secretary, Queensland Acclimatisation Society, Brisbane, Queensland. Received March 29, 1938.

An annual or biennial grass up to 2 feet high which forms a large stool and spreads rapidly from the root divisions. It is native to South America and is a good forage grass.

For previous introduction see 111271.

#### 128193 to 128195.

From Mexico. Seeds presented by Jesús Acuña Ordaz, Cerro Prieto Atoyac, Guerrero. Received March 30, 1938.

128193. Cajanus cajan (L.) Druce. Fabaceae.

Pigeonpea.

An edible bean.

128194. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

A wild red tomato.

128195. Physalis sp. Solanaceae.

Tomate de Cascara.

128196 and 128197. Bomarea spp. Amaryllidaceae.

From Colombia. Seeds presented by M. J. Rivero, Cali. Received March 26, 1938. 128196. BOMAREA Sp.

A climber, cultivated for its red flowers.

128197. BOMAREA Sp.

A vine with purple flowers.

128198. PICEA GLAUCA (Moench) Voss. Pinaceae.

Spruce.

From Massachusetts. Seeds purchased from F. W. Schumacher, Jamaica Plain. Received March 28, 1938.

A silvery blue form received under the name "Hursti."

#### 128199 to 128322.

From Bolivia, Argentina, and Peru. Seeds collected by H. L. Blood. Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received March 22, 1938.

128199 to 128202. Capsicum frutescens L. Solanaceae. Common redpepper.

128199. No. 322. From the market at Tarija, Bolivia, February 11, 1938. Fruit small, round; used as a condiment.

128200. No. 323. From the market at Tarija, Bolivia, February 11, 1938, but grown in Campina. Fruit elongated, orange-colored; used as a condiment.

128201. No. 338. From the market at Jujuy, Argentina, February 15, 1938. Fruit locally grown, small, yellow.

128202. No. 286. From the market at Sucre, Bolivia, February 3, 1938. A locally grown wild fruit, very small, red or yellow. Used pickled by the Indians and sold in the market as "condimento."

128203 to 128207. Cucurbita spp. Cucurbitaceae.

From the market at Tucumán, Argentina, February 17, 1938.

128203. Cucurbita ficifolia Bouche.

Alcallota.

No. 358. A melon, native to Ecuador, where it is cultivated extensively and used for food for man as well as for stock. The melons average 20 to 30 pounds each; when completely ripe, the shell is very hard, the flesh white, and the seeds black. There are two varieties, the white and the green-and-white striped.

For previous introduction see 115176.

128204. CUCURBITA MAXIMA Duchesne.

Squash.

No. 361. Fruit round with rugose spots.

128205. CUCURBITA MOSCHATA Duchesne.

Cushaw.

No. 362. Fruit pear-shaped.

128206 and 128207. CUCURBITA PEPO L.

Pumpkin.

128206. No. 359. Fruit flattish, yellow and green mottled.

128207. No. 360. Fruit dark green, round, rough, covered with warts.

128208. IPOMOEA CAIRICA (L.) Sweet. Convolvulaceae.

No. 387. From the Cordoba Gardens, Argentina, February 21, 1938, and also observed growing wild along the railroad right-of-way. A small vigorous ornamental vine with trumpetlike, lavender to white, red-throated flowers and palmately compound leaves.

For previous introduction see 116515.

128209. JACARANDA Sp. Bignoniaceae.

No. 294. *Tarco*. From the formal garden of the Princess of Sucré, just below Sucré, Bolivia, February 4, 1938, at about 8,000 feet altitude. A tree with pinnately compound leaves and flowers reported to be large, bell-shaped, and brown.

128210. Juglans Australis Griseb. Juglandaceae.

Walnut.

No. 363. From the mountains west of Tucumán, Argentina, February 19, 1938. A tree 40 to 60 feet high.

128211. Juglans sp. Juglandaceae.

No. 324. Monocaco. From Tarija, Bolivia, February 11, 1938. A tree 75 feet tall with a trunk 3 feet in diameter.

128212. LYCIUM sp. Solanaceae.

No. 287. Papango. From Yotala, Bolivia, February 4, 1938, at about 7,900 feet altitude. A shrubby plant with few thorns; flowers white; leaves lanceolate; fruit white at maturity.

128213. LYCIUM sp. Solanaceae.

No. 320. From a field near Tarija, Bolivia. A shrub with long trumpet-shaped violet flowers and small round orange-red fruits, less than ½ inch in diameter.

128214 to 128294. Lycopersicon esculentum Mill. Solanaceae. Tomato.

128214. No. 339. From the market at Jujuy, Argentina, February 15, 1938. Fruit small, round, red.

128215. No. 228. From Chulumani, Bolivia, January 20, 1938. Fruit cherry formed, 2-celled.

128216. No. 239. Collected along the roadside between Chulumani and La Paz, Bolivia, at about 5,000 feet altitude. An escape from cultivation.

Nos. 128217 to 128223. January 24, 1938. From the market at La Paz, Bolivia, but grown in Rio Bojo.

128217. No. 246. Fruit large, red, and very rough.

128218. No. 247. Fruit large, rough, yellow.

128219. No. 248. Fruit round, plum-shaped, yellow.

128220. No. 249. Fruit small, flat, yellow.

128221. No. 250. Fruit small, red, flat, 4-celled.

128222. No. 251. Fruit cherry red, 2- to 3-celled.

128223. No. 253. Fruit small, flat, red.

Nos. 128224 to 128228. From the market at Quillocallo, Bolivia, January 30, 1938.

128224. No. 256. Fruit round, plum-shaped, smooth, about ½ inch in diameter; grown in the Cochabamba Valley.

128225. No. 257. Fruit small, flat, red; about ½ inch in diameter and not quite so thick.

128226. No. 258. Fruit large, rough, yellow.

128227. No. 259. Fruit small, flat, yellow.

128228. No. 260. Fruit red.

128229. No. 261. From Calacala, Bolivia, January 30, 1938. Fruit flat, smooth, red, with cracks around the stem end.

Nos. 128230 to 128237. From the market at Cochabamba, Bolivia, January 31, 1938.

128230. No. 265. Grown at Calacala; fruit small, round, plum-shaped; over  $\frac{1}{2}$  inch in diameter.

128231. No. 266. Grown at Calacala; fruit small, pear-shaped, red, over ½ inch long.

128232. No. 267. Locally grown; fruit small, round, cherry-shaped, over ½ inch in diameter:

128233. No. 268. Grown at Calacala; fruit slightly elongated, plum-shaped, over ½ inch in diameter.

128234. No. 269. Grown near Calacala; fruit medium-sized, rough and yellow.

128235. No. 270. Fruit locally grown; small, flat, and very rough.

128236. No. 271. Grown at Punata; fruit yellow, a mixed type, mostly rough.

128237. No. 272. Grown at Punata; fruit small, plum-shaped.

Nos. 128238 to 128240. From the market at Buen Retiro, Bolivia, but grown at Santira, about 7,800 feet altitude, February 2, 1938.

128238. No. 274. Fruit red, pear-shaped.

128239. No. 275. Fruit red, plum-shaped.

128240. No. 276. Fruit cherry-shaped.

Nos. 128241 to 128247. From the market at Sucré, Bolivia, but grown at Sotomayo, February 2 and 3, 1938.

128241. No. 277. Fruit red, large and rough.

128242. No. 278. Fruit round, ribbed and flat, over 1 inch in diameter.

128243. No. 279. Fruit red, faintly ribbed, subglobose, over 1 inch in diameter.

128244. No. 280. Fruit red, small, subglobose, 2- to 4-celled.

128245. No. 281. Fruit cherry red, 1 inch in diameter.

128246. No. 282. Fruit round, cherry red, 1 inch in diameter.

128247. No. 283. Fruit small, red, round, less than 1 inch in diameter.

Nos. 128248 to 128252. From the market at Sucré, Bolivia, February 3 to 5, 1928.

128248. No. 284. Fruit small, rough, flat, yellow, 3- to 5-celled, locally grown.

128249. No. 285., Grown at Sotomayo; fruit round, yellow, over 1 inch in diameter.

128250. No. 295. Fruit large, yellow, and rough.

128251. No. 296. Fruit rectangular, yellow, tending toward plum type.

128252. No. 297. Fruit red, elongated.

Nos. 128253 and 128254. From Potosi, Bolivia, February 9, 1938.

128253. No. 300. Fruit large, yellow, rough.

128254. No. 301. Fruit small, flat, red.

Nos. 128255 to 128269. From the market at Tarija, Bolivia, February 11, 1938.

128255. No. 303. Fruit large, rough, pink; cultivated in this region for a long time.

128256. No. 307. Fruit large, rough, yellow; cultivated in this region for a long time.

128257. No. 304. Fruit large, rough, and red; cultivated in this region for a long time.

128258. No. 305. Fruit smooth, subglobose, over 2 inches in diameter.

128259. No. 306. Fruit large, smooth, slightly flat; cultivated.

128260. No. 308. Fruit small, globular to ovoid.

128261. No. 309. Fruit small, red, round like a large cherry; resembles the wild form.

128262. No. 310. Fruit large, round, pink; over 1 inch in diameter.

128263. No. 311. Fruit small, pear-shaped; over 1 inch in diameter.

128264. No. 312. Fruit very long, rectangular, over 2 inches in diameter; resembles some Italian tomato, probably a recent introduction.

128265. No. 313. Fruit yellow, pear-shaped.

128266. No. 314. Fruit top-shaped with the stem at the pointed end.

128267. No. 315. Fruit round, yellow; 1 inch in diameter.

128268. No. 316. Fruit round, yellow, over 1 inch in diameter.

128269. No. 317. Fruit small, yellow, rough.

128270. No. 318. From the experiment farm at Tarija, Bolivia, February 11, 1938. Fruit smooth, uniformly red, round and very firm. Introduced from Argentina in 1930 and selected; an exceptional tomato for this country.

128271. No. 319. From the experimental farm at Tarija, Bolivia, February 11, 1938, but grown in this region for a long time. Fruit large, rough and red, vines small, foliage very delicate.

Nos. 128272 and 128273. From the market at Jujuy, Argentina, February 13, 1938.

128272. No. 327. Fruit small, red, stem scar larger and more conspicuous than on typical cherrylike variety; wild, poor quality.

128273. No. 328. Fruit long, Italian pear-shaped type; grown in this region for a long while; mixed with other types.

Nos. 128274 to 128276. From the market at Salta, Argentina. February 14, 1938.

128274. No. 335. Fruit small, round, red.

128275. No. 336. Fruit very small, round, red.

128276. No. 337. Fruit small, elongated, near the plum type.

Nos. 128277 to 128284. From the market at Jujuy, Argentina, February 15, 1938, at 5,200 feet altitude.

128277. No. 340. Fruit small, red, round type slightly elongated; appears free from disease.

128278. No. 341. Fruit small, red, plum and round types mixed; approaching a native type.

128279. No. 342. Fruit small, red, pear type.

128280. No. 343. Fruit elongated with truncated shoulders; a modified pear type.

128281. No. 344. Fruit small, red, elongated; a regular type.

128282. No. 345. Fruit small, red, pear-shaped.

128283. No. 346. Fruit red, cherry formed, but not of wild type; stem and scar too large.

128284. No. 347. Fruit small, round, yellow.

Nos. 128285 to 128298. From the market at Tucumán, Argentina, February 16, 1938.

128285. No. 349. Fruit round, deep red; grown in San Juan.

128286. No. 350. Fruit small, red, flat, ribbed; grown in San Juan.

128287. No. 351. Fruit large, round, grown in San Juan.

128288. No. 352. Fruit small, red, standard type; grown in Chaco.

128289. No. 353. Fruit large, flat, red, standard type; grown in San Juan.

Nos. 128290 to 128294. From the market at Cordoba, Argentina, February 21, 1938.

128290. No. 282. Fruit round, smooth, tending to be slightly flat, a good type, free from disease. Grown in La Rioja.

128291. No. 384. Fruit large, smooth; locally grown.

128292. No. 385. Fruit small, smooth, round type; grown in San Juan.

128293. No. 386. Fruit smooth, round, deep type; grown in San Juan.

128294. No. 383. Fruit small, round, cherry type, resembling wild forms; locally grown.

128295. NICOTIANA Sp. Solanaceae.

No. 333. From between Jujuy and Salta, Argentina, along the roadside in loam soils, February 14, 1938. Plants 2 to 3 feet high; flowers long, white, some with pinkish cast.

128296. Passiflora sp. Passifloraceae.

No. 252. Tumbo Pequeño. Grown in the flower gardens of La Paz, Bolivia, as an ornamental; the fruit is sold on the market. Vine of great length and extensive coverage; fruit cucumberlike, 3 to 4 inches long, yellow, edible.

128297. Passiflora sp. Passifloraceae.

No. 376. Tumbo Chico. Found west of Cordoba, Argentina, in fields along the roadside and fence lines, in dry loam soils. Small vine type; flowers blue; fruit round and orange.

128298. PETUNIA VIOLACEA Lindl. Solanaceae.

No. 370. From Copina, in the Cordoba Hills, Argentina, February 19, 1938, in moist gravelly soil. A petunia, native to Argentina, with dark-green leaves and a profusion of white and pinkish to purple flowers with long trumpet.

For previous introduction see 51109.

128299 to 128301. Physalis spp. Solanaceae.

128299. Physalis sp.

No. 288. Tipilla. Down the river from Yotala, Bolivia, at about 7,800 feet altitude.

128300. Physalis sp.

No. 321. Pacpacha. From Tarija, Bolivia, February 11, 1938.

128301. Physalis sp.

No. 377. From along the roadside west of Cordoba, Argentina, February 19, 1938, in dry loam soil. A low perennial; fruit firm, yellow; flesh dry, deep orange yellow, and very aromatic.

128302. PITHECOCTENIUM CYNANCHOIDES DC. Bignoniaceae.

Argentine monkeycomb.

No. 374. From west of Cordoba, Argentina, February 19, 1938. A woody vine climbing by tendrils on the leaves. The large pure-white, trumpetlike flowers are borne in terminal pairs, usually throughout the year.

For previous introduction see 42328.

128303. Poa horridula Pilger. Poaceae.

Grass.

No. 215. Above Abancay, Peru, January 15, 1938, at 10,500 feet altitude. An erect perennial grass,  $2\frac{1}{2}$  to 3 feet tall, often in large clumps, growing among rocks. Native to Peru.

128304. Sida sp. Malvaceae.

No. 299. From Vila Vila, between Sucré and Potosi, Bolivia, at about 10,000 feet altitude, February 7, 1938. A spreading procumbent plant with lanceolate leaves and orange-yellow blossoms.

128305 to 128319. Solanum spp. Solanaceae.

128305. Solanum sp.

No. 264. From above Calacala, Bolivia, January 30, 1938. A very thorny plant with deeply cleft leaves and purple flowers.

128306. SOLANUM Sp.

No. 330. On hills between Jujuy and Salta, Argentina, on steep mountain slopes where humidity is high, February 14, 1938. Plants 6 to 12 feet high; fruit top-shaped, yellow.

128307. Solanum sp.

No. 356. On a mountainside, west of Tucumán, Argentina, February 17, 1938, in exposed area and rocky soil. A herbaceous plant up to 5 feet high; fruit green at maturity.

128308. SOLANUM Sp.

No. 273. Collected by the Indians about Cochabamba, Bolivia, January 31, 1938. Fruit red, calyx lobes spiny, large, almost enclosing the fruit.

128309. SOLANUM sp.

No. 298. From Tucumbu, Bolivia, February 7, 1938, at about 10,000 feet altitude. A dwarf type of yellow solanum; flowers white with conspicuous stamens,

128310. SOLANUM Sp.

No. 193. Above Limatambo, Peru, about 12,400 feet altitude, January 14, 1938. A slender delicate vine with white flowers and ovoid fruits.

128311. SOLANUM Sp.

No. 209. From a hillside above Curahausi, Peru, January 15, 1938, about 9,000 feet altitude. A bushy herbaceous plant with the leaves and stems slightly viscous.

128312. SOLANUM Sp.

No. 263. From the foothills above Calacala, Bolivia, January 30, 1938, growing in shade in gravelly loam. A herbaceous plant, 3 to 5 feet high, which resembles *Solanum nigrum*. Fruit small and dark green at maturity.

128313. SOLANUM Sp.

No. 293. From below Sucré, Bolivia, February 4, 1938, at 8,000 feet altitude; presented by an Indian as a "wild tomato." A spiny plant with round, red, edible fruits.

128314. SOLANUM Sp.

No. 329. From the hills between Jujuy and Salta, Argentina, February 14, 1938.

128315. SOLANUM Sp.

No. 334. Along the highway between Jujuy and Salta, Argentina, February 14, 1938. Plant spiny; flowers purplish white to white; fruits red, cherry-shaped.

128316. SOLANUM Sp.

No. 371. At Copina, in the "Sierra Grandes," Cordoba Hills, Argentina, February 19, 1938. A plant with leaves 18 inches long and white flowers with yellow anthers.

128317. SOLANUM Sp.

No. 375. From west of Cordoba, Argentina, February 19, 1938. A spiny plant, 6 to 12 inches high, with purple flowers and yellow fruits.

128318. SOLANUM SD.

No. 262. From hills above Calacala, Bolivia, January 30, 1938, in gravelly soil. A shrubby plant with elongated leaves and long yellow fruits. Native to Bolivia.

128319. SOLANUM Sp.

No. 355. From the mountainside west of Tucumán, Argentina, February 17, 1938, at about 3,800 feet altitude. A shrubby plant 10 to 15 feet high; fruits red, borne in clusters; flowers purple.

128320. Sterculia sp. Sterculiaceae.

No. 348. From Jujuy, Argentina, February 15, 1938. Young trees, 15 feet high, pyramidal and symmetrical.

128321. TRISETUM SPICATUM (L.) Richter. Poaceae.

Grass.

No. 216. On hillside above Abancy, Peru, at about 10,500 feet altitude, January 15, 1938. A grass 2 feet high.

For previous introduction see 114290.

128322. VERBENA Sp. Verbenaceae.

No. 366. From hills of Cordoba, Argentina, February 19, 1938. A prostrate plant, leaves linear dentate with acute tips and few conspicuous hairs; flowers rose, red, and blue.

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# Plant Inventory No. 135

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., October 1949



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1938 (Nos. 128323 to 129590)

A SERVICE SERVICE SERVICES

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## INTRODUCTORY STATEMENT

This inventory, No. 135, is a record of the plant material (Nos. 128323 to 129590) received by the Division of Plant Exploration and Introduction during the period from April 1 to June 30, 1938.

The manuscript was prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

C. O. Erlanson,
Principal Horticulturist, in Charge,
Division of Plant Exploration and
Introduction, Plant Industry Station, Beltsville, Md.

#### INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

# 128323 to 128329. ZEA MAYS L. Poaceae.

Corn.

From Bolivia. Seeds presented by Rev. Verne D. Roberts, Bolivian Indian Mission, Cochabamba. Received April 6, 1938.

Received without notes.

827735-49--1

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### 128330 to 128337.

From Germany. Plants purchased from L. Späth, Baumschulenweg, Berlin-Received April 8, 1938.

128330. Malus sylvestris Mill. Malaceae.

Apple.

Bohnapfel Findling.

128331 to 128336. Prunus spp. Amygdalaceae.

128331. PRUNUS Sp.

Kleine Ammer cherry.

128332 to 128335. PRUNUS AVIUM L.

Sweet cherry.

128332. Knaufskirsche.

128333. Schmahlfelds Schwarze.

128334. Spanische Knorpelkirsche.

128335. Wils Früne Herzkirsche.

128336. PRUNUS DOMESTICA L.

Common plum.

Königsbacher Frühzwetsche.

128337. Pyrus communis L. Malaceae. Solaner.

Common pear.

128338. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg, Manitoba. Received April 8, 1938.

No. 926. Harkness tomato.

## 128339. Agave parviflora Torr. Amaryllidaceae.

From Arizona. Plants collected by R. H. Peebles and H. J. Fulton, United States Field Station, Sacaton. Received April 2, 1938.

No. 11444. May 4, 1938, at 4,600 feet altitude, on the road between Ruby and Nogales, Santa Cruz County. A small stemless globose agave with many ascending, gray-dotted, green leaves 4 inches long and ¼ of an inch wide and small greenish-white flowers in an inflorescence about 5 feet long. Native to Mexico.

128340. Juglans nigra L. Juglandaceae. Black walnut.

From Canada. Scions presented by G. H. Carson, Islington, Ontario. Received April 14, 1938.

Troup. A black walnut from Jordan Station, Ontario, overlooking Lake Ontario. This nut is decidedly superior to the *Learn*. The nut is large, the shell thin, the meats very fat, of excellent flavor and loose in the shell.

# 128341. Impatiens balsamina L. Impatientaceae. Garden balsam.

From Sweden. Seeds presented by Dr. C. Skottsberg, Director, Botanic Garden, Göteborg. Received April 5, 1938.

For previous introduction see 127949.

# 128342. Impatient Roylei Walp. Impatient aceae. Snapweed.

From Sweden. Seeds presented by the Director, Botanic Garden, Upsala. Received April 11, 1938.

For previous introduction see 127781.

#### 128343. Mentzelia conzattii Green. Loasaceae.

From Oaxaca, State of Oaxaca, Mexico. Seeds presented by David Barry, Jr., Los Angeles, Calif. Received April 6, 1938.

A tall shrub with oblong-lanceolate leaves up to about 6 inches long and showy bright-yellow flowers almost 2 inches across. Native to Oaxaca, Mexico.

128344. Jacaranda caucana Pittier. Bignoniaceae. Gualanday.

From Colombia. Seeds presented by Dr. Vidal Y. Guitart, Escuela Superior de Agricultura Tropical, Cali, through David Fairchild, Coconut Grove, Fla. Received April 11, 1938.

An erect deciduous tree, native to the Cauca Valley, Colombia, where it is a favorite with the inhabitants because of its blue flowers. These are 1½ inches long, borne in large terminal panicles in summer just after the large pinnate leaves have fallen.

For previous introduction see 124732.

128345. Coleus frederici G. Taylor. Menthaceae.

From England. Seeds purchased from Carters Tested Seeds Ltd., Raynes Park, London S. W. 20. Received April 12, 1938.

An annual or biennial fleshy coleus up to about 4 feet high, native to bushy situations in Angola, western tropical Africa. The broadly ovate, cordate, pubescent leaves are nearly 3 inches in length, and the numerous small, deepblue fragrant flowers are attractively arranged in oblong panicles about 10 inches long. As a winter-blooming greenhouse plant, this elegant coleus has been very popular in England.

128346 to 128349. CITRUS spp. Rutaceae.

From France. Seeds and budwood presented by John Asch, Nice. Received April 15, 1938.

128346. CITRUS SINENSIS (L.) Osbeck.

Orange.

Orange de Nice. (Budwood.)

128347. CITRUS SINENSIS (L.) Osbeck.

Orange.

Bigardier. A heavy bloomer whose large white flowers are sold for the cut-flower trade and also are used for perfume. (Budwood.)

128348. CITRUS SP.

Orange Sauvage. A wild orange, origin unknown, growing on the grounds of the Ministry of Agriculture experiment station at Villa Thuret, on the Cap d'Antibes. The seedlings of this tree are used as stock by the nurserymen in the district. (Budwood.)

128349. CITRUS Sp.

Orange Sauvage. Seeds. [See 128348 for description.]

128350. Prunus subhirtella Miquel. Amygdalaceae. Higan cherry.

From California. Scions presented by W. B. Clarke & Co., San Jose. Received April 2, 1938.

Yae-benishidare. A double-pink, pendulous variety of the Higan cherry.

## 128351 to 128360. ZEA MAYS L. Poaceae.

Corn.

From Peru. Seeds presented by Dr. A. Weberbauer, Estación Experimental Agrícola de La Molina, Lima. Received April 2, 1938.

128351. Uhina. A yellow corn from Granja Escuela Experimental del Kcaira, Cuzco.

128352. A yellow corn from the market at Lima.

128353. A white corn from the market at Lima.

128354. Paraccay. A white corn from Granja Escuela Experimental del Kcaira, Cuzco.

128355. Confite. Originally from Cuzco, Peru.

128356. Cristal. From the market at Lima.

128357. De Gallina. From the market at Lima.

128358. A purple corn from the market at Lima.

## 128351 to 128360-Continued

128359. Culli. A purple corn from Granja Escuela Experimental del Kcaira, Cuzco.

128360. Saccsa Azotado. From Granja Escuela Experimental del Kcaira, Cuzco.

# 128361 to 128365. Malus sylvestris Mill. Malaceae. Apple.

From England. Plants purchased from W. Hopwood & Son, Cheltenham. Received April 4, 1938.

128361. *Joybells*.

128364. The Queen .

128362. Langley Pippin.

128365, Tibberton Codlin.

128363. Stirling Castle.

## 128366. Amygdalus persica L. Amygdalaceae.

Peach.

From Germany. Scions purchased from Philip W. Werner, Reichelscheim, Odonwald. Received April 4, 1938.

Proskauer Frühpfirsich.

# 128367 to 128377. Phaseolus spp. Fabaceae.

Bean.

From Poland. Seeds presented by Dr. L. Kaznowski, Poland Institute for Agricultural Research, Pulawy. Received April 11, 1938.

128367 and 128368. Phaseolus coccineus L.

Scarlet-runner bean.

128367. No. 1. Piekny Jaś.

128368. No. 2. Pstra Wielka.

128369 to 128377. Phaseolus vulgaris L.

Common bean.

128369. No. 6. Cud Francji.

128370. No. 8. Hinricha Biała.

128371. No. 7. Hinricha Pstra.

128372. No. 5. Ideal.

128373. No. 11. Krajowa Thusta.

128374. No. 3. Mount d'Or.

128375. No. 4. Niewyczerpana.

128376, No. 10. Perlówka.

128377. No. 9. Tryumf.

# 128378 to 128380. Cannabis spp. Moraceae.

Hemp.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Kujbyshev. Received April 6, 1938.

128378. Cannabis Ruderalis Janisch.

No. 485.

128379 and 128380. CANNABIS SATIVA L.

128379, No. 486.

128380. Originally from China.

# 128381. Cyrtanthus lutescens var. cooperi Baker. Amaryllidaceae.

From the Union of South Africa. Bulbs presented by W. S. Duke & Co. Received March 6, 1926. Numbered in April 1938.

A cyrtanthus with 2 to 4 linear leaves about 1 foot long and a slender scape of equal length with about 6 fragrant yellow flowers 2 inches long. Native to South Africa.

# 128382. Campanula carpatica Jacq. Campanulaceae.

From England. Plants purchased from Maurice Prichard & Sons, Riverslea Nurseries, Christchurch, Hants. Received June 10, 1935. Numbered in April 1938.

Mrs. V. Frere. A variety about 6 inches high. The flowers, opening flat, with acutely pointed petals, are light blue with a white center.

## 128383. Gossypium raimondii Ulbrich. Malvaceae.

Cotton.

From Peru. Seeds presented by Prof. T. Boza-Barducci, Cotton Genetics Division, Estación Experimental Agrícola de La Molina, Lima. Received March 31, 1938.

A shrub or small tree, native to Peru.

For previous introduction see 126973.

## 128384 to 128390. Impatients spp. Impatientaceae.

From India. Seeds presented by the Curator, Royal Botanic Garden, Calcutta. Received April 5, 1938.

128384. IMPATIENS ARGUTA Hook, f. and Thoms.

An erect branching herb, 1 to 4 feet high, with ovate or lanceolate leaves about 3 inches long and large purplish flowers. Native to the Himalayan region between 3,000 and 5,000 feet altitude.

128385. IMPATIENS BALSAMINA L.

Garden balsam.

For previous introduction see 127949.

128386. IMPATIENS FILICORNU Hook. f.

A slender branching herb a foot or more high, with long-petioled, ovate leaves and many small, light-purple flowers in umbels. Native to tropical Africa.

128387. IMPATIENS JURPIA Buch.-Ham.

A branching, shrubby perennial 5 to 8 feet high, with numerous elliptic-lanceolate leaves 3 to 10 inches long and large white to orange-red flowers on long 1- to 3-flowered peduncles. Native to the temperate and subtemperate Himalayan region.

128388. Impatiens longipes Hook. f. and Thoms.

Snapweed

A tall branched snapweed with distant, elliptic-lanceolate, crenate, alternate leaves 3 to 5 inches long and pale-yellow, unspotted flowers 1 inch long, in loose racemes. Native to the temperate Sikkim Himalayas between 8,000 and 10,000 feet altitude,

For previous introduction see 39669.

128389. IMPATIENS SULTANI Hook. f.

Sultan snapweed.

128390. IMPATIENS Sp.

Collected in the Himalayas at 6,000 feet altitude.

#### 128391 to 128396.

From the Union of Soviet Socialist Republics. Plants presented by Dr. N. I. Sharapov, Institute of Plant Industry, Leningrad. Received April 18, 1938.

128391 to 129394. Amygdalus persica L. Amygdalaceae.

Peach

128391. Bludtohaty Nairaneyshiy.

128392. Lagak 769 T.

128393. Ferganensis No. 189.

128394. Ferghansky Zholto-Miassy.

128395 and 128396. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

128395. Badam Ispharac.

128396. Kondak 0234.

## 128397. Malus sylvestris Mill. Malaceae.

Apple.

From Norway. Scions presented by Prof. Olav Moen, Nŏrges Landbrukshøiskole Planteskolen, Aas. Received April 18, 1938.

Graygylling.

#### 128398 to 128417.

From Canada. Plants presented by M. B. Davis, Central Experimental Farm, Ottawa, Ontario. Received April 18, 1938.

#### 128398 to 128414. MALUS. Malaceae.

Crab apple.

A collection of hybrid crab apples.

128407. Louise. 128398, Amisk. 128399, Atha Baska. 128408. Makimik. 128400. Bernard. 128409. Nameu. 128401. Brome. 128410. Nipissing. 128402, Chilko. 128411. Okanagan. 128403, Cowichon. 128412. Scugog. 128404. Geneva. 128413. Vernon. 128405. Harriman: 128414. Wabickau.

128406. Kingsmere.

128415 to 128417. Pyrus. Malaceae.

Pear.

128415. Pyrus  $\times$  Rosseau.

128416. Pyrus × Sissipuk.

128417. Sissipuk.

## 128418 to 128436.

From the Union of South Africa. Bulbs purchased from Miss K. C. Stanford, Bloem Erf, Banhoek, Stellenbosch. Received April 19, 1938.

A collection of plants native to South Africa.

128418. Babiana ringens (L.) Ker. Iridaceae.

A showy cormous plant 6 to 10 inches high, with several narrow pointed linear leaves and 8 to 12 gaping scarlet flowers in a dense spike.

128419. DIERAMA MEDIUM N. E. Brown. Iridaceae.

A herbaceous perennial 11/4 to 21/2 feet high, with long linear leaves and lax spikes of 2 to 9 dark-red flowers.

128420. DIERAMA PENDULUM (Thunb.) Baker. Iridaceae.

A cormous plant up to 4 feet high, with 5 or 6 rigid linear basal leaves and large white or mauve-purple flowers in nodding panicled spikes.

128421 and 128422. Geissorhiza Hirta (Thunb.) Ker. Iridaceae.

An ixialike bulbous plant with a few hairy distichous leaves and 2 to 6 bright-red flowers in a loose spike.

128423. HESPERANTHA BUHRII L. Bolus. Iridaceae.

A hesperantha about 12 inches high, with several narrow leaves up to 8 inches long and a lax flexuose spike of about 7 small rose flowers.

128424 to 128426. IXIA spp. Iridaceae.

128424. IXIA DUCKITTIAE L. Bolus.

A Cape Province ixia over 2 feet high, with 6 to 8 sword-shaped leaves and many orange flowers, over an inch long, in a dense spike.

## 128418 to 128436—Continued

128425. IXIA MACULATA L.

Spotted ixia.

An ixia with about 4 linear ribbed leaves 6 to 12 inches long, a slender simple or branched stem up to 2 feet high, and a dense erect spike of typically yellow flowers marked with dark purple or black eyes.

128426. IXIA MONADELPHA Delaroche.

An ixia with firm linear leaves 6 to 12 inches long, a slender simple or branched stem 1 foot or more long, and a short spike of a few flowers with limbs  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long. The flower color varies and in the typical form is lilac with a greenish or blue throat.

128427. LAPEYROUSIA CORYMBOSA (L.) Ker. Iridaceae.

A lapeyrousia with a spreading sword-shaped basal leaf 4 to 6 inches long and a dense flat-topped cluster of many white or blue flowers, each about 1 inch across, with nearly regular segments.

128428 to 128431. SPARAXIS spp. Iridaceae.

128428. SPARAXIS BULBIFERA (L.) Ker.

A wandflower with simple or branched stems 6 to 12 inches high, several linear or lanceolate firm basal leaves up to 1 foot long, and a solitary flower or a few small yellow flowers in a spike.

128429. SPARAXIS.

Bloem Erf hybrids. Plants very tall with large crimson, deep amethyst, or yellow flowers.

128430 and 128431. SPARAXIS GRANDIFLORA Delaroche.

A wandflower about 1 foot high, with several linear leaves and 1 to 5 white, yellow, or purple flowers; the limbs are about 1 inch long.

128430. A variety with cream flowers.

128431. A variety with purple flowers.

128432. SYNNOTIA METELERKAMPIAE L. Bolus.

A synnotia with 6 or 7 linear basal leaves 2 to 3 inches long and lax spikes of 9 to 12 deep-violet flowers. Allied to *Synnotia variegata*, but having much larger flowers.

128433 to 128436. TRITONIA spp. Iridaceae.

128433. TRITONIA CRISPA (L. f.) Ker.

A tritonia with 4 to 6 linear crisped basal leaves about 5 inches long. It has a slender simple or branched stem up to 1 foot high and spikes of 4 to 10 whitish or pale-pink flowers with segments ½ inch long.

128434. TRITONIA CROCATA (L.) Ker.

A tritonia with slender or branched stems about 1 foot high; flowers pale salmon marked with white outside, in a raceme.

128435. TRITONIA DEUSTA (Soland.) Ker.

A tritonia with 4 to 10 large copper-colored flowers on a lax spike.

128436. TRITONIA SCILLARIA (L.) Baker.

A small slender tritonia with several linear leaves 4 to 6 inches long and a flexuose spike of about 6 large fragrant pink flowers.

#### 128437 to 128439.

From Costa Rica. Seeds collected by H. F. Loomis, Bureau of Plant Industry, United States Department of Agriculture. Received April 19, 1938.

128437. Bactris sp. Phoenicaceae.

Palm.

Huiscoyol. From Cairo, April 8, 1938.

## 128437 to 128439—Continued

128438. Calyptrogyne sarapiquensis H. Wendl. Phoenicaceae. Palm.

Cola de Gallo. From Cairo, April 8, 1938. A Costa Rican pinnate-leaved palm, nearly stemless or with a short thick stem and numerous leaves 4 to 6 feet long. The young leaves are pinkish green and very handsome.

For previous introduction see 123384.

128439. Theobroma purpureum Pittier. Sterculiaceae. Wild cacao.

Cacao de Montana. From Cairo, April 7, 1938. A large shrub or small tree with digitate, long-petioled leaves of usually 5 obovate-oblong leaflets 12 to 20 inches long and clusters of 5 to 8 small purple flowers borne on the trunk. The pod, about 3 inches long, has a white edible pulp and contains numerous seeds. Native to Central America.

#### 128440 to 128451.

From Chile, Argentina, and Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received April 6, 1938.

128440. Embothrium coccineum Forst. Proteaceae.

Notro.

No. 405. From Temuco, Chile, March 9, 1938. A handsome evergreen shrub or tree which, under favorable conditions, becomes 40 feet high. The thick ovate-lanceolate leaves are dark glossy green, 3 to 4 inches long, and the brilliant scarlet tubular flowers, about 1 inch long, are in short dense axillary and terminal clusters. Native to Chile.

For previous introduction see 124875.

128441 and 128442. GEVUINA AVELLANA Molina. Proteaceae Chilean nut.

An evergreen Chilean tree up to 40 feet high, with dark-green pinnate leaves, white flowers in axillary racemes, and edible red fruits.

For previous introduction see 76484.

128441. No. 373-A. From El Vergel, Angol, Chile, March 12, 1938.

128442. No. 406. From Temuco, Chile, March 9, 1938.

128443. Juglans sieboldiana Maxim. Juglandaceae. Japanese walnut.

No. 399. From El Vergel, Angol, Chile, March 7, 1938. A walnut, native to Japan, which becomes a roundheaded tree up to 60 feet high, with 9 to 17 ovate serrulate leaflets and ovoid, thick-shelled nuts.

For previous introduction see 75445.

128444. LUPINUS Sp. Fabaceae.

No. 213. From the hills above Abancay, Peru, at 10,500 feet altitude, January 15, 1938. May have value as an ornamental.

128445 to 128449. Lycopersicon esculentum Mill. Solanaceae. Tomato.

128445. No. 388. From Buenos Aires, Argentina, February 26, 1938. Fruits small, both cherry- and plum-shaped.

128446. No. 391. From Santiago, Chile, March 6, 1938. Fruit elongated with firm, very sweet flesh.

128447. No. 400. From Temuco, Chile, March 3, 1938, but grown at Talca. A small smooth red fruit; grown in this region a long time.

128448. No. 401. From Temuco, Chile, March 8, 1938, but grown at Talca. Fruit small, very smooth, light in color.

128449. No. 402. From Temuco, Chile, March 8, 1938, but grown at Chillon. Fruit medium size, very deep red, free from disease.

128450. Solanum sp. Solanaceae.

No. 389. From a dry canyon northwest of Mendoza, Argentina, March 2, 1938, at 2,000 feet altitude. Fruit green.

# 128440 to 128451—Continued

128451. Solanum sp. Solanaceae.

No. 390. From a canyon east of Los Andes, Chile, at over 6,000 feet altitude. A plant with blue flowers and orange-red fruits.

# 128452 to 128462. Castanea crenata Sieb. and Zucc. Fagaceae. Japanese chestnut.

From Japan. Scions presented by the Forest Service, Yamagata. Received April 19, 1938.

For previous introduction see 119044.

 128452. No. 8. Banaka.
 128458. No. 3. Rasawara.

 128453. No. 13. Boshi.
 128459. No. 18. Tashiro.

 128454. No. 7. Chokoji.
 128460. No. 14. Omukai.

 128455. No. 4. Ginyose.
 128461. No. 16. Shinnozoki.

 128456. No. 12. Heijho.
 128462. No. 1. Taishowase.

128457. No. 17. Hokizawa.

# 128463 and 128464. Cydonia oblonga Mill. Malaceae. Quince.

From Maryland. Plants presented by E. V. Shear, Division of Fruit and Vegetable Crops and Diseases, Beltsville. Received March 19, 1938. Numbered in April 1938.

128463. Angers. Type A. The best type.

128464. Type B. Common type.

# 128465 to 128497. Rhododendron spp. Ericaceae.

From Germany. Plants purchased from Herman A. Hesse, Weener, Ostfreisland. Received April 21, 1938.

128465 to 128493. Rhododendron catawriense Michx.

 128465. Adalbert, hybrid.
 128480. Donar.

 128466. Alarich, hybrid.
 128481. Dürer.

 128467. Albert.
 128482. Emil.

 128468. Alfred.
 128483. Fichte.

 128469. Anna.
 128484. Figare.

128470. Annedore. 128485. Frau von Wolffersdorff.

 128471. Anton.
 128486. Genoveva.

 128472. Arno.
 128487. Gertrude.

128473. Bibber. 128488. Gloria Gandavensis.

 128474. Bismark
 128489. Granat.

 128475. Botha.
 128490. Holbein.

 128476. Carola.
 128491. Homer.

 128477. Christian.
 128492. Moses.

 128478. Daisy.
 128493. Oldewig.

128479. Desiderius.

128494 to 128497. RHODODENDRON CAUCASICUM Pall. Caucasian rhododendron. Hardy, very early blooming, low-growing varieties.

For previous introduction see 108800.

 128494. Calliope.
 128496. Euterpe.

 128495. Erato.
 128497. Mnemosyne.

827735-49---2

128498. MAURANTHE LUNATA (Liebm.) O. F. Cook (Chamaedorea lunata Liebm.). Phoenicaceae. Palm.

From Washington, D. C. Plants growing in the United States Department of Agriculture greenhouses. Numbered in April 1938.

Originally from seeds collected in 1922 by O. F. Cook, from Alta Vera Paz and Petén, eastern Guatemala.

C. A. 251. A small, slender-trunked palm, 4 to 12 feet high, with smooth, shining, pinnate leaves, the pinnae broad and obliquely oval. The young palms are suitable as house plants. Native to southern Mexico and eastern Guatemala.

## 128499 to 128503.

From Belgium. Seeds presented by Dr. Alexandre Conard, Directeur du Jardin Experimental Jean Massart, Auderghen. Received April 21, 1938.

128499 to 128501. AQUILEGIA spp. Ranunculaceae.

Columbine.

128499. AQUILEGIA CANADENSIS L.

For previous introduction see 13022.

128500. X AQUILEGIA HELENAE G. Arends.

Helen columbine.

Considered to be a hybrid between Aquilegia caerulea and A. chrysantha. The plants are robust, with numerous blue and white flowers.

For previous introduction see 103370.

128501. AQUILEGIA SKINNERI Hook.

A perennial columbine 2 to 3 feet high, with panicles of several nodding flowers. The limb of the petal is yellowish green, and the red spur is about 2 inches long. Native to Mexico.

128502. Cannabis sativa L. Moraceae.

Hemp.

128503. Impatiens roylei Walp. Impatientaceae.

Snapweed.

For previous introduction see 128342.

# 128504 to 128512.

From the Union of Soviet Socialist Republics. Plants and scions presented by the Forest Garden Experiment Station, Beshtaugorsky Lesopark Stanzia Mashuk, near Pyatigorsk, Caucasus. Received April 21, 1938.

128504. Juglands regia L. Juglandaceae.

Persian walnut.

128505 to 128508. Malus spp. Malaceae.

128505. MALUS BACCATA (L.) Moench.

Siberian crab.

For previous introduction see 119229.

128506. MALUS FLORENTINA (Zucc.) Schneid.

A handsome round-headed, small tree with broad-ovate leaves which turn orange scarlet in the autumn and white flowers up to an inch across, in clusters of 6 to 8. Native to Italy.

128507.  $\times$  Malus arnoldiana Sarg.

Arnold crab apple.

A hybrid crab apple (Malus floribunda  $\times$  baccata) that resembles M. floribunda, but has larger leaves and larger flowers, lighter in color. The yellow fruit is about one-half inch across.

For previous introduction see 54082.

1208508. MALUS SPECTABILIS (Ait.) Borkh.

Chinese flowering crab.

A tall shrub or small tree from northern China, with erect slightly spreading branches, large pink flowers which in the cultivated forms are more or less double, and medium-sized yellow fruits.

For previous introduction see 49091.

# 128504 to 128512-Continued

128509 to 128511. PRUNUS spp. Amygdalaceae.

128509. PRUNUS ARMENIACA L.

Apricot.

128510. PRUNUS AVIUM L.

Sweet cherry.
Blackthorn.

128511. PRUNUS SPINOSA L.

For previous introduction see 72577.

128512. Pyrus salicifolia Pall. Malaceae.

Willow-leaved pear.

A roundheaded tree 20 to 25 feet high, with a short trunk and beautiful willowlike grayish to silvery leaves 1 to 3 inches long and scarcely more than ½ inch wide. The dense corymbs of white flowers are borne freely in April, Native to western Asia and southeastern Europe.

For previous introduction see 98195.

# 128513. Phaseolus vulgaris L. Fabaceae.

Common bean.

From California. Seeds presented by Mrs. Edith V. A. Murphey, Potter Valley, Mendocino County. Received April 18, 1938.

From the Round Valley Reservation, near Covelo, at 1,400 feet altitude.

# 128514 and 128515. AVENA SATIVA L. Poaceae.

Oats.

From Australia. Seeds presented by the Department of Agriculture, State Research Farm, Werribee, Victoria. Received April 18, 1938.

128514. Dawn.

128515. Palestine.

# 128516 and 128517. Cannabis sativa L. Moraceae.

Hemp.

From Italy. Seeds presented by R. Scuola Agraria Superiore Universita di Bologna, through Dr. Antonio Biraghi, R. Stazione di Patologia Vegetale, Rome. Received April 18, 1938.

# 128518. Hordeum vulgare L. Poaceae.

Barley.

From Java. Seeds presented by A. M. Cramer, Sr., Wonosobo. Received April 19, 1938.

Grown in the State of Sikkim, Upper Bengal, on the southern slope of the Himalayas. A naked barley which ripens in 3 months.

#### 128519 to 128542.

From Rumania. Seeds presented by Prof. S. St. Radian, Director, Botanic Garden of the University of Bucharest, Bucharest. Received April 19, 1938.

128519 to 128526. AQUILEGIA spp. Ranunculaceae.

Columbine.

Alpine columbine.

#### 128519. AQUILEGIA ALPINA L.

An alpine perennial about 12 inches high, native to Switzerland. The biternate leaves have deeply lobed divisions 1 to 2 inches long and the expanded flowers are 2 inches across with blue sepals and white petals, the incurved spurs being as long as the petals.

For previous introduction see 103360.

128520. AQUILEGIA CHRYSANTHA A. Gray.

Golden columbine.

128521. AQUILEGIA FLABELLATA Sieb. and Zucc.

A Japanese columbine up to 1½ feet high, with many nodding lilac flowers about 2 inches across. Allied to Aquilegia sibirica.

128522. AQUILEGIA NIGRICANS Baumg.

A European alpine aquilegia with smaller, deep-purple flowers than Aquilegia vulgaris, to which it is related.

# 128519 to 128542—Continued

128523. AQUILEGIA SIBIRICA Lam.

Siberian columbine.

A nearly glabrous columbine, 1 to 2 feet high, native to Siberia. The biternate leaves are made up of shallow-lobed leaflets 1 to 2 inches broad, and the many lilac-blue and white flowers have stout incurved or even coiled spurs ½ inch broad.

For previous introduction see 103372.

128524. AQUILEGIA Sp.

Introduced under the name "stenopetala," for which a proper place of publication has not been found.

128525 and 128526. AQUILEGIA VULGARIS L.

European columbine.

128525. Common form.

128526. Var. Duplex.

128527. Callistephus chinensis (L.) Nees. Asteraceae.

For previous introduction see 24109.

128528 to 128533. Impatients spp. Impatientaceae.

Snapweed.

128528. IMPATIENS BALSAMINA L.

128529. IMPATIENS BIFLORA Walt.

Garden balsam.

128530. IMPATIENS BALSAMINA L. Garden balsam. 128531. IMPATIENS INSIGNIS DC.

An herb 1 to 2 feet high, with thick elliptic-lanceolate leaves 2 to 5 inches long and terminal racemes of many dark-rose flowers with long slender spurs. Native to Nepal.

128532. Impatiens nolitangere L.

A form with yellow flowers.

128533. IMPATIENS SCABRIDA DC.

A stout annual, 3 to 5 feet high, with narrow acuminate leaves 2 to 6 inches long and golden-yellow, red-spotted flowers 1 inch across, either axillary or in panicles. Native to the temperate Himalayas at altitudes of 6,000 to 10,000 feet.

For previous introduction see 28222.

128534 to 128541. Viola spp. Violaceae.

Violet.

128534. VIOLA ADRIATICA Freyn.

A stemless perennial violet with broad cordate or ovate leaves. Allied to *Viola odorata* and *V. scotophylla*. Native to Europe.

128535. VIOLA ALICHARIENSIS G. Bech.

A subalpine perennial violet, native to Macedonia.

128536. Viola jooi Janka.

A stemless violet with oblong or ovate-cordate leaves and rather large fragrant lilac flowers. Native to Europe.

For previous introduction see 123803.

128537. VIOLA MIRABILIS L.

A hardy violet, native to northern Europe, which becomes about 3 inches high, producing pale-blue flowers in midsummer.

For previous introduction see 104602.

128538. VIOLA PERSICIFOLIA Roth.

For previous introduction see 28259.

# 128519 to 128542-Continued

128539. VIOLA PINNATA L.

A stemless violet with palmately divided leaves, orbicular in outline, and small violet or blue flowers. Native to Europe.

128540. VIOLA RUPPH All.

A perennial violet with blue or bluish-white flowers. Native to Europe.

128541. VIOLA VARIEGATA Fisch.

A species with cyclamenlike leaves, white along the veins, and light purple flowers.

128542. ZEPHYRANTHES TAUBERTIANA Harms. Amaryllidaceae.

A Brazilian zephyrlily, with linear dark-green leaves 8 to 10 inches long and slightly inclined lilac flowers borne singly on the peduncle.

## 128543 to 128567.

From the Union of Soviet Socialist Republics. Scions presented by Dr. A. M. Popov, Institute of Plant Industry, Leningrad. Received April 25, 1938.

128543 to 128549. Amygdalus persica L. Amygdalaceae.

Peach.

128543. Tabarzen No. 2621.

128544. Ferganensis No. 25. (Inzhirny Bliudtchaty.)

128545, Ferganensis No. 19.

128546, No. 1338.

128547. No. 1376.

128548. No. 1370.

128549. No. 01346.

128550 to 128553. Malus spp. Malaceae. Apple.

128550. MALUS SYLVESTRIS Mill.

128551. MALUS SYLVESTRIS Mill.

Khoroshavka Alaya Guzhavina.

128552. MALUS SYLVESTRIS Mill.

Ssevernoe Zolotoe.

128553. MALUS Sp.

Tchulanovka. Used as a dwarf stock.

128554 to 128559. PRUNUS spp. Amygdalaceae.

128554 to 128556. PRUNUS ARMENIACA L.

Apricot.

128554. Baidam.

128555. Bairam-Ali No. 2698.

128556. Oranzhevo Krassny.

128557 to 128559. PRUNUS spp.

128557. Bejonniere.

128558. Otchakovskaya.

128559. Pulkovskaya.

128560. Pyrus sp. Malaceae.

Finliandskaya,

128561 to 128563. Prunus spp. Amygdalaceae.

128561. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

Kok Sultan.

Pear.

# 128543 to 128567—Continued

128562 and 128563. PRUNUS ARMENIACA L.

Apricot.

128562. Krassnostchoky Nairanneyshy No. 2638.

128563. Krassnostchoky Nairanneyshy No. 2639.

128564. Pyrus. Malaceae.

Bergamotte Ossenny.

128565 and 128566. X PRUNUS DASYCARPA Ehrh. Amygdalaceae. Plum-apricot.

128565. Irany Oliu No. 4.

128566. Schroedera 0347.

128567. Pyrus. Malaceae.

Ushakovskaya.

# 128568. Cypella Peruviana Baker. Iridaceae.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received April 27, 1938.

A Peruvian cypella with 2 or 3 linear stem leaves about 8 inches long and 2 or 3 showy bright-yellow fugacious flowers on a terminal stalk. The petals are spotted red brown at the base.

## 128569 and 128570.

From China. Seeds presented by R. C. Ching, Lu-Shan Arboretum and Botanical Garden, Lu-Shan, Kiukiang Province. Received April 27, 1938.

128569. Aesculus wilsonii Rehder. Aesculaceae.

Horsechestnut.

A handsome tree up to 75 feet high, native to Szechwan and Hupeh Provinces, China. The leaves are downy when young, and the white flowers, ½ inch long, are borne in cylindrical panicles which sometimes become 18 inches long. The burs are rough but not spiny. It is very closely allied to Aesculus chinensis.

For previous introduction see 77647.

Chestnut.

128570. Castanea Henryi (Skan) Rehd. and Wils. Fagaceae. Large nuts, collected at Yu-Shi Liu on O-pie Hsien Shan.

128571 to 128585.

From India. Bulbs and seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1938. 128571. AMARYLLIS sp. Amaryllidaceae.

From Londa, Bombay Presidency, March 5, 1938.

128572 to 128577. ORYZA spp. Poaceae.

Rice.

128572, ORYZA COARCTATA ROXD.

A wild rice which is a tall stout perennial grass with leathery, sword-shaped leaves 6 to 12 inches long. Native to the delta of the Ganges.

128573 to 128577. ORYZA SATIVA L.

128573, Aman Naira. A winter rice.

128574. Aman Khama. A winter rice.

128575. Bora Jabri. A summer rice.

128576. Bora Bati. A summer rice.

128577. Bora Basful. A summer rice.

128578 to 128585. ZEA MAYS L. Poaceae.

Corn.

128578 and 128579. From the Kanke farm, District Ranchi, Bihar State.

120310 and 120313. From the Kanke farm, District Kanchi, Binar State.

128580 and 128581. From Dumka, District Santalparagnas, Bihar State.

128582 and 128583. From the Sabour farm, District Bhagalpur, Bihar State. 128584. From the Patna farm, District Patna, Bihar State.

128585. From Siwan, District Saran, Bihar State.

#### 128586 to 128665.

From Chile and Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received April 20, 1938.

128586 to 128664. Lycopersicon spp. Solanaceae.

128586 to 128595. Lycopersicon esculentum Mill.

Tomato.

Nos. 128586 to 128624. Collected in Chile in March 1938.

128586 to 128588. From a garden in Limache, March 14.

128586. No. 422. Fruit large, fleshy, rose colored.

128587. No. 423. Fruit flat, rough, deeply ribbed.

128588. No. 424. Fruit medium smooth, round, dry, red.

128589 to 128593. From the market at Valparaiso, March 16.

128589. No. 437. Fruit ponderosa type, red; grown at Limache.

128590. No. 438. Fruit flat, odd-shaped, rough, deep red, from Limache.

128591. No. 439. Fruit small, round, smooth, red,  $1\frac{3}{4}$  inches in diameter; grown at Limache.

128592. No. 440. Fruit large, smooth, pink.

128593. No. 441. Fruit small, rough, red.

128594. No. 442. From the market at El Calisa, March 17. Fruit large, generally rought, all deeply colored.

128595. No. 433. From near Villanar, March 19. Fruit mostly cherry form, grown in a very dry situation.

128596. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 448. From west of Villanar, March 19, 1938. Fruit small, irregular, but of uniform type.

128597 to 128643. Lycopersicon esculentum Mill.

Tomato.

Nos. 128597 to 128603 were from fields near Villanar, Chile, March 19, 1938.

128597. No. 449. Fruit 13/4 to 21/4 inches in diameter, smooth, round, red.

128598. No. 449-A. [Received without notes.]

128599. No. 450. Fruit small, deeply colored, but rough.

128600. No. 451. Fruit very large and very rough, deep red.

128601. No. 452. Fruit large and smooth, tending to be flat.

128602. No. 453. Grown from seed introduced from England, type not seen before on this expedition; fruit long-pointed, resembling the fruit of Cyphomandra.

128603. No. 454. Fruit small, rough, flat, pink.

128604 to 128607. From the market at Copiapó, March 19, 1938.

128604. No. 455. Fruit small, round, light red.

128605. No. 456. Fruit medium-sized, flat.

128696. No. 457. Fruit large and rough, red.

128607. No. 458. Fruit small, flat, rough.

128608 to 128612. From the market at Antofagasta, Chile, March 20 and 21, 1938, but 128608 to 128610 were shipped in from Valparaiso.

128608. No. 460. Fruit small, flat, cells conspicuous.

128609. No. 461. Fruit small, deep with blossom scar.

128610. No. 462. Fruit large, flat, irregular.

# 128586 to 128665-Continued

128611. No. 463. Locally grown fruit, round, pink with thin greenish stripes from stem to end.

128612. No. 464. Locally grown fruit, small, round, red, with greenish stripes from stem to end.

128613 and 128614. From the market at Iquique, March 23, 1938.

128613. No. 467. Fruit large and very rough. Grown at Sibayo.

128614. No. 468. Fruit large, very rough, red. Grown in Camiña.

128615 to 128617. From the market at Arica, Chile, March 24, 1938.

128615. No. 469. Grown in Aluta. Fruit variable, but quite rough, with a fruit spot not seen before; dark brown to black, with light gray center raised on surface, the center cracked open.

128616. No. 470. Grown in Aluta. Fruit small, slightly variable, some smooth, some tending to roughness.

128617. No. 471. Grown in Rosario. Fruit variable, mostly flat, some inclined to roughness.

128618 to 128624. From the market at Tacna, Chile, March 26, 1938.

128618. No. 501. Grown in Challota. Fruit small to medium, smooth, flat, red.

128619. No. 502. Grown in Challota. Fruit large, rough, deep red.

128620. No. 503. Fruit small, some indicating a wild strain, poorly colored.

128621. No. 504. Fruit large, very rough, red.

128622. No. 505. Fruit small, pink, round and smooth.

128623. No. 506. Fruit large, deep red, and smooth.

128624. No. 507. Fruit small to medium, smooth, flat, red.

128625. No. 520. Collected between Moquegua and Ica, Peru, March 28. Fruit small, red, some distinctly of the wild cherry form.

128626. No. 521. From the market at Ica, Peru, but grown in Moquegua, Peru. Fruit small, rough, red.

128627 to 128639. From the market at Arequipa, Peru, March 30, 1938.

128627. No. 522. Fruit large, pink, smooth and flat.

128628. No. 523. Fruit large, red, smooth, flat; Baltimore type.

128629. No. 524. Fruit large, rough, flat, red.

128630. No. 525. Fruit red, nugget type, 1½ to 2 inches in diameter.

128631. No. 526. Fruit large, cherry-formed, red.

128632. No. 527. Fruit small, cherry-formed, red.

128633. No. 528. Fruit very small, flat, red.

128634. No. 529. Fruit medium sized, flat, red,

128635. No. 530. Fruit of tear-drop type; pointedness at stem end slight; nugget size, 1 to 1½ inches in diameter.

128636. No. 531. Fruit large of tear-drop type; tendency to pointedness at stem end not very pronounced.

128637. No. 532. Fruit large, pear-shaped, red.

128638. No. 533. Fruit large, plum-shaped, red.

128639. No. 534. Fruit small, pear-shaped, red.

128640 to 128643. From the market at Lima, Peru, April 4, 1938.

128640. No. 542. Fruit large, very rough, flat, red, 3 inches in diameter.

# 128586 to 128665-Continued

128641. No. 543. Fruit small, smooth, flat, red.

128642. No. 544. Fruit oblong, flat, red.

128643. No. 545. Fruit small, pink.

128644 to 128648. Lycopersicon peruvianum var. dentatum Dun.

128644. No. 516. Collected March 27, 1938, at the base of a mountain about 10 miles east of Moquegua, Peru, in dry gravelly soil along a mud wall. Fruit green, 1½ inches in diameter.

128645. No. 475. From the Lluta Valley, between Lluta and Arica, Chile, March 24, 1938, between 150 and 200 feet altitude, in moist gravelly soil. Fruit white, tinged faintly with yellow and having a purplish stripe from stem almost to the tip; 2-celled; calyx slender, short, one-half the length of the fruit; maximum size about ½ inch in diameter.

128646. No. 476. Lluta Valley, between Lluta and Arica, Chile, March 23, 1938, between 120 and 200 feet altitude. Fruit less than 1 inch in diameter, 2-celled, calyx small, slender.

128647. No. 477. From the Azapa Valley, southeast of Arica, Chile, between 100 and 200 feet altitude, March 24, 1938. Fruit less than ½ inch in diameter, white with purplish glow about the stem end, 2-celled, calyx lobes small.

128648. No. 478. From the Azapa Valley, Chile, March 24, 1938, at about 150 feet altitude. Fruit up to \% inch in diameter, some 3-celled with a tendency to be flat. Calyx slender, one-half to two-thirds the length of the fruit, which has faint purplish stripes.

128649. Lycopersicon peruvianum (L.) Mill.

No. 479. From the Azapa Valley, southeast of Arica, Chile, March 24, 1938. A prostrate spreading perennial; fruit less than ½ inch in diameter; sepals practically as long as the fruit; purplish stripes tending to form a network.

128650 and 128651. Lycopersicon peruvianum var. dentatum Dun.

From the Azapa Valley, east to southeast of Arica, Chile, March 24, 1938, at 150 feet altitude.

For previous introduction see 128648.

128650. No. 480. Fruit less than  $\frac{1}{2}$  inch in diameter, deep purple, streaked.

128651. No. 481. Fruit about ½ inch in diameter, dull dark purple.

128652. LYCOPERSICON SD.

No. 482. From the Azapa Valley, southeast of Arica, Chile, between 150 and 200 feet altitude, March 24, 1938. Fruit white with very faint markings of purple,  $\frac{1}{2}$  inch in diameter; 2-celled; calyx small.

128653. Lycopersicon peruvianum (L.) Mill.

No. 483. From the Azapa Valley, southeast of Arica, Chile, at 200 feet altitude. Fruit about  $\frac{1}{2}$  inch in diameter, brilliant yellow to yellowish white, variable; calyx small.

For previous introduction see 128649.

128654 and 128655. Lycopersicon peruvianum var. dentatum Dun.

128654. No. 484. From the Azapa Valley, southeast of Arica, Chile, at 200 feet altitude, in sandy gravelly loam, from the margin of a field.

128655. No. 485. From Chacarilla, Tarapaca Province, Chile, March 25, 1938, southeast of Arica, at 300 feet altitude, in land recently flooded by high water. An unusual type.

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## 128586 to 128665—Continued

128656. LYCOPERSICON PERUVIANUM (L.) Mill.

No. 486 and 487. From Chacarilla, Tarapaca Province, Chile, March 25, 1938, southeast of Arica, at 300 feet altitude, in a field recently flooded by high water.

128657 to 128660. Lycopersicon spp.

Collected west of Tacna, Peru, March 26, 1938.

128657. No. 508. Fruit about  $\frac{1}{2}$  inch in diameter, yellowish white with purple stripe.

128658. No. 509. A prostrate plant with erect floral branches; fruit about ½ inch in diameter, dark red, purplish over all except the tip.

128659. No. 510. A prostrate plant with erect floral branches; fruit about ½ inch in diameter, yellowish white.

128660. No. 511. A mixed sample from a group of plants.

128661 to 128663. Lycopersicon peruvianum var. dentatum Dun.

128661. No. 512. Collected east of Tacna, Peru, March 26, 1938, in dry gravelly clay soil. Fruit about ½ inch in diameter, blotched with red, with purple red stripes.

128662. No. 513. From the desert between Buena Vista and Tecumba, Peru, March 27, 1938, at 1,000 feet altitude. Plant developing from a woody crown, stems erect; fruit ½ inch in diameter.

128663. No. 514. From about 8 miles west of Moquegua, in gravelly soil bordering the desert. Fruit about  $\frac{1}{2}$  inch in diameter, 2-celled, with purplish markings.

128664. LYCOPERSICON Sp.

No. 549. From north of Huacho, Peru, April 4, 1938. Fruit cherry-formed, red, calyx lobes often 6, long and slender.

128665. Solanum sp. Solanaceae.

No. 411. From the San Cristobal hill, near Santiago, Chile. March 11, 1938. A coarse plant 3 to 7 feet high.

#### 128666 to 128668.

From Italy. Seeds presented by Dr. Mario Ercoli, Curator, La Mortola, Ventimiglia. Received April 18, 1938.

128666. Aquilegia vulgaris L. Ranunculaceae.

European columbine.

Var. *Hybrida*. A form with stout lilac-purple spurs as long as the sepals, only slightly incurved. Possibly a hybrid of *Aquilegia vulgaris* with *A. canadensis*.

128667. Callistephus chinensis (L.) Nees. Asteraceae.

For previous introduction and description see 128527.

128668. Impatiens roylei Walp. Impatientaceae.

Snapweed.

For previous introduction and description see 128503.

#### 128669. Eragrostis obtusa Munro. Poaceae.

Grass.

From the Union of South Africa. Seeds presented by the Curator, McGregor Museum, Kimberley, Cape Province. Received April 15, 1938.

A densely cespitose perennial grass, native to South Africa, with wiry stems 6 to 18 inches high and linear, long-pointed leaves 2 to 5 inches long.

For previous introduction see 106087.

# 128670. Tephrosia sp. Fabaceae.

From the Union of South Africa. Seeds purchased from Miss K. C. Stanford, Stellenbosch. Received April 19, 1938.

## 128671 to 128816.

From China. Plants presented by Dr. F. A. McClure, Lingnan University, Canton. Received April 27, 1938.

128671. Arundinaria sp. Poaceae.

Bamboo.

No. 1168. *Chuk Tsai*. From the Teng Oo monastery, Kao-yao District, Kwangtung. A small monopodial, wild bamboo with definite promise as an ornamental. Easily induced to assume a dense dwarfed habit; has fine foliage and is easy to keep under control.

128672. Arundinaria sp. Poaceae.

Bamboo.

No. 1195. Foh Ch'aai Chuk. From the Ch'un Wong Mountains, Ts'ingyuen District, Kwangtung. A small monopodial wild bamboo. A very attractive little plant with graceful habit and slender willowy leaves; promising as an ornamental.

128673. SINOBAMBUSA TOOTSIK (Makino) Makino. Poaceae.

Bamboo.

No. 1159. Tok Chuk; Tsz Chuk. From the Teng Oo monastery, Kao-yao District, Kwangtung. A medium-sized monopodial bamboo, very commonly cultivated in Chinese gardens as an ornamental.

128674. SINOBAMBUSA HUMILIS McClure.

No. 1948-A. From Fei Loi Gorge, North River, Ts'ing-yuen District, Kwangtung. A small wild monopodial species. Vegetative propagation from living type.

128675. Arundinaria sp. Poaceae.

Bamboo.

No. 2147. Foo Chuk. From Lung Chi Mountain, Kiangsu.

128676. Arundinaria sp. Poaceae.

Bamboo.

No. 2181. Koon Yam Chuk, Wong Chuk Tsai. From near Shan Ts'in, Chungshan District. A small, wild, monopodial species with straight, thick-walled culms.

128677. SINOBAMBUSA TOOTSIK (Makino) Makino. Poaceae.

Bamboo.

No. 2350. Lei Kaang Chuk. From Danes Island, P'an-yu District, Kwangtung. A medium-sized monopodial species commonly cultivated as a hedge plant and in gardens as an ornamental.

128678. Indosasa sp. Poaceae.

Bamboo.

No. 2408. To Ch'aap Chuk. From Taai Yung Pin, Loh Fau Mountain, Kwang-

128679. Arundinaria sp. Poaceae.

Ramboo.

No. 2410. Ch'ek Chuk. From So Liu Tung, Loh Fau Mountain, Kwangtung. A small wild monopodial species with thick-walled, straight culms; useful for flower stakes and light picket fences.

126680. Arundinaria sp. Poaceae.

Bamboo.

No. 2680. A monopodial bamboo with stiffly upright thick-walled culms which are suitable for flower stakes and small picket fences. Origin unknown.

128681 and 128682. Sinobambusa tootsik (Makino) Makino. Poaceae.

Bamboo.

A medium-sized monopodial bamboo of unknown origin. Promising as an ornamental.

128681. No. 2683.

128682. No. 2684.

128683. Indocalamus herklotsii McClure. Poaceae.

tung. A very ornamental wild monopodial species.

Bamboo.

No. 2727. From The Peak, Hong Kong Island. A small monopodial wild bamboo, promising as an ornamental and as a source of garden stakes.

128684. Bambusa sinospinosa McClure. Poaceae.

Bamboo.

No. 1113-B. Taai Lak Chuk. From Tak Hing, Teh-k'ing District, Kwangtung. A large, sympodial, very thorny, cultivated bamboo, used chiefly for village barriers and very rough construction. The shoots are sometimes eaten in the pickled form.

128685. Bambusa lapidea McClure. Poaceae.

Bamboo.

No. 1114. Ma Tai Chuk. From Tak Hing, Teh-k'ing District, Kwangtung. A large sympodial, slightly thorny, cultivated bamboo, used for heavy construction. A very useful species with fine straight culms.

128686. Schizostachyum funghomii McClure. Poaceae.

Bamboo

No. 1120. Sha Lok Taan Chuk. From Tak Hing, Teh-k'ing, Kwangtung. A cultivated clump bamboo, native to southern China, with erect culms up to 30 feet high and 3 inches in diameter. They are used for making floating piers and, to a certain extent, for making pulp for a cheap grade of paper. The plant is very ornamental.

For previous introduction see 110512.

128687. Sinocalamus latiflorus (Munro) McClure (Dendrocalamus latiflorus Munro). Poaceae. Bamboo.

No. 1132. Taai T'au Chuk. From Sz-Chim, Yun-fou District, Kwangtung. A large sympodial bamboo of ornamental habit, cultivated for its edible shoots.

128688. SINOCALAMUS Sp. Poaceae.

Bamboo.

No. 1133-A. Tim Chuk. From Sz-Chim, Yun-fou District, Kwangtung. A large sympodial, cultivated bamboo, grown for its edible shoots which are considered to be among the best; hence the name "sweet bamboo."

128689. SINOCALAMUS Sp. Poaceae.

Bamboo.

No. 1133-B. Tim Chuk. From Sz-Chim, Yun-fou District, Kwangtung. This bamboo differs from No. 1133-A (P. I. 128688) in minor characters only.

128690. Bambusa eutuldoides var. basistriata McClure. Poaceae. Bamboo.

No. 1160. Nai Chuk. From the Teng Oo monastery, Kao-yao District, Kwangtung. A large sympodial bamboo, cultivated for its culms, which are commonly used in heavy construction.

128691. Bambusa textilis var. albo-striata McClure. Poaceae. Bamboo.

No. 1177. Wong Chuk. From Shiu Chow, K'uh-Kiang District, Kwangtung. A medium-sized, sympodial bamboo, cultivated chiefly as an ornamental, though it can be used, as the species, as a source of split bamboo for weaving.

128692. Bambusa flexuosa Munro. Poaceae.

Bamboo.

No. 1190. Kai Pei Lak Chuk. From near Ts'ing-yuen City, Ts'ing-yuen District, Kwangtung. A very thorny, sympodial bamboo which is sometimes 45 to 50 feet high; cultivated chiefly for use as fences between land holdings and around villages.

128693. Sinocalamus sp. Poaceae.

Ramboo.

No. 1196. Oo Mei Ma Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. A large sympodial bamboo, cultivated for its edible shoots. The culms have little or no value.

128694. Sinocalamus latiflorus (Munro) McClure (Dendrocalamus latiflorus Munro). Poaceae. Bamboo.

No. 1197. Ma Chuk. From Heung Lo Keuk, Ts'nig-yuen District, Kwangtung. A large sympodial bamboo, cultivated for its edible shoots.

For previous introduction and description see 128687.

128695. Bambusa multiplex (Lour.) Raeusch. Poaceae. Hedge bamboo.

No. 1199. Fa Hok Ngau Kan Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. A medium-sized sympodial bamboo, cultivated as an ornamental and as a source of garden stakes and material for picket fences. This is a variety with the internodes of the culms and the sheaths faintly white striate.

For previous introduction see 124734.

128696. Bambusa eutuldoides McClure. Poaceae.

Bamboo.

No. 1200. Taai Ngaan Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. Vegetative propagation from the living type. A large sympodial bamboo cultivated for its thick-walled, upright culms which are used locally for heavy construction and miscellaneous farm needs.

128697. SINOCALAMUS Sp. Poaceae.

Bamboo.

No. 1201. Tiu Sz Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. A large sympodial bamboo, cultivated partly as an ornamental and partly for its edible shoots. The pale-green culms are strictly erect with long drooping whiplike tips.

128698. Bambusa textilis McClure. Poaceae.

Bamboo.

No. 1202. Wong Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. A medium-sized, thin-walled clump type bamboo.

For previous introduction and description see 80872.

128699. SINOCALAMUS Sp. Poaceae.

Bamboo.

No. 1295. Tiu Sz Taan Chuk. From Heung Lo Keuk, Ts'ing-yuen District, Kwangtung. A large sympodial species, differing from No. 1201 [P. I. 128697] chiefly in its white-striate culm sheaths. A very ornamental bamboo, grown chiefly for its edible shoots.

128700 to 128708. Bambusa spp. Poaceae.

Bamboo.

128700. Bambusa pervariabilis McClure.

No. 1226. Yau Chuk. From Honam Island, P'an-yu District, Kwangtung. A large, stiffly upright, much-branched sympodial bamboo, cultivated for its thick-walled straight culms which are highly esteemed for heavy construction and punting poles. The wood is very durable.

128701. Bambusa lapidea McClure.

No. 1227. Yau Lak Chuk. From Honam Island, P'an-yu District, Kwangtung. A large sympodial slightly spiny bamboo, grown for its thick-walled culms, which are used for heavy construction.

128702. Bambusa multiplex (Lour.) Raeusch.

Hedge bamboo.

No. 1240. Ngau Kan Chuk. From Yau Ue Haang, Kwang-ning District; Kwangtung. A well-known species which attains a height of about 25 feet.

128703. Bambusa textilis var. maculata McClure.

No. 1241. Ts'ing P'ei Chuk. From Oo Shek, Hwai-tsih District, Kwangsi. A medium large sympodial bamboo grown for its culms; it differs from the type in having the lower internodes obscurely white-striate and more or less visibly mottled with maroon when young. It is cultivated chiefly as a source of split bamboo for woven work. The smaller culms find a ready market as bean poles, and the tips, discarded from the split-bamboo industry, are used to make pulp for a cheap grade of paper.

128704. Bambusa textilis McClure.

No. 1242. Ts'ing P'ei Chuk. From Au Tsai, Hwai-tsih District, Kwangsi. A medium large sympodial bamboo, cultivated chiefly as a source of split bamboo for woven work. The smaller culms find a ready market as bean poles. The tips of the culms, discarded from the split-bamboo industry, are used to make pulp for a cheap grade of paper.

128705. BAMBUSA LAPIDEA McClure.

Bamboo.

No. 1245. Ngau Kuen Chuk. From T'ai P'eng Shi, Ts'ing-yuen District, Kwangtung. A large, sympodial, slightly thorny bamboo cultivated for its culms, which are used for heavy construction and for various farm purposes.

128706. Bambusa ventricosa McClure.

Buddha bamboo.

No. 2651. Fat T'o Chuk. From the Fati Gardens, Canton, Kwangtung. A sympodial bamboo grown by the Chinese in pots as an ornamental. Under the conditions of pot culture many if not most of the culms and branches

exhibit a more or less marked shortening of the internodes, especially in the lower part of the culm, and hence are dwarfed in stature, with a height of 1 to 3 feet. The abnormal internodes are flask-shaped or pear-shaped. Normal culms sometimes occur under the conditions of pot culture and may attain a height of 6 to 8 feet, the internodes showing little or no departure from the normal cylindrical or terete form. Plants of this species, growing in the open ground at Vero Beach, Fla., have attained a height of about 35 feet and show little tendency to abnormality in the internodes.

For previous introduction see 77013.

Nos. 128707 to 128712 were transferred to the Lingnan University Bamboo Gardens in 1925 from an old bamboo garden on the campus of the College of Forestry, Los Banos, Laguna Province, Philippine Islands.

128707. BAMBUSA TULDA ROXD.

No. 1350. Ma Kaap Chuk. One of the most promising species introduced, though it does not stand much frost. The culms are green and smooth and, under good conditions, may reach a height of 60 to 70 feet and a diameter of 2 to 5 inches. They are nearly solid, extremely tough and strong, split easily and therefore lend themselves to many uses. The plant is quite leafy and proves a beautiful ornamental with its graceful leaning stems and tropical frondage. Native to Bengal, India.

For previous introduction see 74413.

128708. Bambusa multiplex (Lour.) Raeusch.

Hedge bamboo.

No. 1351. A cultivated variety with dark-green striations against a paler ground on the lower internodes of the culms.

128709. Schiszostachyum lima (Blanco) Merr. Poaceae.

Bamboo.

No. 1354. One of the most valuable species of bamboo in the Philippines, being the source of most of the split bamboo used to make the matting called sawale. A very ornamental species.

128710. Bambusa spinosa Roxb. Poaceae.

Bamboo.

No. 1356. A large, very spiny bamboo whose vegetative characters check with Gamble's illustration of this species of his Bambuseae of India, under the name of *B. arundinacea* Willd.

128711. GIGANTOCHLOA LEVIS (Blanco) Merr. Poaceae.

Bamboo.

No. 1358. A large sympodial bamboo with culms and culm sheaths densely appressed brown-pubescent. The thick culms are used for heavy construction.

128712 to 128716. Bambusa spp. Poaceae.

Bamboo.

128712. Bambusa vulgaris Schrad.

Common bamboo.

No. 1359. An Indian bamboo, with bright-green culms 20 to 80 feet high and with numerous branches weighted with dense foliage, the leaves being usually 6 to 10 inches long and  $\frac{2}{3}$  to  $\frac{1}{2}$  inches wide. It is propagated differently from the hardy sorts, as new shoots are borne from the base of the culm as well as from the rhizomes.

For previous introduction see 42668.

128713. Bambusa tuldoides Munro.

No. 1475. Nai Chuk. From Shiu Chow, K'uh-kiang District, Kwangtung. A strain characterized principally for its rather long internodes. Cultivated for its culms, which are used principally for structural purposes.

128714. Bambusa rutila McClure.

No. 1476. Muk Chuk. From Shiu-Chow, K'uh-kiang District, Kwangtung. A rather large spiny species of no special merit except its tolerance of adverse environmental conditions, notably drought and neglect. Flowering specimens of this species were recently discovered in New Territories, Hong Kong. The plant survived flowering and recovered its vegetative vigor.

128715. Bambusa textilis McClure.

No. 1481. Shaan Taan Chuk. From T'ung Tsz Haang, Lung T'au Mountain, K'uh-kiang District, Kwangtung. A medium-large, sympodial bamboo, apparently spontaneous, perhaps the wild prototype of the cultivated forms.

128716. Bambusa textilis var. gracilis McClure.

No. 1487. Koon Yam Chuk. From Lung T'au Mountain, K'uh-kiang District, Kwangtung. A charming ornamental, distinct from the species in its more slender culms, with internodes usually entirely glabrous.

128717. SINOCALAMUS LATIFLORUS (Munro) McClure (Dendrocalamus latiflorus Munro). Poaceae. Bamboo.

No. 1581. Tiu Sz Tim Chuk (?) From Wuchow, Ts'ang-wu District, Kwangsi. A well-known species cultivated for its edible shoots.

128718 to 128726. Bambusa spp. Poaceae.

Bamboo.

128718. Bambusa gibba McClure.

No. 1669. Nai Chuk. From south of Kanchow (Mandarin), the capital of Kiangsi Province. A medium-sized sympodial bamboo commonly cultivated in Kwangtung as a hedge plant, chiefly on account of its persistent verdure during the dry winter months. The culms are rather crooked and of low economic value.

128719 and 128720. Bambusa Tuldoides Munro.

128719. No. 1817. Shui Chuk. From Hong Kong. A medium-large sympodial bamboo with strict habit, cultivated for its culms, which are in demand for structural purposes and punting poles.

128720. No. 1817-A. Division from the same plant as No. 1817 (P. I. 128719).

128721. Bambusa textilis McClure.

No. 1842. Ts'ing P'ei Chuk. From Cheung Kung Tsz, Foh Shaan, Ts'angwu District, Kwangsi. Vegetative propagation from the living type. A sympodial bamboo, cultivated for its culms, which are used for garden stakes and picket fences; a very ornamental plant.

128722. Bambusa multiplex (Lour.) Raeusch.

No. 1854. Yau Ip Wong Chuk. From Ling Moon, Tseng-ch'eng District, Kwangtung. A small graceful willowy variety of the well-known species, cultivated locally as an ornamental.

128723 and 128724. Bambusa Pervariabilis McClure.

128723. No. 1862. Paak Mei Chuk. From Pok Ha Ts'uen, Tseng-ch'eng District, Kwangtung.

128724. No. 1862–D. Division from the same plant as No. 1862 (P. I. 128723).

128725. Bambusa textilis var. glabra McClure.

No. 1865. Wong Chuk. From T'ong T'au Ha, Tung-kwan District. A variety which differs from the species in having culms and culm sheaths glabrous or nearly so.

128726. Bambusa Lapidea McClure.

No. 1868. Taai Lak Chuk. From Tong Tau Ha, Tung-kwan District, Kwangtung.

128727. Sinocalamus sp. Poaceae.

Bamboo.

No. 1887-D. Ts'oi Chuk. From Canton, P'ae-yu District, Kwangtung. A medium-sized bamboo, cultivated for its edible shoots.

128728. Schizostachyum dumetorum (Hance) Munro. Poaceae. Bamboo.

No. 1951. Liu Chuk or T'ang Chuk. From New Territories, Hong Kong. A small wild sympodial species with scandent habit. When planted in the open without any support the slender culms bend in a graceful arch, the tips nearly touching the ground. A very charming ornamental with many unusual features. Prefers hillside habitat with good drainage. Base of plant is sold as a drug in Chinese herb shops.

128729. LINGNANIA FIMBRILIGULATA McClure. Poaceae.

Bamboo.

No. 1984. Kaap Chuk. From Hung Mo Shan, Hainan Island. Vegetative propagation from living type. A heavy sympodial species, attaining a height of 40 feet; cultivated locally for its culms, which are used for various purposes in the domestic economy.

128730. Bambusa fecunda McClure. Poaceae.

Bamboo.

No. 1989. Ngaang Tau Wong Chuk. From Naam Fung market, Tan District, Hainan Island, Kwangtung. Vegetative propagation from living type. A very prolific sympodial species, cultivated for its culms which are used for picket fences, etc. The culms grow about 10 feet high.

128731. SCHIZOSTACHYUM PSEUDOLIMA McClure. Poaceae.

Bamboo.

No. 1991. Sha Luk Chuk. From Naam Fung market, Tan District, Hainan Island, Kwangtung. A wild sympodial species of medium stature, promising as an ornamental.

128732 to 128748. Bambusa spp. Poaceae.

Bamboo.

128732. Bambusa dolichoclada Hayata.

No. 2000. Kaap Chuk. From San Hing, Tan District, Hainan Island, Kwangtung. A medium-sized sympodial bamboo, cultivated for its culms which are put to various farm uses.

128733. BAMBUSA Sp.

No. 2001. Ngaang T'au Wong Chuk. From San Hing, near Nodoa, Tan District, Hainan Island, Kwangtung. A medium-sized, sympodial, cultivated bamboo of limited usefulness.

128734. Bambusa multiplex (Lour.) Raeusch.

Hedge bamboo.

No. 2002. In T'ung Chuk. From San Hing, near Nodoa, Tan District, Hainan Island, Kwangtung. A wild sympodial species attaining a height of 15 to 20 feet. Culms used as garden poles and for picket fences.

128735. Bambusa sp.

No. 2159. Fa Mei Chuk. From Naam T'aan, Lung-men District, Kwangtung. A small monopodial, cultivated species with strong thick walls and rather crooked culms.

128736. Bambusa sinospinosa McClure.

No. 2170. A large sympodial, very thorny, cultivated bamboo, used chiefly for village barriers and very rough construction. The shoots are sometimes eaten in the pickled form.

128737. Bambusa flexuosa Munro.

No. 2177. Lak Chuk. From Honam Island, P'au-yu District, Kwangtung. Small to medium-sized sympodial thorny bamboo, cultivated as hedges and barriers.

128738 and 128739. BAMBUSA MULTIPLEX (Lour.) Raeusch. Hedge bamboo.

128738. No. 2188. Shaan Wong Chuk. From Naam Kw'aan K'iu, Lung-men District, Kwangtung. A variety with the internodes of the culms striated with cream-colored stripes.

128739. No. 2278. Shek Tso Chuk. From Uen T'aam Mei, Tseng-ch'eng District, Kwangtung. A variety characterized by ruddy color in the young culm sheaths and yellow color in the internodes of the mature culms.

128740. Bambusa textilis var. gracilis McClure.

No. 2279. Wong Chuk. From Uen T'aam Mei, Tseng-ch'eng District, Kwangtung.

For previous introduction and description see 128716.

128741. Bambusa multiplex (Lour.) Raeusch.

No. 2283. From Loh Fau Mountain, Poh-lo District, Kwangtung. A form unique in our collection, characterized by large size, glabrous culms, and conspicuous white striation of the internodes.

128742. Bambusa textilis var. albo-striata McClure.

No. 2286. Luk Lei Chuk. From Maak Ts'uen, Tseng-ch'eng District, Kwangtung. Vegetative propagation from the type plant.

For previous introduction and description see 128691.

## 128743. BAMBUSA Sp.

No. 2288. Paak Mei Chuk. From Loh Fau Mountain, Lung-men District, Kwangtung. A small monopodial, cultivated species with strong thick walls and rather crooked culms.

128744. Bambusa pervariabilis McClure.

No. 2332. Nai Chuk. From Chung Shaan public garden, Hoh Uen City, Ho-yuen District, Kwangtung.

For previous introduction and description see 128700.

128745. BAMBUSA TULDOIDES Munro.

No. 2333. Nai Chuk. From Hoh Uen City, Ho-yuen District, Kwangtung. A commonly cultivated structural bamboo.

128746. Bambusa textilis var. fusca McClure.

No. 2335. Luk Chuk. From Hoh Uen City, Ho-yuen District, Kwangtung. Vegetative propagation from the type plant. The variety differs from the species in the very much darker, denser, more persistent appressed pubescence on the culm sheaths. This bamboo is used for the same purposes as the typical form.

128747. Bambusa bashirsuta McClure.

No. 2337. *Bin Chuk*. From Lung Keng, Ho-yuen District, Kwangtung. Vegetative propagation from the type plant. A sympodial bamboo reaching a height of 40 feet, cultivated locally for its culms which are of some value for temporary structural purposes, and for its edible shoots.

128748. Bambusa dissimulator McClure.

No. 2348. Lak Chuk. From the Lingman University campus near Canton, P'an-yu District, Kwangtung. Vegetative propagation from the type plant. A medium large, somewhat thorny sympodial species, cultivated for its strong, thick-walled culms which are used in heavy construction.

128749. SINOCALAMUS LATIFLORUS (Munro) McClure (Dendrocalamus latiflorus Munro). Poaceae. Bamboo.

No. 2368. Tim Chuk. From the Saam Kong Market, Tseng-ch'eng District, Kwangtung. A large sympodial species, cultivated for its edible shoots which are counted the best.

128750. Bambusa dissimulator McClure. Poaceae.

Bamboo.

No. 2423. Lak Chuk. From Lingnan University campus, near Canton, P'an-yu District, Kwangtung.

For previous introduction and description see 128748.

128751. Bambusa mutabilis McClure. Poaceae.

Bamboo.

No. 2438. Wong Chuk Tsai. From Ko K'ei, Chow Island, Yai District, Hainan Island, Kwangtung. Vegetative propagation from type plant. A sympodial species reaching a height of about 20 feet, cultivated for its culms which in character and usefulness resemble those of Bambusa textilis.

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128752. Bambusa flexuosa Munro. Poaceae.

Bamboo.

No. 2443.  $Lak\ Chuk$ . From Paai Poon, Ling-shui District, Hainan Island, Kwangtung.

For previous introduction and description see 128737.

128753. LINGNANIA FIMBRILIGULATA McClure. Poaceae.

Bamboo.

No. 2451. Ngau Ts'oi Chuk. From Fan-Maan, Yai District, Hainan Island, Kwangtung.

For previous introduction and description see 128729.

128754. Bambusa boniopsis McClure. Poaceae.

Bamboo.

No. 2454. Ma Chuk. (Loi: K'au-tin.) From Fan-Maan, Yai District, Hainan Island, Kwangtung. Vegetative propagation from type plant. A wild sympodial species reaching a height of 6 feet or over, promising as an ornamental. The culms are produced abundantly and would serve admirably as garden stakes.

128755. Bambusa sp. Poaceae.

Bamboo.

No. 2649. *Chuk Tsai*. From Tsai Sin To, T'ung Koo Leng, Wen ch'ang District, Hainan Island, Kwangtung. Seedling plants of a wild sympodial species of, as yet, unknown mature stature.

128756. Sinocalamus sp. Poaceae.

Bamboo.

No. 2664. Tiu Sz K'au Chuk. From the Lingnan University gardens (original source unknown). A medium-large sympodial species, cultivated for its edible shoots.

128757. Bambusa sp. Poaceae.

Bamboo.

No. 2665. *Ue T'o Naam Chuk*. From the Lingnan University gardens (original source unknown). A medium-large sympodial species, cultivated for its edible shoots.

128758 and 128759. Sinocalamus beechayanus (Munro) McClure.

Poaceae. Bamboo.

From the Lingman University gardens (original source unknown). Large sympodial species, cultivated for their edible shoots.

128758. No. 2666. Ma Mei Chuk.

128759. No. 2667. Taai T'au Tim Chuk.

Bamboo.

**128760 to 128767.** Bambusa spp. Poaceae.

128760. Bambusa multiplex (Lour.) Raeusch.

Hedge bamboo.

No. 2672. Taai Ip Koon Yam Chuk. From the Lingman University campus (original source unknown). A small sympodial species rather commonly grown here as a hedge plant.

128761. Bambusa textilis McClure.

No. 2674. Ts'ing P'ei Chuk. From the Lingnan University campus.

For previous introduction and description see 128698.

128762. Bambusa pervariabilis McClure.

No. 2675.  $Kwat\ T'au\ Ts'ing\ Chuk$ . From the Lingman University campus, Canton, Kwangtung.

For previous introduction and description see 128700.

128763 and 128764. Bambusa textilis var. gracilis McClure.

From the Lingnan University campus, Canton, Kwangtung.

For previous introduction and description see 128716.

128763. No. 2677. Ngai Chau Chuk.

128764. No. 2678. T'ok Chuk. Vegetative propagation from type plant.

128765. Bambusa textilis var. maculata McClure.

No. 2691. Chue Ts'uen Wong Chuk. From Chue Ts'uen, Tseng-ch'eng District, Kwangtung.

For previous introduction and description see 128703.

128766 and 128767. Bambusa Pervariabilis McClure.

From the Lingnan University campus, Canton, Kwangtung.

For previous introduction and description see 128700.

128766. No. 2719. Fa Mei Chuk.

128767. No. 2720. Yau Chuk.

128768 to 128810. PHYLLOSTACHYS spp. Poaceae.

Bamboo.

128768. PHYLLOSTACHYS Sp.

No. 1116-B. P'o Chuk. From Tak Hing, Teh-k'ing District, Kwangtung. A small monopodial, wild bamboo whose shoots are used for food.

128769. PHYLLOSTACHYS NIDULARIA MUNTO.

No. 1117-1. Kan Chuk. From Tak Hing, Teh-k'ing District, Kwangtung. A small to medium-sized, monopodial, very aggressive wild bamboo whose shoots are used for food. The culms are used for paper making in central China.

128770. PHYLLOSTACHYS Sp.

No. 2112. Loh Han Chuk. From I-hsing District, Kiangsu. A monopodial species of medium stature.

128771. PHYLLOSTACHYS PURPURATA McClure.

No. 1246. Lai Tsai Chuk. From Koon T'aan Haang, Kwangning District, Kwangtung. Vegetative propagation from type plant. A wild, rampant, monopodial species with weak flexuose culms up to 15 feet high. Promising only as a pioneer plant, it should not be allowed to get out of hand on land intended for cultivation.

128772. PHYLLOSTACHYS NIDULARIA Munro.

No. 1399. So Pa Chuk. From Kwangtung Province, without locality. A small wild, rampant, monopodial bamboo with edible shoots. Should not be allowed to get out of hand.

128773. PHYLLOSTACHYS Sp.

No. 1421. Lei San Chuk. From Tak Hing, Teh-king District, Kwangtung. A medium-sized monopodial bamboo, half-cultivated for its edible shoots and for its culms which are used for temporary fences and for fuel.

128774. PHYLLOSTACHYS Sp.

No. 1424. Kan Chuk. From Wuchow, Ts'ang-su District, Kwangsi.

128775. PHYLLOSTACHYS BAMBUSOIDES Sieb. and Zucc.

No. 1662. Kam Chuk. From Chung Tung, Wung-yuen District, Kwangtung. A small monopodial bamboo, cultivated for its edible shoots. This number has been flowering over a period of about 10 years, and for this reason its full stature is not yet known. It is about 7 feet high at present.

128776. PHYLLOSTACHYS Sp.

No. 1831. Chan Chuk. From Ch'eung Chow, T'eng District, Kwangsi. A small wild monopodial bamboo with edible shoots.

128777. PHYLLOSTACHYS SD.

No. 1841. Taai Chan Chuk. From Wuchow, Ts'ang-wu District, Kwangsi. A medium-sized monopodial species cultivated for its edible shoots.

128778. PHYLLOSTACHYS SD.

No. 2007. Fa Chuk. From Ta Tsit, near the Hang Mo Mountains, Tan District, Hainan Island, Kwangtung. A small wild monopodial species, possibly useful as an ornamental.

128779. PHYLLOSTACHYS NIDULARIA Munro.

No. 2102. Kam Sz Chuk. From the Fati Gardens, Canton, P'an-yu District, Kwangtung, where it is cultivated as a potted ornamental.

Nos. 128780 to 128787. From Nanking, Kiangsu.

128780. PHYLLOSTACHYS Sp.

No. 2108. Haak Paan Chuk.

128781. PHYLLOSTACHYS Sp.

No. 2109. Mui Tim Chuk.

128782. Phyllostachys sp.

No. 2114. Mat Chuk.

128783. PHYLLOSTACHYS Sp.

No. 2117. Chau Chuk.

128784. PHYLLOSTACHYS sp.

No. 2123. T'aam Chuk.

128785. PHYLLOSTACHYS sp.

No. 2126. Foo Chuk.

128786. Phyllostachys sp.

No. 2128. Sha P'ei Chuk.

128787. PHYLLOSTACHYS BAMBUSOIDES Sieb, and Zucc.

No. 2130. Mui Tim Chuk.

128788. PHYLLOSTACHYS Sp.

No. 2132. Mei Chuk. From Lung Chi Mountain, Kiangsu.

128789. PHYLLOSTACHYS Sp.

No. 2133. Foo (Wong) Chuk. From I Hing, Kiangsu.

Nos. 128790 to 128796. From Lung Chi Mountain, Kiangsu.

128790. PHYLLOSTACHYS SD.

No. 2135. Hau Chuk.

128791. PHYLLOSTACHYS Sp.

No. 2140. Ts'o Chuk.

128792. PHYLLOSTACHYS PURPURATA McClure.

No. 2141. Chung Chuk.

128793. PHYLLOSTACHYS Sp.

No. 2142. Kong Chuk.

128794. Phyllostachys bambusoides var. castilloni (Marl.) H. de Lehaie.

No. 2143. Wong P'ei Kong Chuk.

128795. PHYLLOSTACHYS Sp.

No. 2144. Wong P'ei Kong Chuk.

128796. PHYLLOSTACHYS Sp.

No. 2145. Poon Chuk.

128797. PHYLLOSTACHYS PURPURATA McClure.

No. 2151. M'uk Chuk. From I Hing, Kiangsu.

128798. PHYLLOSTACHYS Sp.

No. 2160. Wong Kam Chuk. From Ma Cha, Lung-men District, Kwangtung. A small wild species with edible shoots and some possibilities as an ornamental.

128799. PHYLLOSTACHYS Sp.

No. 2118. Mui Chuk. From Nanking, Kiangsu.

Nos. 128800 to 128805. From Mo Hong, Chekiang.

128800. PHYLLOSTACHYS PURPURATA McClure.

No. 2197. Muk Chuk.

128801. PHYLLOSTACHYS Sp.

No. 2200. T'oi Chuk.

128802. PHYLLOSTACHYS sp.

No. 2201. Oo Kam Chuk.

128803. PHYLLOSTACHYS Sp.

No. 2203. Shek Chuk.

128804. PHYLLOSTACHYS Sp.

No. 2206. Tso Uet Chuk.

128805. Phyllostachys sp.

No. 2207. Shui Chuk.

128806. PHYLLOSTACHYS Sp.

No. 2214. From Naam P'o T'o Tsz, Amoy, Fukien.

128807. PHYLLOSTACHYS Sp.

No. 2277. Kam Chuk or Kan Chuk. From near Loh Fau Mountain in Tseng-ch'ang District (?), Kwangtung.

128808. PHYLLOSTACHYS Sp.

No. 2292. Laap P'a Chuk. From Loh Fau Mountain, Poh-lo District, Kwangtung. A small wild monopodial species used principally for fuel and to make rough brooms.

128809. PHYLLOSTACHYS Sp.

No. 2341. Kam Chuk. From Hoh Uen City, Ho-yuen District, Kwangtung. A medium-sized bamboo, cultivated for its edible shoots.

128810. PHYLLOSTACHYS Sp.

No. 2349. Kam Chuk. From Danes Island, P'an-yu District, Kwangtung. A wild species with edible shoots.

128811. ARUNDINARIA Sp. Poaceae.

Bamboo.

No. 2644. Chuk Tsai. From T'o Leng Village, Wen-ch'ang District, Hainan Island, Kwangtung.

128812. PHYLLOSTACHYS NIDULARIA Munro. Poaceae.

Ramboo

No. 2657. Pat Sun Chuk. From Honan Island, near Canton, Kwangtung. A bamboo cultivated for its edible shoots. The culms reach a height of 12 to 15 feet, are very flexuous, with large nodes, but are of little use.

128813. PHYLLOSTACHYS sp. Poaceae.

Bamboo.

No. 2353. From Danes Island, near Canton, Kwangtung.

128814. ARUNDINARIA Sp. Poaceae.

Bamboo.

No. 2137. Pat Chuk. From Lung Chi Mountain, Kiangsu.

128815. Indocalamus sinicus (Hance) Nakai. Poaceae.

Bamboo.

No. 2726. From Hong Kong Island. A small monopodial, wild bamboo, apparently endemic on Hong Kong Island. Promising as an ornamental.

128816. Sinocalamus sp. Poaceae.

Bamboo.

No. 1580. Ts'ing Tim Chuk. From Wuchow, Ts'ang-wu District. A large attractive sympodial species, cultivated for its edible shoots.

#### 128817 to 128824.

From Chile and Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received April 20, 1938.

128817. Cestrum parqui L'Her. Solanaceae.

Chilean cestrum.

No. 412. Collected near Santiago, Chile, March 11, 1938.

For previous introduction see 81148.

128818. Datura stramonium L. Solanaceae.

No. 459. From the Experiment Farm, Copiapó, Chile, March 19, 1938.

128819. Datura stramonium L. Solanaceae.

No. 553. From Huaraz, Peru, April 4, 1938.

128820. Lantana camara L. Verbenaceae.

No. 488. From Arica, Chile, March 25, 1938.

128821. Physalis sp. Solanaceae.

No. 465. Capoli. From a garden at Pica, Chile, March 23, 1938. A large plant, about 5 feet tall.

128822. Physalis sp. Solanaceae.

No. 445. From a garden near Villanar, Chile, March 18, 1938. Fruit small and sticky.

128823. Solanum sp. Solanaceae.

No. 554. Gapichinya. From near Huaraz, Peru, April 4, 1938.

128824. Solanum sp. Solanaceae.

No. 444. From a garden near Villanar, Chile, March 18, 1938. A plant with slender, undulating, obtuse, spiny leaves, light-purple flowers, and small yellow fruits.

## 128825 and 128826.

From the Union of Soviet Socialist Republics. Seeds presented by the Forest Garden Experiment Station, Beshtaugorsky Lesopark, Stanzia Mashuk near Pyatigorsk, Caucasus. Received April 21, 1938.

128825. Juglans regia L. Juglandaceae.

Persian walnut. Sweet cherry.

128826. Prunus avium L. Amygdalaceae.

128827 to 128831. Phleum Pratense L. Poaceae.

Timothy.

From Norway. Seeds presented by Dr. H. Wexeksen, Felleskjopets Stamsedgard, Hjellum. Received April 22, 1938.

Improved strains of timothy.

128827. GI 143.

128830. F 89-0.

128828. 412-1.

128831. H 54.

128829, 710-1.

#### 128832 to 128836.

From the Netherlands. Seeds presented by the Botanic Garden, Utrecht. Received April 25, 1938.

128832. Aquilegia vulgaris L. Ranunculaceae.

European columbine.

For previous introduction and description see 128525.

128833. Callistephus chinensis (L.) Nees. Asteraceae.

For previous introduction and description see 128667.

128834. Cannabis sativa L. Moraceae.

Hemp.

128835. Impatiens parviflora DC. Impatientaceae.

Snapweed

An annual snapweed with elliptic-ovate leaves and erect clusters of 3 to 10 small yellow flowers. Native to central Asia.

128836. Impatiens scabrida DC. Impatientaceae.

Snapweed.

For previous introduction and description see 128533.

# 128837 to 128859. ZEA MAYS L. Poaceae.

Corn.

From Chile and Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received May 2, 1938.

Nos. 128837 to 128847. Collected in Chile in March 1938.

128837. No. 447. From near Villanar, March 18. Plant 8 to 10 feet high; 14 rows on each ear.

128838. No. 474. From the market at Arica, March 24, but grown in Tacna. Kernels with dark red tips.

128839. No. 489. Tilia Saguara. From Arica, March 25. A typically native corn; 15 rows to the ear.

128840. No. 490. *Piamontes*. From the Valle de Azapa, March 20; ears 5 to 6 inches long with 17 rows on each ear.

128841. No. 491. Guancarne. From the Valle de Camarones, March 20; 14 rows to the ear.

128842. No. 492. Argentina. From the Valle de Azapa, March 25; ears 5 to 6 inches long with 12 to 14 rows on each ear.

128843. No. 493. Guancarne. From the Valle de Camarones, March 25. Ears tinted bright red, 12 rows on each ear.

128844. No. 494. *Hacienda Camarones*. From the Valle de Camarones. Yellow corn with 14 rows on each ear.

128845. No. 495. Esquiña. From the Valle de Camarones, March 25; 15 rows to the ear.

128846. No. 496. Guancarne. From the Valle de Camarones, March 25; dark red corn, 12 rows on each ear.

128847. No. 497. Lluta Valle. From Arica, March 25.

Nos. 128848 to 128859. Collected in Peru in 1938.

128848. No. 498. From the market at Tacna, March 26. Yellow corn with brownish red band on the yellow tips: 10 rows on the ear.

128849. No. 499. From the market at Tacna, March 26. Dark yellow corn with red streaks; 14 rows on the ear.

128850. No. 500. From the market at Tacna, March 26. Kernels yellow, tipped red, cloaked with occasional dark red streaks.

128851. No. 518. Negro Arequipa. From a garden east of Moquegua, March 27. Black corn, 10 rows on the small ear.

128852. No. 519. Corillo Maiz de Pachia. From a garden east of Moquegua, March 13. Native white corn that matures in 4 months; 12 rows on the ear.

128853. No. 535. Negro. From the market at Arequipa, March 30; black corn.

128854. No. 536. *Plonca*. From the market at Arequipa, March 30; large white corn.

128855. No. 555. From Lima, April 4; yellow sweet corn.

128856. No. 556. From Lima, April 4; white corn with large kernels; 8 rows on the ear.

128857. No. 557. From Lima, April 4; yellow corn with large kernels; 8 rows on the ear.

## 128837 to 128859—Continued

128858. No. 558. From Lima, April 4; large yellow kernels with red streaks.

128859. No. 560. From the market at Tacna, March 26; yellow corn with red stripes; 12 rows on the ear.

#### 128860 to 128863.

From New Zealand. Seeds purchased from Mrs. E. C. Richards, Round Top, Windwhistle, Canterbury. Received April 27, 1938.

128860. CARMICHAELIA UNIFLORA T. Kirk. Fabaceae.

A dwarf matted shrub with slender, often subterranean stems 1 to 2 inches high, forming large patches, and solitary purplish flowers ½ inch long. Native to New Zealand.

128861. DACRYDIUM LAXIFOLIUM Hook. f. Taxaceae.

A prostrate evergreen shrub with slender branches 3 to 24 inches long. The leaves of young plants are lax, narrow-linear, and up to ½ inch long; the leaves of mature plants are broader and thicker. Native to New Zealand.

128862. HIBISCUS TRIONUM L. Malvaceae.

Flower-of-the-hour.

128863. VIOLA FILICAULIS Hook. f. Violaceae.

A New Zealand violet with many slender prostrate stems sometimes ascending at the tips, cordate leaves, and very pale blue flowers ½ inch across.

# 128864 to 128868. Trifolium spp. Fabaceae.

Clover.

From Sweden. Seeds presented by Dr. Frederik Nilsson, Vasternorrland substation of Sveriges Utsädesforening, Undrom. Received April 28, 1938.

A collection of Angermanland clover strains from northern Sweden.

128864 to 128867. TRIFOLIUM PRATENSE L.

Red clover.

128864. Bollsta.

128866. Offer.

128865. Bredyn.

128867. Sidensjo.

128868. Trifolium repens L.

White clover.

01.

# 128869. Malus sylvestris Mill. Malaceae.

Apple.

From Canada. Scions presented by Kenneth McDonald & Sons, Ltd., Ottawa. Received May 4, 1938.

Peach of Montreal.

# 128870 to 128883.

From Chile. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received April 22, 1938.

128870 to 128873. Alstroemeria spp. Amaryllidaceae.

128870. Alstroemeria ligtu var. pulchra (Sims) Baker.

No. 415. Presented by Augustin Garaventa, Limache, March 14, 1938. A bulbous plant, native to Chile, with thin linear-lanceolate leaves 2 to 3 inches long and a flower stem 2 feet long, bearing a compound umbel of whitish lilac or pale-red flowers 1 to 2 inches long, streaked with purple.

For previous introduction see 92946.

128871. Alstroemeria inodora Herbert.

No. 413. Presented by Augustin Garaventa, Limache, March 14, 1938. An alstroemeria 2 to 3 feet high, with thin lanceolate or oblong leaves narrowed into winged petioles and an umbel of 2 to 6 flowers over 1 inch long. Native to Brazil.

# 128870 to 128883—Continued

128872. Alstroemeria versicolor var. cummingiana (Herbert) Baker.

No. 431. From Quebrada Salta Mathaei, east of Viña del Mar, March 15, 1938. A Chilean alstroemeria about 12 inches high, with small scattered linear leaves ½ inch long and yellow, purple-spotted flowers 1 inch long in small umbels.

128873. Alstroemeria sp.

No. 435. Collected along the seaside, north of Viña del Mar, March 15, 1938.

128874. APIUM GRAVEOLENS L. Apiaceae.

Celery.

No. 433. Collected along the ocean north of Salinas, near Viña del Mar, March 15, 1938. A plant with coarse glossy green leaves.

128875. APIUM sp. Apiaceae.

No. 430. From Quebrada Salta Mathaei; growing on a dry slope among trees, March 15, 1938.

128876. CALANDRINIA GRANDIFLORA Lindl. Portulacaceae.

No. 427. Along the shore on rocks north of Salinas, March 15, 1938. A succulent, shrubby perennial with tortuous stems about 2 feet high, small fleshy rhomboid leaves, and terminal racemes of few large violet flowers. Native to Chile.

128877. Dolia tomentosa (Lindl.) Benth. and Hook. f. Nolanaceae.

No. 436. From along the seaside near Viña del Mar, March 15, 1938. A prostrate shrubby plant with small fleshy linear-oblong leaves and solitary, white or very pale-lilac flowers. Native to Chile.

128878. ESCALLONIA PULVERULENTA (Ruiz and Pav.) Pers. Escalloniaceae.

No. 419. From Limache, March 14, 1938. A shrub with large, thick, silvery-gray, oval or elliptic leaves and white flowers in long dense terminal racemes. Native to Chile.

For previous introduction see 78344.

128879. MUTISIA sp. Asteraceae.

No. 426. Growing near the coast south of Salta, March 15, 1938. Received without further notes.

128880. Papaver sp. Papaveraceae.

No. 429. From Quebrada Salta Mathaei, east of Viña del Mar, March 15, 1938.

128881. Solanum sp. Solanaceae.

No. 428. Along the shore north of Salinas, March 15, 1938. Fruit small, green, with a violet stripe from stem to blossom end.

128882. Tropaeolum ciliatum Ruiz and Pay. Tropaeolaceae.

No. 417. From Limache, March 14, 1938. A perennial herbaceous twiner with slender stems, lobed peltate leaves, and small yellow flowers. Native to Peru and Chile.

128883. Vestia lycioides Willd. Solanaceae.

No. 418. From Limache, March 14, 1938. A handsome erect deciduous shrub about 3 feet high, with oblong-oval leaves up to 2 inches long, glossy on the upper surface, and tubular pale-yellow flowers over 1 inch long. Native to Chile.

# 128884 to 128890. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

From France. Seeds purchased from Tézier Frères, Valence-sur-Rhone. Received April 22, 1938.

128884. de Marmande.

128888. Reine des Hâtives.

128885. Mikado Ecarlate.

128889. Roi Humbert.

128886. Merveille des Marchès.

128890, Rouge Grosse.

128887. Perfection.

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# 128891 to 128893. Trifolium repens L. Fabaceae. White clover.

From New Zealand. Seeds presented by E. Bruce Levy, Director, Grasslands Division, Department of Scientific and Industrial Research, Plant Research Bureau. Received April 26, 1938.

128891. New Zealand Certified Mother Seed, Ac. 2414.

128892. New Zealand Certified Permanent Pasture, Ac. 2426.

128893. New Zealand Pedigree Seed, Ac. 2419.

# 128894. GLYCERIA MULTIFLORA Steud. Poaceae.

Grass.

From Chile. Seeds presented by Father Atanasio Hollenmeyer, Mision Quinchilea, through Prof. T. H. Goodspeed, University of California, Berkeley, Calif. Received May 6, 1938.

A perennial grass with stems 3 feet or higher; grows in swamps and on banks near stagnant water; a good grazing grass.

# 128895 to 128897. Trifolium spp. Fabaceae.

From Denmark. Seeds presented by the Dänske Landboforeningers Frøforsyning, Taastrup. Received May 6, 1938.

128895 and 128896. TRIFOLIUM PRATENSE L.

Red clover.

128895. Early Øtofte El 406.

128896. Late Øtofte El 454.

128897. TRIFOLIUM REPENS L.

White clover.

Morse Øtofte El 407.

# 128898. Begonia sutherlandi Hook. f. Begoniaceae.

From Pennsylvania. Plants presented by Mrs. J. Norman Henry, Gladwyne. Received May 9, 1938.

A tuberous begonia with slender, bright red-purple stems 1 to 2 feet high, translucent ovate-lanceolate leaves, the blades about 5 inches long, and axillary and terminal cymes of many orange to rose-red flowers, each about 1 inch in diameter. Native to damp, shady places in Natal at altitudes of 3,500 to 5,000 feet.

# 128899 to 128908. Cucumis melo L. Cucurbitaceae. Muskmelon.

From France. Seeds purchased from Tézier Frères, Valence-sur-Rhone. Received May 22, 1938.

128899. Ananas d'Amérique à Chair Rouge.

128900. Cantaloup d'Alger.

128901. Cantaloup de Bellegarde.

128902. Charentais (choix courant).

128903. de Cavaillon à Chair Rouge.

128904. de Cavaillon à Chair Verte.

128905. Délices de la Table.

128906. Noir des Carmes.

128907. Prescott Fond Blanc Gros.

128908. Sucrin de Tours.

#### 128909 to 128917.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 26, 1938.

128909. CICER ARIETINUM L. Fabaceae.

Chickpea.

Sabour Type 4. From the Botanical Section, Sabour, District Bhagalpur, Bihar.

## 128909 to 128917—Continued

. 128910 to 128914. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

128910. From Pakur, District Santalparagnas, Bihar.

128911. From Samastipur, District Darbhanga, Bihar.

128912. From Sabour, District Bhagalpur, Bihar.

128913. From Madhubani, District Darbhanga, Bihar,

128914. From Pusa, District Darbhanga, Bihar,

128915 and 128916. Dolichos Lablab L. Fabaceae.

Hyacinth-bean.

From the Botanical Section, Sabour, District Bhagalpur, Bihar.

128915. Sabour Type 1.

128916. Sabour Type 2.

128917. RANDIA sp. Rubiaceae.

From Londa, Bombay Presidency, February 1938. A small tree or shrub.

# 128918. Stenolobium arequipense Sprague. Bignoniaceae.

From Peru. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received May 4, 1938.

No. 517. From Moquegua, Peru, March 27, 1938. An erect shrub up to 6 feet high, with slender 4-angled branches and pinnate leaves 4 to 5 inches long. The funnel-shaped orange flowers are 2 to 3 inches long and are borne in terminal racemes 4 to 8 inches long. Native to Peru.

For previous introduction see 127850.

# 128919 to 128922. Derris spp. Fabaceae.

From the Federated Malay States. Cuttings presented by the Central Experiment Station, Serdang, through the Royal Botanic Gardens, Kew, Surrey, England. Received May 11, 1938.

128919 to 128922. DERRIS ELLIPTICA (Roxb.) Benth.

128919. Changi 1.

128920. Changi 2.

128921. Changi 3. Serdang. Clone No. 39.

128922. Sarawak Creeping. Clone No. 19

# 128923. Derris Malaccensis var. Sarawakensis M. R. Henderson. Fabaceae.

Serdang. Clone No. 5. An erect shrubby plant differing from the type by the larger flowers with a more hairy calyx and silky standard. Native to the Malay Peninsula.

#### 128924 to 128984.

From India. Seeds presented by the Lloyd Botanic Garden, Darjeeling. Received May 12, 1938.

128924. ACONITUM LURIDUM Hook f. and Thoms. Ranunculaceae. Monkshood.

A perennial herb with simple erect stems 2 to 3 feet high, native to the alpine slopes of the Himalayas in India. The palmately 5-lobed leaves, 2 to 3 inches across, have crenate margins, and the dull-red flowers, borne in a simple raceme, have a long straight beak and a broad domelike dorsal prominence.

For previous introduction see 122055.

128925. ACTINIDIA STRIGOSA Hook. f. and Thoms. Dilleniaceae.

A woody vine resembling *Actinidia callosa*, with strigose-hispid ovate leaves 5 inches long, white flowers nearly 1 inch across in axillary cymes, and ovoid edible fruits. Native to the Sikkim Himalayas at altitudes of 6,000 to 8,000 feet.

For previous introduction see 93173.

#### 128926. Anemone vitifolia DC. Ranunculaceae.

Grapeleaf anemone.

A stout bushy perennial, 1 to 3 feet high, with large deeply divided leaves 3 to 6 inches across and beautiful white flowers 1 inch or more across in open corymbs. Native to the Himalayas at altitudes of 5,000 to 10,000 feet.

For previous introduction see 114714.

128927. Argyreia Wallichii Choisy. Convolvulaceae.

A large woody climber with leathery ovate-cordate leaves 6 to 14 inches long and many white rose-tinged flowers about  $1\frac{1}{2}$  inches long, in dense heads up to 3 inches in diameter. Native to northern India.

128928. Arisaema griffithii Schott. Araceae.

A tuberous herb native to the temperate Himalayas in India from 7,000 to 12,000 feet altitude. The 2 leaves are divided into 3 rhombic-orbicular crenate lobes 6 to 10 inches long with faint yellow margins. The tube of the spathe, 2 to 3 inches long, is purple ribbed with white, and the incurved limb, 5 to 8 inches broad, is divided into 2 dull-purple lobes reticulated green and having purple tails 3 inches long. The stout spadix has a tortuous linear purple tail 1 to 3 feet long.

For previous introduction see 102753.

128929. Arisaema tortuosum (Wall.) Schott. Araceae.

A tuberous herb native to the subtropical and temperate Himalayas up to 8,000 feet altitude. The 2 or 3 leaves, on petioles 1 to 3 feet long, have 5 to 20 linear to ovate tailed leaflets 12 to 18 inches long. The flower stalk, 2 to 4 feet high, bears a pale-green or purple spathe 4 to 6 inches long with an incurved boatshaped limb, and the spadix, which resembles a rat tail, is first erect, then recurved, and again erect.

For previous introduction see 102754.

128930. ASTER TRICEPHALUS Clarke. Asteraceae.

A small vigorous subtropical herbaceous perennial with obovate-spatulate radical leaves and 1 to 3 reddish flower heads about 1 inch in diameter. Native to the Sikkim Himalayas at altitudes of 10,000 to 14,000 feet.

For previous introduction see 122067.

128931. Begonia megaptera A. DC. Begoniaceae.

A begonia with a thick woody rootstock, erect stems up to 18 inches high, and cordate-ovate, undulate leaves 4 to 6 inches long. The large pink flowers are on elongated peduncles, often 8 inches in length, in the upper axils. Native to the Sikkim Himalayas at 2,000 to 8,000 feet altitude.

128932. Begonia sikkimensis A. DC. Begoniaceae.

An erect-stemmed begonia up to 18 inches high, with round-lobed leaves 4 to 6 inches in diameter and medium-sized bright-red flowers. Native to the Sikkim Himalayas between 3,000 and 7,000 feet altitude.

## 128933. Betula utilis D. Don. Betulaceae.

Birch.

A tree 40 to 60 feet high, with a red-brown trunk and branches and bark which peels off in papery flakes. It is native to subtropical regions of the Himalayas. The oval coarsely-toothed, sharp-pointed leaves, 3 inches long, are dark green above and paler beneath. In winter, the orange-chocolate color of the twigs is very striking.

For previous introduction see 99654.

128934. Bupleurum candollii Wall. Apiaceae.

A perennial herb 1 to 3 feet high, native to the Himalayas up to 12,000 feet altitude. The linear to ovate leaves, 2 to 5 inches long, are entire, and the small yellow flowers are borne in compound umbels.

For previous introduction see 99722.

128935. CATHCARTIA VILLOSA Hook. f. Papaveraceae.

A hardy annual or biennial found between 10,000 and 12,000 feet altitude in the Sikkim Himalayas. The abundance of long shaggy fulvous hairs and the large bright-yellow, nodding, glabrous flowers give it a handsome appearance. The cordate radical leaves are long-petioled and palmately 5-lobed; the stem leaves are sessile and the uppermost ones pinnatifid.

For previous introduction see 102312.

128936. Celastrus paniculatus Willd. Celastraceae.

A climbing shrub native to the Himalayan foothills up to 4,000 feet altitude. The oval-oblong or obovate serrate acuminate leaves are 2 to 5 inches long, and the small yellowish-green flowers are in small terminal panicles. The seeds contain oil that is used chiefly for illumination.

For previous introduction see 47657.

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128937. CLINTONIA ALPINA (Royle) Kunth. Convallariaceae.

A low perennial native to the temperate slopes of the Himalayas. The lanceolate leaves are 4 to 9 inches long, and the small white funnel-shaped flowers are borne in a loose raceme on a scape 1 to 2 feet high.

For previous introduction see 122074.

128938. Corydalis Chaerophylla DC. Papaveraceae.

An upright herbaceous perennial, 2 to 4 feet high, with large decompound leaves 6 to 10 inches long and slender golden yellow flowers  $\frac{3}{4}$  inch long, in terminal racemes. Native to the temperate Himalayas at altitudes of 6,000 to 10,000 feet.

For previous introduction see 66453.

128939. Crawfurdia affinis C. B. Clarke. Gentianaceae.

A herbaceous twiner with cordate-lanceolate leaves about 3 inches long and several small white or greenish-yellow flowers in fascicles. Native to the Himalayan region at 5,000 to 6,000 feet altitude.

128940. Crawfurdia speciosa Wall. Gentianaceae.

A herbaceous twiner with elliptic leaves about 3 inches long and showy cymes of 1 to 5 purple flowers. Native to the central and eastern Himalayas at altitudes of 6,000 to 10,000 feet.

128941. Cremanthodium sp. Asteraceae.

Received under the name "uniforum," for which a place of publication has not been found.

128942. Cynoglossum furcatum Wall. Boraginaceae.

An erect perennial with numerous stems from a rosette of lanceolate, soft-haired, entire leaves. The small blue flowers are borne in long slender clusters similar to those of the forget-me-not. Native throughout India at altitudes of 4,000 to 9,000 feet.

For previous introduction see 111044.

128943. Daphne involucrata Wall. Thymelaeaceae.

A lax shrub up to 20 feet high, with thin oblong-lanceolate leaves 3 to 6 inches long and silky-white, fragrant flowers in long-stemmed heads. Native to the Sikkim region in India at altitudes of 4,000 to 6,000 feet.

For previous introduction see 124246.

128944. Eurya symplocina Blume. Theaceae.

A slender evergreen shrub with oblong-elliptic leaves 3 to 5 inches long and small whitish flowers in rather crowded fascicles. Native to the central and eastern Himalayas at altitudes of 5,000 to 7,000 feet.

128945. Gentiana stylophora C. B. Clarke. Gentianaceae.

Gentian.

A stout herbaceous perennial native to the Himalayas in Sikkim between 11,000 and 14,000 feet altitude. The simple stems are 3 to 6 feet high, the lower leaves are elliptic and 12 inches long, and the upper leaves are sessile, about 5 inches long. The widely funnel-shaped solitary flowers are borne on axillary peduncles up to 8 inches long.

For previous introduction see 102316.

128946. GLOCHIDION VELUTINUM Wight. Euphorbiaceae.

An evergreen tree 20 to 30 feet high, with orbicular to ovate-elliptic or oblong leaves 2 to 5 inches long and inconspicuous flowers in clusters. Native to hot valleys of the Himalayas and the Deccan Peninsula.

128947. Hemiphragma heterophyllum Wall. Scrophulariaceae.

A prostrate herbaceous perennial with slender loosely tufted, creeping stems 1 to 2 feet long, ovate stem leaves \( \frac{1}{3} \) to \( \frac{1}{3} \) of an inch long, smaller needleshaped branch leaves, and very small sessile pink flowers. Native to the temperate Himalayan region at altitudes between 4,000 and 12,000 feet.

128948. HERACLEUM WALLICHII DC. Apiaceae.

A stout perennial about 4 feet high, with compound umbels of small yellow flowers. Native to the Himalayas at 10,000 feet altitude.

For previous introduction see 111051.

128949. Hymenopogon parasiticus Wall. Rubiaceae.

A small straggling shrub, often epiphytic, with elliptic-lanceolate or oblanceolate leaves 3 to 12 inches long. Native to the temperate Himalayas at altitudes of 3,000 to 8,000 feet.

128950. Hypericum hookerianum Wight and Arn. Hypericaceae.

St. Johnswort.

For previous introduction see 116590.

128951. Hypericum oblongifolium Choisy. Hypericaceae. St. Johnswort.

A shrub 3 to 6 feet high, native to the temperate slopes of the Himalayas at altitudes between 5,000 and 7,000 feet. The sessile ovate-lanceolate leaves are 1 to 3 inches long, and the nodding flowers, 2 inches across, are white on opening, turning light yellow with age.

For previous introduction see 102767.

128952. LACTUCA MACRANTHA Clarke. Cichoriaceae.

Lettuce.

A stout perennial lettuce up to 2 feet high, with large pinnatifid leaves and loosely panicled heads of blue flowers. Native to the Sikkim Himalayas at altitudes of 10,000 to 14,000 feet.

For previous introduction see 122101.

128953. Leucosceptrum canum J. E. Smith. Menthaceae.

A stout-branched, densely hairy tree, commonly about 30 feet high, with large narrowly ovate leaves, silvery hairy beneath and at times a foot long. The small white or pinkish flowers are in spikes. Native to temperate regions of the Himalayas at altitudes of 2,000 to 8,000 feet.

For previous introduction see 65260.

128954. Leycesteria belliana W. W. Smith. Caprifoliaceae.

A small graceful shrub with opposite membranous lance-shaped leaves and sessile 2- to 4-flowered spikes of rosy-white flowers. It is native to the Sikkim Himalayas near the Nepal border at an altitude of about 10,000 feet.

For previous introduction see 61610.

128955. LIGUSTRUM CONFUSUM Decaisne. Oleaceae.

Privet.

A small tree up to 40 feet high, one of the tropical relatives of the California privet (*Ligustrum ovalifolium*). The obtuse leathery leaves are about 9 inches long, and the small white flowers are in panicles 1 to 5 inches long. Native to northern India at altitudes of 3,000 to 5,500 feet.

For previous introduction see 122103.

128956. LILIUM NEPALENSE D. Don. Liliaceae.

Lily.

A showy lily, native to the central Himalayas, with a slender erect stem 2 to 3 feet long, leafy to the inflorescence. The glossy, bright-green leaves, 4 to 6 inches long, are oblong-lanceolate and 5-ribbed. The flowers, 4 to 5 inches long, are greenish yellow outside and yellow within and flushed, except in the upper third, with purplish black. The oblanceolate segments are reflexed only in the upper half. The purplish-black filaments bear yellow anthers nearly an inch long.

For previous introduction see 115982.

128957. Lobelia Pyramidalis Wall. Campanulaceae.

A herbaceous perennial 2 to 7 feet high, found between 3,000 and 9,000 feet altitude in the Himalayas. The linear leaves are glabrous, and the purple-rose or whitish flowers are produced in many-flowered racemes.

For previous introduction see 116596.

128958. Lonicera glabrata Wall. Caprifoliaceae.

Honeysuckle.

A shrubby climber, native to the temperate Himalayas up to 8,000 feet altitude. The cordate-oblong, leathery leaves are 3 to 5 inches long and the yellow flowers, 1 inch long, are tinged with purple outside and are followed by black fruits.

For previous introduction see 99739.

128959. LYSIMACHIA CHENOPODIOIDES Hook, f. Primulaceae.

An erect or decumbent herb 1 to  $1\frac{1}{2}$  feet high, with elliptic ovate leaves  $\frac{1}{2}$  to 1 inch long and small white or pale-pink flowers in the leaf axils. Native to the temperate Himalayas at altitudes of 6,000 to 9,000 feet.

128960. Osbeckia nepalensis Hook. Melastomaceae.

An evergreen shrub about 18 inches high, native to the Himalayas at altitudes up to 4,000 feet, with a rough erect stem, opposite, lanceolate rigid leaves, and large purplish-rose or white flowers in terminal and axillary panicles or corymbs.

For previous introduction see 124258.

128961. Oxyspora paniculata (D. Don) DC. Melastomaceae.

A large spreading shrub with drooping branches, opposite ovate leaves 5 inches long, and large loose panicles of rose-purple flowers. Native to the subtropical and temperate Himalayas at altitudes of 3,000 to 7,000 feet.

For previous introduction see 99745.

128962. Pentapterygium serpens (Wight) Klotzsch. Vacciniaceae.

An epiphytic evergreen shrub with slender pendulous branches 2 to 4 feet high, small ovate leaves, and solitary axillary bright-red flowers an inch or over in length. Native to the eastern Himalayas at 3,000 to 8,000 feet altitude.

128963. Phlomis setigera Falcon. Menthaceae.

A tall erect herbaceous perennial, with ovate leaves 4 to 8 inches long and many small white flowers in dense axillary whorls. Native to the temperate Himalayas at altitudes of 10,000 to 12,000 feet.

128964. PIPTANTHUS NEPALENSIS (Hook.) Sweet. Fabaceae.

A shrub from 2 to 11 feet high, with palmately trifoliolate leaves made up of lanceolate leaflets 2 to 4 inches long; the yellow pea-shaped flowers, 1 inch long, are borne in dense racemes resembling bunches of grapes. Native to the temperate Himalayas at altitudes of 7,000 to 9,000 feet.

For previous introduction see 122117.

128965. Polygala Arillata Buch.-Ham. Polygalaceae.

An erect shrub 4 to 8 feet high, native to southeastern Asia. The lanceolate to ovate leaves are 4 to 6 inches long and the irregular flowers, ½ inch long, in drooping panicles, have red-purple sepals and yellow petals. The broadly reniform, fleshy capsules are nearly 1 inch across.

For previous introduction see 102772.

128966. Polygonum roettleri Roth. Polygonaceae.

A polygonum with slender erect or ascending stems 2 to 3 feet high and lanceolate leaves 2 to 6 inches long. It is allied to *Polygonum hydropiper* and is native throughout India in wet places, ascending to 4,000 feet in the Himalayas.

128967. Polygonum molle D. Don. Polygonaceae.

A shrubby perennial 2 to 3 feet high, with white flowers in large thyrselike terminal panicles. Allied to *Polygonum polystachyum*. Native to Nepal, at altitudes of 5,000 to 7,000 feet.

For previous introduction see 122110.

128968. POTENTILLA LEUCONOTA D. Don. Rosaceae.

A herbaceous perennial with many oblong leaves 2 to 6 inches long and erect or ascending flower stems with umbellate clusters of small yellow flowers. Native to the alpine Himalayan region at altitudes between 10,000 and 16,000 feet.

128969. Poterium diandrum Hook. f. Rosaceae.

Burnet.

A glabrous erect perennial herb 2 to 3 feet high, native to the temperate slopes of the Himalayas at altitudes of 10,000 to 13,000 feet. The pinnately compound leaves, 6 to 10 inches long, are made up of crenate cordate leaflets 1 inch long, and the small dark-purple flowers, in heads 1 inch in diameter, are followed by pendulous 4-winged fruits ¼ inch long.

For previous introduction see 102323.

128970. Primula geraniifolia Hook. f. Primulaceae.

A very slender primula with acutely lobed orbicular leaves 2 to 3 inches in diameter and simple and superimposed whorls of lilac flowers. Native to the Himalayas between Sikkim and Bhotan at an altitude of about 10,000 feet.

128971. PRUNUS ACUMINATA (Wall.) Hook. f. Amygdalaceae. Cherry-laurel.

A slender-branched tree 30 to 40 feet high, with narrow leaves up to 7 inches long and many-flowered racemes of yellowish-white flowers. The fruit is a small oval drupe. Native to the central and eastern Himalayas at altitudes between 5,000 and 7,000 feet.

For previous introduction see 124755.

128972 to 128976. Rhododendron spp. Ericaceae.

128972. RHODODENDRON CAMELLIAEFLORUM Hook. f.

An often epiphytic evergreen shrub 2 to 3 feet high, with densely scaly branchlets, native to the Himalayas between 9,000 and 11,000 feet altitude. The narrowly oblong, obtusely mucronate leaves, 2 to 4 inches long, are glabrous and reticulate above and densely scaly beneath. The pink-tinged white flowers, an inch across, are fleshy with a short broad tube and a widespreading limb.

For previous introduction see 102777.

128973. RHODODENDRON EDGEWORTHII Hook, f.

A shrub, often epiphytic, 4 to 6 feet high, native to the Himalayas in Sikkim, India, at altitudes of 7,000 to 9,000 feet. The elliptic-ovate leaves, 4 inches long, are strongly bullate above and densely cobwebby-tomentose beneath. The fragrant white or pink-tinged flowers are broadly tubular and 3 or 4 inches long.

For previous introduction see 111076.

128974. RHODODENDRON GRANDE Wight.

A tree up to 30 feet high, native to the Sikkim Himalayas between 8,000 and 10,000 feet altitude. The elliptic to oblanceolate leaves, 6 to 12 inches long, are shining deep green above and silvery white beneath. The mortar-shaped flowers, 2 to 3 inches long, are pale rose in the bud, opening creamy white with basal purple blotches, and are borne in large rounded clusters of 20 to 25.

For previous introduction see 111077.

128975. RHODODENDRON MADDENI Hook. f.

A shrub 6 to 8 feet high, with red-stemmed, dark-green leaves. The large, delicately fragrant flowers, tinged with rose, are produced in threes at the ends of the branches. Native to the Himalayas at about 6,000 feet altitude.

For previous introduction see 122129.

128976. RHODODENDRON VACCINIOIDES Hook. f.

A low shrub 1 to 3 feet high, with densely warty-glandular branchlets, native to the Sikkim Himalayas between 6,000 and 10,000 feet altitude. The scattered emarginate leaves are less than 1 inch long, and the lilac-pink or pink-tinged white campanulate flowers are ½ of an inch long.

For previous introduction see 102780.

128977 to 128979. RUBUS spp. Rosaceae.

128977. RUBUS CALYCINUS Wall.

A wild raspberry from the temperate slopes of the Himalayas and of the Khasia Hills, India, where it grows as a creeping herbaceous perennial with kidney-shaped leaves and small scarlet fruits containing, normally, but a few drupelets.

For previous introduction see 58495.

128978. RUBUS HOOKERI Focke.

A low prickly shrub with pinnately foliolate bright-green leaves and large greenish-white flowers, solitary or few in a panicle, followed by fruits ¾ of an inch across. Native to the eastern temperate Himalayas at altitudes of 7,000 to 9,000 feet.

128979. Rubus paniculatus J. E. Smith.

A very rambling climber which has all the parts, except the upper surface of the leaves, covered with a dense tomentum. The fruit is a large round black drupe, edible but insipid. Native to the temperate Himalayas from Rajaori to Sikkim, between 3,000 and 8,000 feet altitude.

For previous introduction see 39132.

128980. Salvia campanulata Wall. Menthaceae.

Sage.

A stout perennial 2 to 3 feet high, with ascending hirsute stems and ovate cordate-crenate leaves on long petioles. The large flowers, yellow with purple dots, are in axillary or terminal racemes. Native to the Himalayas at altitudes of 9,000 to 13,000 feet.

For previous introduction see 116611.

128981. Saurauja napaulensis DC. Dilleniaceae.

A moderate-sized tree with the youngest branches, leaf stems, and midribs covered with rough brown hairs; the narrow, strongly toothed leaves are up to 15 inches in length, the pink flowers are borne in many-flowered panicles, and the edible green fruits have a sweet mealy pulp. The tree is native to the temperate Himalayas at altitudes between 5,000 and 7,000 feet.

For previous introduction see 55703.

128982. Scrophularia elatior Benth. Scrophulariaceae.

A tall stout branching perennial with ovate or lanceolate leaves 5 to 10 inches long and many small flowers in long panicles. Native to the Himalayas at altitudes up to 10,000 feet.

128983. SCROPHULARIA PAUCIFLORA Benth. Scrophulariaceae.

A stout herbaceous perennial 2 to 3 feet high, with ovate-cordate leaves about 3 inches long and dense terminal cymes of small yellowish flowers. Native to the Himalayas at altitudes up to 13,000 feet.

128984. LYONIA OVALIFOLIA (Wall.) Drude. Ericaceae.

A shrub or small tree with ovate or somewhat oblong leathery leaves 3 to 6 inches long and racemes of white or bluish or sometimes flesh-colored flowers. Native to the temperate Himalayas from 3,000 to 8,000 feet altitude.

For previous introduction see 100103.

128985. Citrullus vulgaris Schrad. Cucurbitaceae. Watermelon.

From Cephalonia Island, Greece. Seeds presented through P. Demetratos, Bristol, Va. Received May 7, 1938.

A long watermelon with thin skin which turns yellow when ripe. The flesh is sweet, of delicate flavor, and very aromatic.

128986. Citrus sinensis (L.) Osbeck. Rutaceae.

From Tunisia. Seeds presented by M. Plessis, Menzel-Bou-Zelfa, through N. Champagne, Ville-Marie, Quebec, Canada. Received May 12, 1938.

Var. Beldi.

128987. Eranthemum nervosum (Vahl) Roem. and Schult. (Daeda-lacanthus nervosus T. Anders.). Acanthaceae.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 2, 1936. Numbered in May 1938.

No. 508. From Jaipur City, Rajputana, April 10, 1936. A shrub up to 6 feet high, with axillary spikes of scarlet flowers. Native to India.

For previous introduction see 103488.

128988. Cannabis sativa L. Moraceae.

Hemp.

From Germany. Seeds presented by Dr. H. Neugebauer, Director, Botanic Garden, Leipzig. Received May 10, 1938.

128989. Casuarina sumatrana Jungh. Casuarinaceae.

From the Dutch East Indies. Seeds presented by Walter Baugham, Dolok Merangir, Sumatra, through David Fairchild. Received May 17, 1938.

A handsome shrub, sometimes over 6 feet high, and densely branched. The branches, twigs, and little twigs are 3-angled, very slender, destitute of leaves, gracefully arched, sometimes pendent, forming by their union plumy masses or a kind of foxtail, the whole a deep shining green.

The plant is widely distributed throughout the East Indies and the Philippine

Islands and, in the wild state, it often becomes a tree 50 feet high.

For previous introduction see 92375.

# 128990. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Argentina. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received May 18, 1938.

San Marzano. From a seed store in Buenos Aires.

#### 128991 to 128995.

From China. Seeds presented by R. C. Ching, Lu-Shan Arboretum and Botanical Garden, Lu-Shan, Kiukiang Province. Received May 5, 1938.

128991. Abies delayayi Franch. Pinaceae.

Fir.

A tall tree, often 100 feet high, native to western China. The slightly grooved branchlets are lustrous red-brown, and the emarginate linear leaves, about 1 inch long, are revolute on the margin, dark green above, and with 2 white bands beneath. The violet-black cylindric to ovoid cones are 2 to 4 inches long.

For previous introduction see 103111.

128992. Davidia involucrata Baill. Cornaceae.

Dovetree.

For previous introduction see 103990.

128993. Juglans cathayensis Dode. Juglandaceae.

Chinese walnut.

A deciduous tree, native to central, western, and southwestern China. At low altitudes it forms a small bushy tree 15 to 30 feet high, flowering and fruiting when 8 to 10 feet high. In the woods and forests it occasionally makes a large tree 40 to 70 feet high. The leaves on young plants are often a yard long, rivaling those of Ailanthus and Cedrela. The fruits are produced in clusters of 6 to 10 and are over an inch long. The kernel is sweet and pleasantly flavored.

For previous introduction see 48014.

128994. Quercus variabilis Blume. Fagaceae.

Oriental oak.

A large oak, up to 80 feet high, forming pure stands between 2,000 and 5,000 feet altitude in central and eastern China. The bark is pale yellowish gray and deeply furrowed; the deep-green, crenately serrate leaves with bristlelike teeth are oblong to oblong-lanceolate, and the roundish acorns are almost sessile.

For previous introduction see 120658.

128995. Quercus sp. Fagaceae.

Collected at Opie Hsien at about 600 feet altitude.

#### 128996. Tephrosia vogelii Hook. f. Fabaceae.

From the Gold Coast, Africa. Seeds presented through the Royal Botanic Gardens, Kew, England. Received May 12, 1938.

For previous introduction see 126550.

#### 128997 to 129000.

Collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 14, 1938.

Unless otherwise stated, the material was collected in India as seeds.

128997. ALLIUM CEPA L. Liliaceae.

Onion.

No. 4389. *Peyaz*. Bulbs collected in Bombay, January 1938, but probably grown in Surat. An onion with extraordinary keeping qualities.

128998. Brassica oleracea var. botrytis L. Brassicaceae. Cauliflower.

No. 4390. From Palermo, Sicily, Giardino de Acclimazione, March 1938. A green variety, reported to be superior to American varieties in having a more delicate flavor and less odor while cooking.

128999. Canavalia sp. Fabaceae.

No. 4372. From Sanchi Bhopal, January 2, 1938, at 1,500 feet altitude. A climber 10 feet high, found in a thicket.

# 128997 to 129000-Continued

129000. ZEA MAYS L. Poaceae.

Corn.

No. 4388. Shatwatsalli (60-day corn). From Kulu, Punjab, January 1938, at 5,000 feet altitude. The earliest corn grown in this district. Cobs smaller than the later corn.

# 129001 to 129004. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Puerto Rico. Tubers presented by F. A. López Dominguez, Director, Agricultural Experiment Station of the University of Puerto Rico, Rio Piedras.

129001. Capitaleña.

129003. New Orleans.

129002. Don Juan.

129004. Yuguilla.

## 129005. Peumus boldus Molina. Monimiaceae.

From Chile. Seeds presented by S. M. Arriola, Ranacagua. Received May 17, 1938.

Boldo. A small evergreen tree or large shrub, with opposite, very rough, ovate obtuse leaves. The small white flowers, one-half inch across, not very showy but very attractive to bees, are in small panicles, and the small edible fruits are sweet and aromatic. The exceedingly hard wood is used for tools, and the bark is used for tanning and dyeing. Native to Chile.

For previous introduction see 55871.

# 129006. Gossypium. Malvaceae.

Cotton.

From Mexico. Seeds presented by W. W. Hopps, Tampico, State of Tamaulipas. Received May 10, 1938.

## 129007 to 129010. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by Prof. J. B. Griffing, Escola Superior de Agricultura, Viçosa, Minas Geraes. Received May 10, 1938.

129007. No. 450.

129009. No. 815.

129008. No. 624.

129010. No. 933.

## 129011 to 129013.

From Spain. Seeds presented by the Director, Botanic Institute, Barcelona. Received May 18, 1938.

129011. AQUILEGIA NEVADENSIS Boiss. and Reut. Ranunculaceae.

Received with the varietal name "litardieri," for which a place of publication has not been found.

129012. Nepeta Nepetella L. Menthaceae.

A herbaceous perennial about 1 foot high, with whitish, red-spotted flowers. Native to Europe.

129013. VIOLA CATALONICA W. Becker. Violaceae.

Violet.

A stemless perennial violet with 5 or 6 round or broadly ovate leaves and white flowers. Allied to *Viola adriatica*. Native to Catalonia, Spain.

#### 129014 to 129017.

From Italy. Seeds presented by the Director, Botanic Garden, Palermo. Received May 19, 1938.

129014 to 129016. Aquilegia spp. Ranunculaceae.

Columbine.

129014. AQUILEGIA ADVENA Regel.

An aquilegia with blue flowers. Habitat unknown.

129015. AQUILEGIA GLANDULOSA Fisch.

Altai columbine.

A Siberian columbine about 18 inches high, with nodding lilac-blue flowers up to 3 inches across, the sepals twice the length of the white limb of the petals.

129016. AQUILEGIA VULGARIS L.

European columbine.

For previous introduction and description see 128666.

# 129014 to 129017—Continued

129017. Callistephus chinensis (L.) Nees. Asteraceae.

For previous introduction and description see 128833.

#### 129018 to 129165.

From Central and South America. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received May 25, 1938.

129018 to 129157. Lycopersicon spp. Solanaceae.

129018 to 129020. Lycopersicon esculentum Mill.

Tomato.

129018. No. 546. From the market at Lima, Peru, April 4, 1938. Fruit small, flat, smooth, red.

129019. No. 547. From the market at Lima, Peru, April 4, 1938. Fruit nugget type, small, round.

129020. No. 562. From Salinas, Ecuador, April 8, 1938.

129021. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 564. From Muey, Ecuador, April 8, 1938. Fruit small, 1 inch in diameter, very rough and flat.

129022 to 129026. Lycopersicon esculentum Mill.

Tomato.

From the market at Guayaquil, Ecuador, April 10, 1938.

129022. No. 571. Fruit small, cherry type, red.

129023. No. 572. Fruit small, flat, 4- to 5-celled, ribbed.

129024. No. 573. Fruit small, flat, very rough, common.

129025. No. 574. Fruit large, flat, very rough.

129026. No. 575. Fruit medium flat, rough, very deep scarlet.

129027. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 593. From a garden in Pasaje, Province of El Ora, Ecuador, April 12, 1938. Fruit large, cherry type.

129028 to 129061. Lycopersicon esculentum Mill.

Tomato.

129028. No. 594. From a garden in Pasaje, Province of El Ora, Ecuador, April 12, 1938.

Nos. 129029 to 129034. From the market at Guayaquil, Ecuador, April 17, 1938.

129029. No. 605. Fruit cherry type; some red, some yellow.

129030. No. 606. Fruit small, 2-celled, red.

129031. No. 607. Fruit 3-celled, flat, red.

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129032. No. 608. Fruit 4- to many-celled, flat, red, color deeper in recesses marking the ribs.

129033. No. 609. Fruit small, very rough, flat, many-celled.

129034. No. 610. Fruit large, flat, many-celled, rough, red.

Nos. 129035 to 129041. From the market at Cuenca, Ecuador, April 19, 1938.

129035. No. 611. Fruit large, over 2 inches in diameter, rough and pointed at the top.

129036. No. 612. Fruit small, rough, red, 3- or 4-celled.

129037. No. 613. Fruit large, cherry form, smooth, red.

129038. No. 614. Fruit cherry form and size, but variable; some a little rough.

129039. No. 615. Fruit small, square, 4-celled.

129040. No. 616. Fruit small, red, currant type.

129041. No. 617. Fruit small, red, elongated plum type.

Nos. 129042 to 129050. From the market at Ambato, Ecuador, April 21, 1938.

129042. No. 639. Fruit large, cherry type.

129043. No. 640. Fruit large, very rough, red.

129044. No. 641. Fruit red, elongated plum-shape, flattened on two sides.

129045. No. 642. Fruit red, nugget type.

129046. No. 643. Fruit variable, 2- to 4-celled, flat, red.

129047. No. 644. Fruit small, heart-shaped, red.

129048. No. 645. Fruit small, red, elongated, plum-shape.

129049. No. 646. Fruit elongated cherry type, red.

129050. No. 647. Fruit currant and small cherry type, red.

Nos. 129051 and 129052. From the market at Baños, Ecuador, April 21, 1938.

129051. No. 649. Fruit nugget type, red.

129052. No. 650. Fruit flat, small, red.

Nos. 129053 to 129057. From the market at Quito, Ecuador, April 23, 1938.

129053. No. 654. Fruit small, round, cherry type, red.

129054. No. 655. Fruit large, round, cherry type.

129055. No. 656. Fruit small, flat, cherry type, red.

129056. No. 657. Fruit large, flat, cherry type, red.

129057. No. 658. Fruit small, rough, flat, red.

Nos. 129058 to 129061. From the market at Pasto, Colombia, April 26, 1938.

129058. No. 661. Fruit small, cherry type, red.

129059. No. 662. Fruit large, cherry type, 3- to 4-celled, slightly flat.

129060. No. 663. Fruit small, flat, smooth, 4- to 6-celled, red.

129061. No. 664. Fruit very rough, flat.

129062. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 671. From Purillo, Colombia, between El Bordo and Dolores, April 27, 1938. Fruit red, elongated, cherry type.

129063 to 129111. Lycopsicon esculentum Mill.

Tomato.

129063. No. 673. From Purillo, Colombia, between El Bordo and Dolores, April 27, 1938. Fruit small, flat, wrinkled.

Nos. 129064 and 129065. From Tulua, Colombia, along the railway, April 29, 1938.

129064. No. 674. Fruit small, round, smooth, red.

129065. No. 675. Fruit small, variable-celled, angular.

129066. No. 676. From Uribe, Colombia, April 29, 1938. Fruit red, cherry type.

Nos. 129067 to 129073. From the market at Bogota, Colombia, May 1, 1938.

129067. No. 677. Fruit large, rough, flat, red.

129068. No. 678. Fruit large, smooth, Baltimore type.

129069. No. 679. Fruit medium, nugget type, red.

129070. No. 680. Fruit red, plum-shaped.

129071. No. 681. Fruit red, pear-shaped.

129072. No. 682. Fruit small, flat, rough, red.

129073. No. 683. Fruit small, cherry type, red.

129074. No. 688. From La Mesa, Colombia, between David and Gerardt, May 3, 1938. A wild fruit, small, cherry type, red.

Nos. 129075 to 129082. From the market at Ibague, Colombia, May 4, 1938.

129075. No. 696. Fruit large, very rough, folded, red.

129076. No. 697. Fruit ribbed, but otherwise smooth, flat, red.

129077. No. 698. Fruit small, flat, many-celled, ribbed, red.

129078. No. 699. Fruit small, flat, 4- to 8-celled, ribbed, red.

129079. No. 700. Fruit small, flat, currant type, 2- and 4-celled, red.

129080. No. 701. Fruit small, nugget to cherry type, round, red.

129081. No. 702. Fruit cherry type, round, red.

129082. No. 703. Fruit currant type, round, red.

Nos. 129083 and 129084. From the market at Calarca, Colombia, May 4, 1938.

129083. No. 704. Fruit small, flat, 3-celled.

129084. No. 705. Fruit currant type, 2-celled, oval.

Nos. 129085 to 129091. From the market at Armenia, Colombia, May 4, 1938.

129085. No. 706. Fruit medium small, red, very rough, angular, folded type.

129086. No. 707. Fruit nugget type, red.

129087. No. 708. Fruit large, cherry type, 3- and 4-celled, red.

129088. No. 709. Fruit cherry form, red.

129089. No. 710. Fruit currant type, 2-celled, slightly flat.

129090. No. 711. Fruit round, currant type, 2-celled, red.

129091. No. 712. Fruit round, pink, current type.

Nos. 129092 to 129100. From the market at Manizales, Colombia, May 5, 1938.

129092. No. 715. Fruit yellow, pear-shaped, larger and fuller about the stem than the common type in the United States.

129093. No. 716. Fruit small, round, red, over 1 inch in diameter.

129094. No. 717. Fruit cherry form, red.

129095. No. 718. Fruit small, cherry type, 3- or 4-celled, irregular.

129096. No. 719. Fruit small, pear-shaped, fleshy type, red.

129097. No. 720. Fruit currant type, red, size of small cherries.

129098. No. 721. Fruit currant type, pink, the size of small cherries.

129099. No. 722. Fruit small, red.

129100. No. 723. Fruit yellow, medium size, irregular, but not rough.

Nos. 129101 to 129108. From the market at Pereira, Colombia, March 5, 1938.

129101. No. 724. Fruit over 1 inch in diameter, rough, ribbed, red.

129102. No. 725. Fruit small, angular, flat, less than 1 inch in diameter.

129103. No. 726. Fruit large, cherry type, red.

129104. No. 727. Fruit small, red, pear-shaped.

129105. No. 728. Fruit currant type, red.

129106. No. 729. Fruit cherry type, pink, round.

129107. No. 730. Fruit 3-cornered (3-celled), cherry type, pink.

129108. No. 731. Fruit currant type, pink.

Nos. 129109 and 129110. From Cartago, Colombia, May 5, 1938.

129109. No. 732. Fruit red, odd-shaped, variable, and irregular.

129110. No. 733. Fruit cherry type, pink.

129111. No. 734. From Tulua, Colombia, May 5, 1938. Fruit cherry type, red, round, smooth.

129112. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 735. From Candelaria, Rio Cauca Valley, Colombia, May 5, 1938. Fruit cherry type, red, some very irregular.

129113 to 129143. Lycopersicon esculentum Mill.

Tomato.

Nos. 129113 to 129123. From the market at Cali, Colombia, May 6, 1938.

129113. No. 736. Fruit 2 to 3 inches in diameter, smooth, deep red, uniform; best type in market.

129114. No. 737. Fruit large, very rough and folded, ripens unevenly, red.

129115. No. 738. Fruit red, rough, flat, medium size, less than 2 inches in diameter.

129116. No. 739. Fruit small, ¾ to 1¼ inches in diameter, rough, flat, angular, many-celled.

129117. No. 740. Fruit small, 5- to 7-celled, flat, angular, red.

129118. No. 741. Fruit large, cherry type, 3- to 5-celled, round, smooth.

129119. No. 742. Fruit cherry type, 3- to 5-celled, round, smooth.

129120. No. 743. Fruit small, cherry type, 2- to 3-celled, rather deep.

129121. No. 744. Fruit small, 4-celled, red, tending to flatness.

129122. No. 745. Fruit small, cherry type, 3-celled, round, red.

129123. No. 746. Fruit small, cherry or current type, 2-celled, round, red.

129124. No. 749. From Cisneros, Colombia, May 7, 1938. Fruit small, red, angular, with tendency to be rough.

129125. No. 750. From the market at Buenaventura, Colombia, May 8, 1938. Fruit red, large, round, smooth, fleshy type.

Nos. 129126 to 129131. From the market at Panama, Panama, May 10, 1938.

129126. No. 751. Fruit red, large, angular, folded type, folds only along side, quite flat.

129127. No. 752. Fruit red, large, very rough, folded type.

129128. No. 753. Fruit red, medium size, flat, variable.

129129. No. 754. Fruit red, medium size, round.

129130. No. 755. Fruit small, flat, rough, pink.

129131. No. 756. Fruit small, round, cherry type, pink.

Nos. 129132 to 129137. From the markets in Buenos Aires, Argentina.

129132. No. 759. Fruit large, smooth, round.

129133. No. 760. Fruit large, irregular, rough, red.

129134. No. 761. Fruit small, flat.

129135. No. 762. Fruit large, round, smooth.

129136. No. 763. Fruit large, irregular, malformed.

129137. No. 764. Fruit small, flat.

Nos. 129138 to 129140. From the market at La Plata, Argentina.

129138. No. 765. Fruit large, round, smooth.

129139. No. 766. Fruit large, irregular.

129140. No. 767. Fruit small, flat.

129141. No. 770. From Armenia, Colombia, May 4, 1938. Fruit small, irregular.

129142. No. 771. From Pasaje, Ecuador, April 12, 1938. Fruit said to be yellow when ripe.

129143. No. 548. From La Molina, Peru, April 4, 1938. Fruit small, currant type.

129144 to 129146. Lycopersicon peruvianum var. dentatum Dun.

129144. No. 515. East of Moquegua, Peru, March 27, 1938. Fruits small, 1 to 11/4 inches in diameter.

129145. No. 537. From Tambo, Peru, April 1, 1938. Fruit small, greenish white with purple stripings; calyx lobes long and slender.

129146. No. 539. From Tambo, Peru, April 1, 1938. Fruit not seen.

129147 and 129148. Lycopersicon pimpinellifolium (Jusl.) Mill.

129147. No. 561. From betwen Guayaquil and Salinas, Ecuador, April 8, 1938. Fruit small, currant type.

129148. No. 563. From Muey, Ecuador, April 8, 1938. Fruit small, cherry or currant type.

129149. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 579. From about 15 km. west of Guayaquil, Ecuador, April 10, 1938. Fruit yellowish green; different from the type found in Peru.

129150 to 129152. Lycopersicon spp.

From about 15 km. west of Guayaquil, Ecuador, April 10, 1938. Fruit yellowish green; different from the type found in Peru.

129150. No. 580.

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129151. No. 581.

129152. No. 582. A mixed sample of Nos. 579, 580, and 581 (P. I. 129149, 129150, and 129151).

129153. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

No. 587. From Santa Rosa, Province of El Oro, Ecuador, April 12, 1938. Fruit red, cherry type.

129154. Lycopersicon sp.

No. 589. From Santa Rosa, Province of El Oro, Ecuador, April 12, 1938. Fruit red, currant type.

129155 and 129156. Lycopersicon esculentum var. cerasiforme (Dun.) A. Gray.

From Pasaje, Province of El Oro, Ecuador, April 12, 1938.

129155. No. 591. Fruit of small-cherry or large-current type.

129156. No. 604. Fruit small, smooth, currant type.

129157. LYCOPERSICON HIRSUTUM f. GLABRATUM.

No. 648. From west of Baños, Ecuador, April 21, 1938. Fruit greenish white with purplish stripes from stem end, 2-celled.

129158 to 129165. ZEA MAYS L. Poaceae.

Corn.

Nos. 129158 to 129162. From Cuenca, Ecuador, April 19, 1938. Native Indian corn.

129158. No. 632.

129161. No. 635.

129159. No. 633.

129162. No. 636.

129160. No. 634.

Nos. 129163 to 129165. From the market at Buesaco, Colombia, April 27, 1938.

129163. No. 666. Hard, dark-yellow flint corn, 12 rows.

129164. No. 667. Hard, light-yellow flint corn, 12 rows.

129165. No. 668-A. Light pink, large kernels, 10 rows.

# 129166 to 129168. Phaseolus lunatus L. Fabaceae. Lima bean.

From India. Seeds presented by Dr. D. Rhind, Economic Botanist, Burma, Mandalay. Received May 18, 1938.

129166. Pebyugale.

129167. Pegya.

129168. Peni.

## 129169 to 129297.

From China. Seeds collected in Szechwan Province and presented by R. C. Ching, Lu-Shan Arboretum and Botanical Garden, Lu-Shan, Kiukiang Province. Received in May and June 1938.

129169. Davidia involucrata Baill. Cornaceae.

Dovetree.

A tree native to central and western China at 1,400 m. altitude.

For previous introduction and description see 128992.

129170. Rehderodendron sp. Styracaceae.

129171. Abies sp. Pinaceae.

Fir.

No. 1358. From O-pie Hsien, October 1937, at 1,900 m. altitude.

129172. ACANTHOPANAX Sp. Araliaceae.

No. 1164. From Mount Omei, September 2, 1937, at 2,600 m. altitude.

129173. ACER Sp. Araceae.

Maple.

No. 1268. From Mount Omei, October 1937, between 2,000 and 2,300 m. altitude.

129174. Acanthopanax sp. Araliaceae.

No. 1272. From Mount Omei, October 1937, at 600 m. altitude.

129175 to 129181. ACER spp. Aceraceae.

Maple.

129175. ACER Sp.

No. 1202. From Mount Omei, September 3, 1937, at 2,300 m. altitude.

129176. Acer sp.

No. 165. From Mount Omei, October 1937, at 2,300 m. altitude.

129177. ACER Sp.

No. 1266. From Mount Omei, October 1937, at 2,300 m. altitude.

129178. ACER Sp.

No. 1333. From Tien Chuan Hsien, November 1937, between 2,000 and 2,300 m. altitude.

129179. ACER Sp.

No. 1366. From Tien Chuan Hsien, November 1937, at 2,500 m. altitude.

129180. ACER Sp.

No. 1367. From Tien Chuan Hsien, November 1937, at 2,800 m. altitude. 129181. Acer sp.

No. 1369. From Tien Chuan Hsien, November 1937, at 2,700 m. altitude. 129182. Actinidia sp. Dilleniaceae.

No. 1355. September 1937. From O-pie Hsien at 1,400 m. altitude.

129183. Albizzia Thorelli Pierre. Mimosaceae.

No. 1351. From O-pie Hsien, November 1937, at 1,200 m. altitude. A deciduous tree up to 35 feet high, with feathery, bipinnate leaves 5 to 7 inches long and clusters of many small flowers. Native to Cochin China.

129184. ALNUS Sp. Betulaceae.

No. 1334. From Tien Chuan Hsien, November 1937, at 3,200 m. altitude. 129185. Anemone sp. Ranunculaceae.

No. 1368. From Tien Chuan Hsien, November 1937, at 2,000 m. altitude. 129186. Antidesma sp. Euphorbiaceae.

No. 1274. From Mount Omei, October 1937, at 600 m. altitude.

129187. ASTILBE Sp. Saxifragaceae.

No. 1302. From Mount Omei, October 1937, at 3,200 m. altitude.

129188. BAUHINIA SAIGONENSIS Pierre. Caesalpiniaceae.

No. 1352. From O-pie Hsien, November 1937, at 1,200 m, altitude. A vine which climbs by means of tendrils terminating short lateral branches. The firm, roundish leaves, about 2 inches long, are divided to the center into 2 rounded lobes, and the pale-rose flowers, nearly 1 inch long, are in small terminal corymbs. Native to Cochin China.

129189. Bauhinia sp. Caesalpiniaceae.

No. 1354. From O-pie Hsien, October 1937, at 1,500 m. altitude.

129190. Bauhinia faberi Oliver. Caesalpiniaceae.

No. 1361. From O-pie Hsien, November 1937, at 1,000 m. altitude. A low shrubby climber with slender blackish branches and spiral tendrils. The membranous leaves, 2 to 3 inches long, are divided to the center into 2 triangular lobes, and the flowers are in racemes 4 inches long. Native to Indochina.

129191. Berberis sp. Berberidaceae.

No. 1341. From Tien Chuan Hsien, November 1937, at between 2,300 and 2,700 m. altitude.

129192. Berberis sp. Berberidaceae.

No. 1380. From Tien Chuan Hsien, November 1937, at 2,000 m. altitude. 129193. Berchemia sp. Rhamnaceae.

No. 1384. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude. 129194 to 129196. Betula spp. Betulaceae. Birch.

129194. BETULA Sp.

No. 1378. From Tien Chuan Hsien, November 1937, at 3,200 m. altitude. 129195. Betula sp.

No. 1300. From Mount Omei, October 1937, at 3,200 m. altitude. 129196. Betula sp.

No. 1386. From Tien Chuan Hsien, November 1937, at 3,200 m. altitude. 129197. Buddleia sp. Loganiaceae.

No. 1314. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude.

129198. Camellia sp. Theaceae.

No. 1099. From Mount Omei, October 1937, at 1,760 m. altitude.

129199. Cassia mimosoides L. Caesalpiniaceae.

No. 1381. From Tien Chuan Hsien, November 1937, at 500 m. altitude. An herb about 2 feet high with yellow flowers. Native to tropical Asia.

For previous introduction see 114725.

129200. CATALPA sp. Bignoniaceae.

No. 1385. [Received without notes.]

129201. Celastrus sp. Celastraceae.

No. 1319. From Tien Chuan Hsien, November 1937, at between 2,300 and 2,700 m. altitude.

129202 to 129204. CLEMATIS spp. Ranunculaceae.

129202. CLEMATIS Sp.

No. 1291. From Mount Omei, October 1937, at 500 m. altitude.

129203. CLEMATIS Sp.

No. 1299. From Mount Omei, October 1937, at 3,200 m. altitude.

129204. CLEMATIS Sp.

No. 1379. From Tien Chuan Hsien, November 1937, at 2,000 m. altitude. 129205. CLERODENDRUM sp. Verbenaceae.

No. 1263. From Mount Omei, October 1937, at 2,000 m. altitude.

129206 to 129208. Cornus spp. Cornaceae.

129206. CORNUS SP.

No. 1077. From Mount Omei, August 21, 1937, between 600 and 1,100 m. altitude.

129207. Cornus sp.

No. 1270. From Mount Omei, October 1937, betwen 2,000 and 2,300 m. altitude.

129208. Cornus sp.

No. 1322. From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude.

129209. Corylopsis sp. Hamamelidaceae.

No. 1304. From Mount Omei, October 1937, at 900 m. altitude.

129210. Corylus sp. Betulaceae.

No. 1251. From Mount Omei, September 3, 1937, at 2,500 m. altitude.

129211 to 129216. Cotoneaster spp. Malaceae.

Collected in Tien Chuan Hsien in November at different altitudes.

129211. No. 1310, at 2,300 m.

129212. No. 1312, at 2,300 m.

129213. No. 1327, at 2,900 m.

129214. No. 1340, at between 2,300 and 2,700 m.

129215. No. 1342, at 2,300 m.

129216. No. 1395, at 2,600 m.

129217. Cudrania sp. Moraceae.

No. 1399. From Mount Omei, November 1937, at 1,800 m. altitude.

129218 and 129219. DAPHNIPHYLLUM spp. Euphorbiaceae.

From Mount Omei, November 1937, at 600 m. altitude.

129218. DAPHNIPHYLLUM Sp.

No. 1365.

129219. DAPHNIPHYLLUM Sp.

No. 1364.

129220. Deutzia sp. Hydrangeaceae.

No. 1326. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude.

129221. ENKIANTHUS sp. Ericaceae.

No. 1375. From Tien Chuan Hsien, November 1937, at 3,200 m. altitude.

129222. EUPTELEA PLEIOSPERMA Hook, f. and Thoms. Trochodendraceae.

No. 1267. From Mount Omei, October 1937, at between 2,000 and 2,300 m. altitude. A tree 30 to 40 feet high, native to Tibet and western China, with ovate-crenate leaves which are glaucescent beneath and have very long acuminate tips. The slender-stalked red flowers, in axillary fascicles, appear before the leaves.

For previous introduction see 103425.

129223. Eurya Chinensis R. Br. Theaceae.

No. 1275. From Mount Omei, October 1937, at 600 m. An evergreen shrub up to 12 feet high, with obovate leaves over 1 inch long and inconspicuous greenish flowers in small axillary clusters, followed by berrylike fruits.

For previous introduction see 111355.

129224. Euscaphis Japonica (Thunb.) Dipp. Staphyleaceae.

No. 1370. From Mount Omei, October 1937, at 1,300 m. altitude. A shrub or small tree with compound leaves composed of 7 to 11 ovate-lanceolate serrate leaflets 1 to 3 inches long. The small white flowers, in upright panicles, are followed by brown-red pods which open, exposing the steel-blue fruits.

For previous introduction see 116870.

129225. Fraxinus sp. Oleaceae.

Ash.

No. 1294. From Mount Omei, October 1937, at 500 m. altitude.

129226. GAULTHERIA Sp. Ericaceae.

No. 1335. From Tien Chuan Hsien, November 1937, at between 2,300 and 2,700 m. altitude.

129227. GAULTHERIA YUNNANENSIS (Franch.) Rehd.

No. 1387. From Mount Omei, October 1937, at 1,600 m. altitude.

129228. GENTIANA Sp. Gentianaceae.

No. 1281. From Mount Omei, October 1937, at 600 m. altitude.

129229. Anaphalis Pterocaulon (Franch, and Sav.) Maxim. Asteraceae.

No. 1377. From Mount Omei, October 1937, at 3,200 m. altitude. A woolly herbaceous perennial with erect, simple stems over 1 foot high, oblong leaves, and heads of whitish flowers in corymbs. Native to eastern Asia.

129230. Hydrangea sp. Hydrangeaceae.

No. 1315. From Tien Chuan Hsien, November 1937, at 2,500 m. altitude.

129231 to 129233. Hypericum spp. Hypericaceae.

129231. HYPERICUM Sp.

No. 1296. From Mount Omei, October 1937, at 1,700 m, altitude.

129232. HYPERICUM Sp.

No. 1317. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude.

129233. HYPERICUM Sp.

No. 1403. From Kuan Hsien, October 1937, at 1,000 m. altitude. 129234 to 129240. ILEX spp. Aquifoliaceae.

129234. ILEX Sp.

No. 1278. From Mount Omei, October 1937, at 600 m. altitude. 129235. ILEX Sp.

No. 1285. From Mount Omei, October 1937, at 600 m. altitude.

129236. ILEX sp.

No. 1288. From Mount Omei, October 1937, betwee 900 and 1,000 m. altitude.

129237. ILEX Sp.

No. 1313. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude. 129238. ILEX Sp.

No. 1349. From O-pie Hsien, November 1937, at 1,700 m. altitude. 129239. ILEX SD.

No. 1373. From Mount Omei, October 1937, at 1,800 m. altitude. 129240. ILEX sp.

No. 1396. From Tien Chuan Hsien, November 1937, at 500 m. altitude. 129241. Juglans sp. Juglandaceae. Walnu

No. 1408. From Tien Chuan Hsien, November 1937, at 2,800 m. altitude. 129242. Juniperus sp. Pinaceae.

No. 1339. From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude.

129243. LILIUM sp. Liliaceae.

Lily.

Holly.

No. 1389. From Tien Chuan Hsien, November 1937, at 2,000 m. altitude.

129244. LILIUM GIGANTEUM Wall. Liliaceae.

Giant lily.

No. 1371. From Tien Chuan Hsien, November 1937, at 2,900 m. altitude. For previous introduction see 11061.

129245. Lonicera sp. Caprifoliaceae.

No. 1229. From Mount Omei, September 3, 1937, at 2,200 m. altitude. 129246. MAESA sp. Myrsinaceae.

No. 1287. From Mount Omei, October 1937, at 600 m. altitude. 129247 to 129252. MALUS SDD. Malaceae.

129247. MALUS Sp.

No. 1213. From Mount Omei, September 3, 1937, at 2,200 m. altitude.

Nos. 129248 to 129252. Collected in Tien Chuan Hsien in November 1937, at different altitudes.

129248. MALUS Sp.

No. 1330. Between 2,300 and 2,700 m.

129249. MALUS Sp.

No. 1337. Between 2,300 and 2,700 m.

129250. MALUS Sp.

No. 1372. At 3,200 m.

129251. MALUS Sp.

No. 1383. At 2,600 m.

129252. MALUS Sp.

No. 1394. At 2,300 m.

129253. Meconopsis sp. Papaveraceae.

No. 1252. From Mount Omei, September 3, 1937, at 2,300 m. altitude.

129254. Melastoma normale D. Don. Melastomaceae.

No. 1025. From Mount Omei, August 17, 1937, at 650 m. altitude. An erect evergreen shrub up to 6 m. high, with hairy branches and pubescent, lanceolate leaves 8 to 12 cm. long. The rose-purple flowers, about 5 cm. across, are in terminal clusters of 3 to 10, sometimes a few in the upper leaf axils, and are followed by baccate fruits. Originally described from the Himalayan region, where it grows up to 3,000 m. altitude. In western China it is a common shrub on red sandstone hills up to 750 m. altitude.

129255. Melastoma sp. Melastomaceae.

No. 1011. From Mount Omei, August 17, 1937, at 650 m. altitude.

129256. Meliosma sp. Sabiaceae.

No. 1293. From Mount Omei, October 1937, at 550 m. altitude.

129257. Meliosma sp. Sabiaceae.

No. 1199. From Mount Omei, September 3, 1937, at 2,100 m. altitude.

129258. Morus sp. Moraceae.

No. 1139. From Mount Omei, August 27, 1937, at 1,760 m. altitude.

129259. Oxalis sp. Oxalidaceae.

No. 1298.

129260, Pieris sp. Ericaceae.

No. 1336. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude.

129261. Phellodendron sp. Rutaceae.

No. 1400. From Kuan Hsien, September 1937, at 1,000 m. altitude.

129262. PICEA Sp. Pinaceae.

Spruce.

No. 1407. From Tien Chuan Hsien, November 1937, at 3,200 m. altitude.

129263. Pistacia sp. Anacardiaceae.

No. 1374. From Mount Omei, October 1937, at 1,600 m. altitude.

129264. Pittosporum sp. Pittosporaceae.

No. 1047. From Mount Omei, August 20, 1937, at 650 m. altitude.

129265. Primula sp. Primulaceae.

No. 1388. From Mount Omei, October 1937, at 3,100 m. altitude.

129266. Clethra monostachya Rehd. and Wils. Clethraceae.

No. 1329. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude. A shrub or small tree up to 18 feet or more high, with elliptic-oblong to oblong-lanceolate, dark-green leaves about 5 inches long and small white flowers in lax terminal racemes 7 or 8 inches long. Native to central China.

129267. Pterocarya sp. Juglandaceae.

No. 1175. From Tien Chuan Hsien, November 1937, at 2,300 m. altitude.

129268. Pyracantha sp. Malaceae.

No. 1276. From Mount Omei, October 1937, at 600 m. altitude.

129269 to 129275. Rhododendron spp. Ericaceae.

From Tien Chuan Hsien and O-pie Hsien, November 1937, between 2.300 and 2,700 m. altitude.

129269, No. 1309.

129273. No. 1356.

129270. No. 1321.

129274. No. 1393.

129271. No. 1323.

129275. No. 1406.

129272. No. 1344.

129276 and 129277. RIBES spp. Grossulariaceae.

From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude.

129276. No. 1311.

129277. No. 1320.

129278 to 129280. Rosa spp. Rosaceae.

129278. Rosa sp.

No. 1002. From Mount Omei, October 1937, at 500 m. altitude.

129279. Rosa sp.

No. 1219. From Mount Omei, September 3, 1937, at 2,200 m. altitude.

129280. Rosa omeiensis Rolfe.

No. 1397. From Mount Omei, October 1937, at 3,200 m. altitude. A shrub 12 to 15 feet high, native to southwestern China, between 3,000 and 4,500 m. altitude. The brush branches from the base, and the young branches, broadly winged, are carmine. The flowers are white.

For previous introduction see 94044.

129281. Rubus sp. Rosaceae.

No. 1390. From Tien Chuan Hsien, November 1937, at 1,500 m. altitude.

128282. Schima sp. Theaceae.

No. 1332. From Tien Chuan Hsien, November 1937, at 2,500 m. altitude.

129283. Sloanea sp. Elaeocarpaceae.

No. 1362. From O-pie Hsien, November 1937.

129284 to 129286. Sorbus spp. Malaceae.

From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude. 129284. Sorbus sp.

No. 1331.

129285. Sorbus sp.

No. 1325.

129286. Sorbus sp.

No. 1343.

129287. SPIRAEA Sp. Rosaceae.

No. 1303. From Mount Omei, October 1937, at 3,200 m. altitude.

129288. STACHYURUS Sp. Stachyuraceae.

No. 1301. From Mount Omei, October 1937, at 1,800 m. altitude.

129289. Styrax sp. Styracaceae.

No. 1269. From Mount Omei, October 1937, at 2,300 m. altitude.

129290. TILIA sp. Tiliaceae.

No. 1392. From Tien Chuan Hsien, November 1937, at 3,000 m. altitude.

129291. VACCINIUM sp. Vacciniaceae.

No. 1318. From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude.

129292 to 129296. VIBURNUM spp. Caprifoliaceae.

From Mount Omei and Tien Chuan Hsien, between 900 and 2,300 m. altitude, from August to October 1937.

129292. No. 1282.

129295. No. 1113.

129293. No. 1345.

129296. No. 171.

129294, No. 1290,

129297. Zanthoxylum sp. Rutaceae.

No. 1308. From Tien Chuan Hsien, November 1937, between 2,300 and 2,700 m. altitude.

# 129298 and 129299. Gossypium spp. Malvaceae.

Cotton.

From India. Seeds presented by S. S. Pande, Economic Botanist for Cotton, Nagpur, Central Provinces. Received April 28, 1938.

129298. Gossypium sp.

Introduced under the specific name of "indicum," a name of uncertain position.

129299. Gossypium obtusifolium Roxb.

# 129300. Gossypium. Malvaceae.

Cotton.

From Cuba. Seeds presented by the Estación Experimental Agronómica, Santiago de las Vegas. Received May 25, 1938.

Marcusci.

# 129301 to 129304.

From England. Plants presented by Sir Arthur W. Hill, Director, Royal Botanic Gardens, Kew, Surrey. Received May 31, 1938.

129301. Arundinaria angustifolia (Mitf.) H. de L. Poaceae. Bamboo.

A Japanese running bamboo with slender, erect stems 2 to 6 feet high and smooth brilliant-green narrow leaves  $1\frac{1}{2}$  to 6 inches long.

129302. SINARUNDINARIA NITIDA (Mitf.) Nakai. Poaceae. Bamboo.

A clump-forming, hardy bamboo with slender arching culms up to 9 feet or more long and leaves with purple sheaths and narrow blades up to 3½ inches long. Native to northwestern China.

For previous introduction see 110336.

129303. Arundinaria racemosa Munro. Poaceae.

Bambeo.

An erect clump bamboo up to 15 feet high, with linear-lanceolate leaves 4 to 7 inches long. Native to the Himalayan region at altitudes of 6,000 to 12,000 feet.

For previous introduction see 114414.

129304. Sinobambusa tootsik (Makino) Makino. Poaceae. Bamboo.

129305. Medicago lupulina L. Fabaceae.

Black medic.

From Denmark. Seeds presented by the Royal Agricultural Society of Denmark, Copenhagen. Received June 1, 1938.

Roskilde. An early, high-yielding strain.

## 129306 to 129308.

From India. Seeds purchased from the Divisional Forest Officer, Darjeeling, Bengal. Received May 27, 1938.

129306. Abies spectabilis Spach. Pinaceae.

Himalayan fir.

A tree, sometimes 150 feet high, native to the Himalayas at altitudes between 7,000 and 13,000 feet. The dark-green leaves are arranged in 2 opposite series so as to leave a V-shaped opening along the top; the individual leaves are 1 to 2 inches long. The cones are about 5 inches long, are violet purple at first, later becoming brown.

For previous introduction see 122049.

129307. Prunus napaulensis (Seringe) Steud. Amygdalaceae.

A small tree, native to the temperate Himalayas at altitudes up to 10,000 feet. The lanceolate to oblong-lanceolate, crenate-serrate leaves, 4 to 6 inches long, are glaucous beneath, and the white flowers, in dense racemes, are followed by globose-ovoid blue fruits nearly 1 inch long.

For previous introduction see 102773.

129308. TSUGA DUMOSA (D. Don) Eichler.

Hemlock.

A handsome forest tree, sometimes 120 feet high, with gracefully drooping branches, native to northwestern India between 8,000 and 10,000 feet altitude. For previous introduction see 122048.

## 129309 and 129310.

From Malta. Seeds presented by the Director, Royal University Botanic Gardens, Floriana. Received June 1, 1938.

129309. Callistephus chinensis (L.) Nees. Asteraceae. China aster. For previous introduction and description see 129017.

129310. Cannabis sativa L. Moraceae.

Hemp.

#### 129311 to 129315.

From Japan. Seeds presented by S. Sakurai, Department of Forestry, Tokyo Imperial University, Tokyo. Received May 24, 1938.

129311 to 129313. Alnus spp. Betulaceae.

Alder.

#### 129311. ALNUS PENDULA Mats.

A graceful shrub or small tree up to 25 feet high, native to Japan. The sharply serrate, dark-green leaves are oblong with long points, and the small conelike fruits are on slender pedicels in pendulous racemes.

For previous introduction see 75699.

129312. Alnus firma Sieb. and Zucc.

A shrub or small tree up to 30 feet high, with long slender branches and handsome foliage remaining green until late in the fall. Native to Japan.

For previous introduction see 10529,

129313. Alnus hirsuta Turcz.

Manchurian alder.

A handsome vigorous medium-sized tree, up to 65 feet high, native to Japan and Manchuria. The rounded-elliptic, slightly lobed, dull dark-green leaves, which are reddish-brown hairy beneath, are  $2\frac{1}{2}$  to 8 inches long.

For previous introduction see 127044.

129314. Lespedeza bicolor Japonica Nakai. Fabaceae.

A shrub 5 to 8 feet high, with slender, graceful branches and oval to roundedovate leaflets. The small white flowers are in racemes 1 to 4 inches long. Native to Japan.

For previous introduction see 83799.

129315. ZOYSIA JAPONICA Steud. (Osterdamia japonica Hitchc.). Poaceae.

Japanese lawngrass.

For previous introduction see 106840.

# 129316 to 129319. LINUM USITATISSIMUM L. Linaceae.

Flax.

From Argentina. Seeds presented by Dr. José Vallega, Instituto Fitotécnico, Llavollol, Province of Buenos Aires. Received June 3, 1938.

129316. Klein 10e, I. F. 595.

129317. Seleccion Pergamino 6010, I. F. 475; flowers white.

129318. Linita 176, I. F. 586.

129319. Klein 10d, I. F. 428.

# 129320 to 129322. ZEA MAYS L. Poaceae.

Corn.

From Chile. Seeds presented by G. Montero, Temuco, at the request of H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received June 8, 1938.

129320. From San Ferria, Chile.

129321. From Concepción, Chile.

129322. From Temuco, Chile.

## 129323 to 129366.

From Central America and South America. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received May 26, 1938.

129323. Aristolochia elegans Masters. Aristolochiaceae.

Calicoflower.

No. 576. From near Guayaquil, Ecuador, April 10, 1938. A perennial vine with long-stalked, broadly ovate leaves 2 to 3 inches across and solitary flowers with no unpleasant odor, borne on the pendulous young wood. The flowers have a yellow-green tube 2 to 3 inches long, and the cordate-circular limb, 3 inches across, is purple and white blotched, white outside with a yellow eye. It is native to Brazil.

For previous introduction see 122035.

129324 to 129326. Capsicum frutescens L. Solanaceae. Common redpepper.

129324. No. 577. Pepino. From south of Guayaquil, Ecuador, April 10, 1938.

129325. No. 588. From north of Santa Rosa, Province of El Oro, Ecuador, April 12, 1938, in an abandoned field. Fruit small, elongated, orange red.

129326. No. 691. From Buenos Aires, east of Ibaque, Colombia, February 2, 1938. Fruit 1½ inches long, purplish black, and very hot.

129327. CORDIA LUTEA Lam. Boraginaceae.

No. 565. From Muey, Ecuador, April 8, 1938. An ornamental shrub with clusters of yellow, trumpet-shaped flowers and small fruits which are white at maturity. The fruits are said to be eaten by children. Native to Peru.

129328 and 129329. Cucumis anguria L. Cucurbitaceae West Indian gherkin.

A small fruit resembling a round spiny cucumber, used boiled as a vegetable.

For previous introduction see 117557.

129328. No. 768. From Pasaje, Ecuador.

129329. No. 768-A. From Santa Rosa, Ecuador.

129330. Datura stramonium L. Solanaceae.

No. 472. From Arica, Chile, March 24, 1938. An ornamental plant over 6 feet high, with large, double, yellow flowers.

129331. Datura metel fastuosa (L.) Safford. Solanaceae.

No. 473. From Arica, Chile, March 24, 1938. An ornamental herbaceous annual, common throughout India and the East Indies, which varies in height from 2 to 3 feet. It has entire or deeply-toothed leaves about 4 inches long and flowers 7 or more inches in length, varying in color from white to lavender or rose.

For previous introduction see 122273.

# 129323 to 129366—Continued

129332. GALACTIA Sp. Fabaceae.

No. 603. From east of Pasaje, Province of El Oro, Ecuador, April 12, 1938. 12933. IPOMOEA Sp. Convolvulaceae.

No. 368. From the Cordoba Hills, Sierra Grande, Argentina, February 19, 1938. A vine with large, pink, trumpet-shaped flowers.

129334 and 129335. Juglans Australis Griseb. Juglandaceae. Walnut.

A large tree with compound leaves made up of 13 to 21 large, ovate, sharp-pointed, serrate, viscid-pubescent leaflets and small grooved ovoid nuts about 1 inch in diameter. It is native to Argentina.

For previous introduction see 128210.

129334. No. 665. From the market at Cayambe, Ecuador, April 24, 1938.

129335. No. 630. From the experiment station at Cuenca, Ecuador, April 19, 1938.

129336. Lapageria rosea Ruiz and Pav. Liliaceae. Red Chile-bells.

No. 394. From El Vergel, Angol, Chile, March 7, 1938. Copihue, the national flower of Chile, is an evergreen climber of slow growth, with slender wiry stems, alternate, narrowly ovate leaves, and bright crimson, pendent, tubular flowers about 3 inches long in the axils of the upper leaves or in terminal racemose clusters.

For previous introduction see 98754.

129337. LUFFA CYLINDRICA (L.) Roemer. Cucurbitaceae. Suakwa towelgourd.

No. 748. From near Tulua, Colombia, May 5, 1938. Fruit long, green, striped, with a slightly crooked neck.

129338. Lycopersicon sp. Solanaceae.

No. 369. From the Hacienda Chanblay, Argentina, at 3,500 m. altitude.

129339. Lycopersicon sp. Solanaceae.

No. 516. [Received without notes.]

129340. Momordica Zeylanica Mill. Cucurbitaceae.

No. 566. Achacho China. From just above the beach at Salinas, Ecuador, April 8, 1938. A herbaceous vine closely related to the balsam-pear (Momordica charantia), but generally smaller, with narrower leaf lobes and shorter fruits armed with rows of sharp spines. Native to the Tropics.

For previous introduction see 43007.

129341. Physalis sp. Solanaceae.

No. 592. From Pasaje, Province of El Oro, Ecuador, April 3, 1938. A plant common in this region.

129342 to 129346. Rubus spp. Rosaceae.

129342. Rubus sp.

No. 684. Moro-Castilla. From Bogotá, Colombia, May 1, 1938. Fruit medium-sized, black.

129343. Rubus sp.

No. 685. Mora. From Bogotá, Colombia, May 1, 1938. Fruit small, black. 129344. Rubus sp.

No. 686. Moron. From Bogotá, Colombia, May 1, 1938. Fruit large, black.

129345. Rubus sp.

No. 713. Mora Castilla. From Armenia, Colombia, May 4, 1938. Fruit large, reddish black; grows wild; the fruit is picked and marketed by the natives.

# 129323 to 129366-Continued

129346. Rubus sp.

No. 714. Mora. Along the roadside near Armenia, Colombia, May 4, 1938. Plant small, thorny, shrubby; fruits very small.

129347 to 129363. Solanum spp. Solanaceae.

129347 and 129348. Solanum mammosum L.

Nightshade.

A spiny shrub with indigo flowers and yellow fruits, 2 to  $2\frac{1}{2}$  inches wide and 2 to 3 inches long, that have the odor of tomato.

129347. No. 670. Soponia. Along a mountain side between Patio and El Bordo, Colombia, at 6,500 feet altitude.

129348. Nos. 590 and 590-A. Between Machala and Pasaje, Ecuador, April 13, 1938.

129349 and 129350. Solanum Quitoense Lam.

Naraniilla.

An ornamental shrub about 3 feet high, native to Peru; the oblong-ovate, deep-green leaves are soft hairy, and the large white flowers are in short axillary clusters. The aromatic, orange-colored, juicy fruits are nearly spherical and about 2 inches in diameter; they are used in the preparation of refreshing drinks.

For previous introduction see 115289.

129349. No. 568. From the market at Guayaquil, Ecuador, May 9, 1938.

129350. No. 651. From Rio Verde, Ecuador, April 2, 1938.

129351. SOLANUM NIGRUM L.

Black nightshade.

No. 596. Yerba Moro. From Pasaje, Ecuador, April 13, 1938. Fruit black.

129352. SOLANUM Sp.

No. 551. Redunto Ojo. From gardens about Huaraz, Peru, April 4, 1938. 129353. Solanum nigrum L. Black nightshade.

No. 567. From the garden of the hotel at Salinas, Ecuador, April 8, 1938. A dark-green plant with short stem and clusters of red berries.

129354. Solanum sp.

No. 567-A. From the hotel garden at Salinas, Ecuador, April 8, 1938. A plant with dark-green leaves and clusters of red berries.

129355. Solanum sp.

No. 583. From west of Guayaquil, Ecuador, April 10, 1938. Fruit blackish green, about the size of a cherry.

129356. SOLANUM Sp.

No. 631. From Cuenca, Ecuador, April 19, 1938.

129357. Solanum sp.

No. 660. From between Cayambe and Otavalo, Ecuador, April 24, 1938. A large-leaved plant having flowers and fruits in umbellike clusters at the tips of twigs; fruit yellowish green at maturity.

129358. SOLANUM SD.

No. 674-A. Quinda. From between Pasto and Bursaco, Colombia, at 4,500 feet altitude, April 27, 1938.

129359. SOLANUM NIGRUM L.

Black nightshade.

No. 687. [Received without notes.]

129360. SOLANUM Sp.

No. 690. [Received without notes.]

129361. SOLANUM Sp.

No. 692. [Received without notes.]

# 129323 to 129366—Continued

129362. Solanum aculeatissimum Jacq.

No. 757. From Costa Rica, at 5,000 feet altitude, May 10, 1938. 1 to 1¼ inches in diameter, brownish red or burnt orange. A spiny undershrub 1 to 2 feet high, widely distributed in the Tropics. The few-flowered axillary cymes of snow-white flowers, 1 inch across, are followed by globose fruits often 2 inches in diameter.

For previous introduction see 116152.

129363. SOLANUM Sp.

No. 769. From Machale, Ecuador. A vine used as an ornamental.

129364. Tephrosia toxicaria (Swartz) Pers. Fabaceae.

No. 669. Between Mercaderes and Rio Patia, Colombia, April 27, 1938.

129365. Thunbergia fragrans Roxb. Acanthaceae.

No. 595. From near Pasaje, Province of El Oro, Ecuador, April 12, 1938. A slender, somewhat ornamental climbing vine with lanceolate to triangular, cordate leaves, rough on both sides, and white trumpet-shaped flowers with slender tube and limb  $1\frac{1}{2}$  inches across.

For previous introduction see 76749.

129366. (Undetermined.)

No. 672. From Pusillo, Colombia, April 28, 1938. Fruit round and very hard.

# 129367. Tephrosia vogelii Hook. f. Fabaceae.

From Nyasaland, Africa. Seeds presented through the Royal Botanic Gardens, Kew, England. Received June 10, 1938.

For previous introduction see 128996.

# 129368. Amaryllis reginae L. Amaryllidaceae.

From Ecuador. Bulbs collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received April 21, 1938.

No. 652. From Rio Verde, April 21, 1938. A tropical American hippeastrum with lorate leaves 2 feet long and 2 inches wide, developed after the flowers. The 2 to 4 flowers, with short tubes and bright red limbs, 4 to 5 inches long, have a whitish star in the throat.

For previous introduction see 118933.

## 129369 to 129378.

From Africa. Seeds presented by the Director, National Botanic Gardens of South Africa, Kirstenbosch, Newlands, Cape Province. Received June 9, 1938.

A collection of South African succulents.

129369 to 129375. Gasteria spp. Liliaceae.

129369. Gasteria croucheri (Hook. f.) Baker.

A gasteria with a short stem 1 to 2 inches long and a rosette of 12 to 18 lanceolate leaves 15 inches long, 3 inches broad, and 1 inch thick at the base, narrowed to a sharp point and marked with small greenish white spots.

For previous introduction see 78205.

129370. Gasteria elongata Baker.

A gasteria with a short leafy stem of 6 to 8 thin, rather glossy, lorate leaves 6 to 10 inches long, about 1 inch broad, and many immersed, whitish dots.

# 129369 to 129378-Continued

129371. GASTERIA NIGRICANS (Haw.) Duval.

A gasteria with a leafy stem 4 or 5 inches long with 10 to 20 crowded, lorate, rigidly leathery glossy dark-green leaves 4 to 8 inches long and ½ to 2 inches broad, having many scattered immersed whitish spots.

129372. Gasteria nigricans (Haw.) Duval.

Introduced with the varietal name "rufescens," for which a place of publication has not been found.

129373. Gasteria obtusifolia (Salm-Dyck) Haw.

A low fleshy plant with a leafy stem 2 inches high, densely crowded, tongueshaped leaves 4 to 6 inches long, and rosy flowers in a raceme over a foot long.

For previous introduction see 79475.

129374. GASTERIA PARVIFOLIA Baker.

A gasteria with 10 to 12 lanceolate-deltoid leaves 2 to 3 inches long, in a dense rosette. The leaves, dull-green, changing to purple, have numerous small, whitish, immersed spots forming irregular bands on the face.

129375. GASTERIA PLANIFOLIA Baker.

A gasteria with a short stem and about 12 narrow, ligulate leaves in 2 rows. These are dull green with a slight purplish tinge, mottled with irregular blotches of greenish white. The many lax, drooping flowers on a raceme about 2 feet long are less than 1 inch long and greenish, changing below into pale red.

129376. Hoodia gordoni (Mass.) Sweet. Asclepiadaceae.

A leafless perennial with many spreading and erect, somewhat branching, thick, cylindric, angled and spiny stems up to  $1\frac{1}{2}$  feet long. The large flowers, borne 1 to 3 together, near the summit of the stems, are buff with purplish margins.

129377. Stapelia flavirostris N. E. Brown. Asclepiadaceae.

A dwarf perennial.

For previous introduction see 78229.

129378. Stapelia Rufa Mass. Asclepiadaceae.

A stapelia with erect velvety stems 4 to 9 inches high and clusters of 3 to 5 flowers borne at the base or near the middle of the stems. The dark or chocolate-red corolla,  $1\frac{1}{4}$  to 2 inches across, sometimes has dull olive-green lines on the disk and lobes.

#### 129379 to 129381.

From Chile. Seeds presented by Dr. D. S. Bullock, El Vergel Escuela Agrícola, Angol. Received June 13, 1938.

129379. NICOTIANA Sp. Solanaceae.

Collected along the banks of the Rio Malleco at El Vergel, Angol, March 23, 1938.

129380. Solanum sp. Solanaceae.

Natrillo. From Baños, Rio Blanco, Curacautin, March 27, 1938. This may have possibilities as an ornamental shrub.

129381. Solanum sp. Solanaceae.

A wild potato from the mountains southeast of Curacautin, March 30, 1938.

# 129382 to 129533.

From Poland. Seeds presented by Dr. Josef Przyborowski, Department of Plant Breeding, University of Krakow. Received June 18, 1938.

129382 to 129423. Avena sativa L. Poaceae.

Oats.

129382. Aldershafer (Biały Orzel). Originally from Sweden.

129383. Antoniński Biały.

129384. Antoniński Zółty.

129385. Bensings Findling. Originally from Germany.

129386. Beseler II. Originally from Germany.

129387. Biały Mazur.

129388, Biały Orzel. Originally from Sweden.

129389. Detenicky Schlanstedsky. Originally from Bohemia.

129390. Dippes Weisshafer. Originally from Germany.

129391. Dregeruw Zluty. Originally from Bohemia.

129392. Düppawski.

129393. Eckenderfer Früh "Borriess." Originally from Germany.

129394. Fichtelgebirgshafer. Originally from Germany.

129395. Fischers Wirchenblätter III. Originally from Germany.

129396. Goldkorn. Originally from Germany.

129397. Grzywacz Wolyński.

129398. Kirsches Gelbhafer. Originally from Germany.

129399. Kolbens Vienauer. Originally from Germany.

129400. Koscielecki.

129401. Krafft's Gelbhafer. Originally from Germany.

129402. Lembkes Baldur. Originally from Germany.

129403. Lischower Frühhafer. Originally from Germany.

129404. Marczak.

129405. Niemierczanski.

129406. Peragis. Originally from Germany.

129407. Podkowa.

129408. Puławski.

129409. Rothenburger Schwarzhafer. Originally from Germany.

129410. Rychlik Oberek.

129411. Selekcni No. 2. Originally from Bohemia.

129412, Solacki,

129413. Sobieszyński.

129414. Streckenthiner W. H. Originally from Germany.

129415. Strubes Schlandstadter. Originally from Germany.

129416, Tatrzanski,

129417. Teodozia.

129418. Udyez Biały.

129419. Udyez Zołty.

129420. Valecovsky. Originally from Bohemia.

129421, Zieleniak Zamlicki,

129422. Złoty Deszez. Originally from Sweden.

129423. Złoty Lechowa. Originally from Germany.

129424. Hordeum vulgare pallidum Seringe. Poaceae.

Six-rowed barley.

129425 to 129432. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129425. Abed Kenia. Originally from Denmark.

129426. Abed Opal. Originally from Denmark.

129427. Ackermanns Bavaria. Originally from Germany.

129428. Ackermanns Danubia. Originally from Germany.

129429. Ackermanns Isaria. Originally from Germany.

129430. Bethges u. Oelzes XIII. Originally from Germany.

129431. Bethges II. Originally from Germany.

129432. Borzymowicki.

129433. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley. Coura. Originally from Tunis.

129434 to 129436. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129434. de Colmar. Originally from France.

129435. de Moravie. Originally from France.

129436. Diosecky 496. Originally from Bohemia.

129437. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley. Dłużewski.

129438 to 129441. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129438. Dobrovicky Staročesky. Originally from Bohemia.

129439. Dornburger Heils Franken. Originally from Germany.

129440. Dubasquier. Originally from France.

129441. Elka.

129442. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley. Emilio Mariani. Originally from Belgium.

129443 to 129448. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129443. Hadostreng. Originally from Germany.

129444. Halliko. Originally from Finland.

129445. Hanna Hildebranda.

129446. Hanna Kargyn. Originally from Austria.

129447. Hanna Skrzeszowicki.

129448. Hanna z Goli.

129449 and 129450. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley.

129449. Heines Vierzeilige. Originally from Germany.

129450. Hohenifinower. Originally from Germany.

129451 to 129458. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129451. Kazimierski.

129452. Kneifelgerste. Originally from Austria.

129453. Kneifluv P 13. Originally from Bohemia.

129454. Kujawski.

rley

129455, Kutnowski 08.

129456. Kutnowski 18.

129457. Kutnowski 19.

129458. Kutnowski 333.

129459. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley. Lapin. Originally from Finland.

129460. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley.

Landsorte Aus Tirol (Rotholz). Originally from Austria.

129461. Hordeum distiction nudum L. Poaceae. Two-rowed barley.

Laschkego Tybetański.

129462. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley. Louhi. Originally from Finland.

129463 to 129465. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley.

129463. 3732 z Mandzurji. Originally from U.S.S.R.

129464. 10342 z Mandzurji. Originally from U.S.S.R.

129465. 10343 z Mandzurji. Originally from U. S. S. R.

129466. HORDEUM VULGARE NIGRUM (Willd.) Beaven. Poaceae.

Six-rowed barley.

Six-rowed barley.

10345 z Mandzurji. Originally from U. S. S. R.

129467 and 129468. Hordeum vulgare pallidum Seringe. Six-rowed barley. 129467. 10371 z Mandzurji. Originally from U. S. S. R. 129468. Marchijaki.

129469. Hordeum vulgare coeleste L. Poaceae. Six-rowed barley.

Mieiscowy z Podhala.

129470 and 129471. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129470. Mahndorfer Victoria. Originally from Germany.

129471. Nolc's Imperial. Originally from Germany.

129472 and 129473. Hordeum distiction nudum L. Poaceae.

Two-rowed barley.

129472, 33,

129473. 63. Miejscowy z Podhala.

129474 to 129476. Hordeum vulgare coeleste L. Poaceae. Six-rowed barley. 129474. 150. Miejscowy z Podhala.

129475. 151. Miejscowy z Podhala.

129476. 154. Miejscowy z Podhala.

129477. HORDEUM DISTICHON NUDUM L. Poaceae. Two-rowed barley.

156. Miejscowy z Podkarpacia.

129478. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley.

Noles Moravia. Originally from Bohemia.

129479 to 129482. Hordeum vulgare pallidum Seringe. Poaceae.

129479. Norland. Originally from Germany.

129480. Nr. 4 A. Originally from Tunis.

129481. Olli. Originally from Finland.

129482. Oziery.

129483. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley.

Perbete 4. Originally from Bohemia.

129484. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley. Pertu. Originally from Finland.

129485. HORDEUM DISTICHON PALMELLA Harlan. Poaceae. Two-rowed barley.

Pisarecky R. 31. Originally from Bohemia.

129486. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley. Podhorecki.

129487 to 129490. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129487. Postoloprtsky 31. Originally from Bohemia.

129488. Przeworski.

129489, Puławski,

129490. Putza.

129491 and 129492. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley.

129491. Nr. 14. Originally from Tunis.

129492. A Six Rang de Chine. Originally from Belgium.

129493 to 129498. Hordeum distiction palmella Harlan. Poaceae.

Two-rowed barley.

129493. Webskys Silesia. Originally from Germany.

129494. Streng's Frankengerste. Originally from Germany.

129495. Sel. Hannacky 2. Originally from Bohemia.

129496. Sel. Hannacky II. Originally from Bohemia.

129497. St. Croix. Originally from France.

129498. Szelejewski.

129499. Hordeum vulgare pallidum Seringe. Poaceae. Six-rowed barley. Sobieszyński.

129500. HORDEUM DISTICHON PALMELLA Harlan. Poaceae. Two-rowed barley. Teresa.

129501. HORDEUM VULGARE PALLIDUM Seringe. Poaceae. Six-rowed barley. z Urkujska. Originally from the U. S. S. R.

129502. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley. Zidlochovicka Hanna × Kargyn II. Originally from Bohemia.

129503. Hordeum deficiens steudelli (Koern.) Harlan. Poaceae.

129504. Hordeum distiction palmella Harlan. Poaceae. Two-rowed barley.

Album.

129505. Hordeum deficiens steudelii (Koern.) Harlan. Poaceae.

129506. HORDEUM VULGARE AETHIOPS (Koern.) Harlan. Poaceae.

129507. Hordeum deficiens deficiens. (Steud.) Harlan. Poaceae.

129508. Hordeum deficiens tridax (Koern.) Harlan. Poaceae.

129509 to 129533. Triticum Aestivum L. Poaceae. Common wheat. 129509. Banatka 730.

129510. Blondynka.

129511. Bogatka.

ley.

ley.

129512. Egipcianka,

129513, Eka.

129514. Gruboklosa Zaleskiego.

129515, Halina.

129516. Hanka.

129517. Hatvani 5371.

129518. O. S. Jakowcki.

129519. Jasnocha.

129520. Lebeny X.

129521. Nadwiślanka.

129522, Ostka Krukowska,

129523. Ostka Skomoroska.

129524. Ozorai 195.

129525. Ozorai 1004.

129526. Ozorai 1012.

129527. Podolanka.

129528. Sandomierka.

129529. Superelekta.

129530. Szekacs 1399. Originally from Austria.

129531. Wegierska 2/II. Originally from Austria.

129532. Zaborzanka.

129533. Zoska.

# 129534. Phaseolus lunatus L. Fabaceae.

Lima bean.

From Puerto Rico. Seeds presented by Wallace K. Bailey, associate horticulturist, Puerto Rico Agricultural Experiment Station, Mayaguez. Received June 17, 1938.

The native or wild Puerto Rico lima bean, collected in the hills about 4 miles east of San Sebastian.

# 129535 to 129539. Capsicum frutescens L. Solanaceae.

Common redpepper.

From Hungary. Seeds presented by Edmund Mauthner, Budapest. Received June 23, 1938.

A collection of redpepper seed, grown in Bulgaria.

129535. No. 239. Dagger's Shell.

129536. No. 222. Kalinkov, green.

129537. No. 241. Sheep's Horn, green.

129538. No. 235. A tomato-shaped green variety.

129539, No. 223, White of Csaba.

# 129540 to 129542. Cucurbita spp. Cucurbitaceae.

From New Zealand. Seeds presented by H. R. Wright, Avondale, Auckland. Received June 21, 1938.

129540. Cucurbita maxima Duchesne.

Squash.

Triamble.

129541 and 129542. CUCURBITA PEPO L.

Pumpkin.

129541. Kumekume, a native marrow.

129542. Kumekume X Acorn.

# 129543 and 129544.

From Africa. Seeds presented by R. C. Marshall, Conservator of Forests, Accra, Gold Coast. Received June 17, 1938.

129543. Annona senegalensis Pers. Annonaceae.

A shrub or small tree, sometimes 20 feet high, native to both eastern and western tropical Africa. The oval, blue-green, leathery leaves are up to 5 inches long, and the orange-yellow, edible fruits, over 1 inch in diameter, contain an aromatic dark-red pulp which suggests that of the cherimoya of tropical America.

For previous introduction see 124979.

129544. MALACANTHA ALNIFOLIA (Baker) Pierre. Sapotaceae.

A tropical African shrub or tree with milky juice and leathery, broadly obovate, coarse-veined leaves about 7 inches long. The light-yellow, hard, durable wood is termite-proof and is used in western Africa for veranda posts and tool handles.

# 129545 and 129546. Gossypium spp. Malvaceae.

Cotton.

From China. Seeds presented by Dr. Yu Chio-Pao, Agricultural College, National Central University, Chungking. Received June 27, 1938.

129545. V2 (virescent yellow leaf).

129546. V1 (virescent yellow bud).

# **129547 to 129568.** Gossypium spp. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by J. B. Hutchinson, Cotton Research Station, Trinidad, through the Empire Cotton Growing Corporation. Received June 16, 1938.

129547. Gossypium anomalum Wawra and Peyr.

W. 1. A tropical African shrub up to 10 feet high, with rough branches, reddish flowers, and oval capsules about 1 inch long.

For previous introduction see 77172.

129548 and 129549. Gossypium arboreum L.

129548. A-7. Variety Cernuum.

129549. Humpi. Variety Typicum.

129550 to 129555. Gossypium Barbadense L.

Sea-island cotton.

Seed obtained originally from Piura, Peru.

129550. B. P. 4-2. No. 1. Pardo.

129551. B. P. 4-3. No. 2. Pardo.

129552. B. P. 4-4. No. 3. Pardo.

129553. B. P. 4-5. No. 4. Pardo.

129554. B. P. 4-6. No. 5. Semiaspero.

129555. B. P. 8-2.

129556. Gossypium klotzschianum Anderss.

A cotton related to Gossypium barbadense. Native to the Galápagos Islands.

129557 to 129566. Gossypium religiosum L.

A cotton related to Gossypium hirsutum.

129557. R. A. 3-1. Teclstal, British Honduras.

129558. R. A. 8-4. Gambia 10.

129559. R. A. 8-5. Gambia 11.

129560. R. A. 8-6. G. punctatum, French West Africa.

129561. R. A. 8-9. Faran Kada, Nigeria.

## 129547 to 129568—Continued

129562. R. A. 8-11. Bakatuka, Nigeria.

129563. R. A. 8-12. Eritrea.

129564. R. A. 8-13. Zanzibar.

129565. R. A. 8-14. Madagascar.

129566. R. A. 9-1. Port Essington, Australia.

129567. Gossypium Stocksii Masters.

A shrubby tropical Indian cotton, with small yellow flowers, native to the Sind District.

For previous introduction see 124662.

129568. Gossypium taitense Parl.

W. 9-4. A wild cotton, native to Polynesia.

# 129569 to 129571. MACADAMIA TERNIFOLIA F. Muell. Proteaceae. Oueensland nut.

From Australia. Seeds presented by W. R. Petrie, Nutland Plantations, Petrie, Queensland. Received June 23, 1938.

An evergreen tree up to 50 feet high, native to eastern Australia. It is cultivated for its edible nuts, which have sweet white flesh with the flavor of chestnuts, incased in a shell which is typically hard.

For previous introduction see 116751.

129569. Eggshell.

129570. G. R. K. (Large rough nuts.)

129571. Comet.

#### 129572 to 129586.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanic Garden, Alma-Ata, Kazakhstan. Received June 23, 1938.

129572 to 129575. AQUILEGIA spp. Ranunculaceae.

Columbine.

129

Fron

12

: 18

129572. AQUILEGIA CHRYSANTHA A. Gray.

Colden columbine.

No. 567. For previous introduction see 128520.

129573. AQUILEGIA GLANDULOSA Fisch.

Altai columbine.

No. 150. A Siberian columbine about  $1\frac{1}{2}$  feet high, with nodding lilacblue flowers up to 3 inches across; the sepals are twice the length of the white limb of the petals.

129574. AQUILEGIA KARELINI Baker.

No. 149. A perennial up to 2 feet high, with membranous, deeply lobed leaves and bright-blue or claret-purple flowers. Native to the Ala Tau Mountains, Turkistan.

For previous introduction see 107889.

129575. AQUILEGIA Sp.

No. 568.

129576. Canna indica L. Cannaceae.

No. 603. A low slender-stemmed tropical American canna 3 to 5 feet high, with green oblong leaves about 1 foot long and simple lax racemes of small flowers. The latter have pale-green narrow petals, a reddish yellow lip, and bright-red upper staminodia.

For previous introduction see 100718.

129577. IMPATIENS PARVIFLORA DC. Impatientaceae.

N. 324. For previous introduction and description see 128835.

# 129572 to 129586-Continued

129578 to 129586. Rosa spp. Rosaceae.

Rose.

129578. Rosa beggeriana Schrenk.

No. 84. A dense prickly shrub 4 to 8 feet high, with oval or elliptic, bluish or grayish-green leaflets. The flowers, in large or small corymbs, are white or rarely pink and about 1 inch across; the fruits are very dark red. Native to northern Iran [Persia] and Turkistan.

For previous introduction see 116205.

129579. Rosa gebleriana Schrenk.

No. 85. A rose with erect prickly stems, leaves of 9 to 11 ovate-oblong leaflets, and corymbs of white or pale yellow flowers. Allied to *Rosa laxa*. Native to the Altai region.

129580. Rosa Persica Michx.

Persian rose.

No. 86. A low straggling shrub 1 to 3 feet high, with simple oval to oblong glaucous leaves and small yellow flowers. It is native to dry clayey ridges and alkaline loess plains from northern Iran [Persia] to Siberia.

For previous introduction see 116203.

129581. Rosa spinosissima L.

Scotch rose.

A low shrub, usually 3 to 4 feet high, with spreading or recurving branches and densely prickly branchlets. It is native to Europe. The compound leaves are made up of 5 to 11 orbicular serrate leaflets about 1 inch long, and the pink, white, or yellow flowers, 2 inches across, are solitary but borne on numerous short branchlets along the stems.

For previous introduction see 116204.

129582. Rosa beggeriana Schrenk.

No. 89.

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ne.

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bed

mall

and

For previous introduction and description see 129578.

129583. Rosa sp.

No. 90. Introduced under the name "sosnovskiana," for which a place of publication has not been found.

129584. Rosa turkestanica Regel.

No. 91. A tall shrub native to Turkistan, with few prickles, yellow flowers, and bright-red ovoid fruits 1 inch long.

For previous introduction see 54231.

129585. Rosa sp.

No. 92.

129586. Rosa sp.

No. 93.

# 129587 to 129590.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received June 30, 1938.

129587. Pennisetum ciliare (L.) Link. Poaceae.

Grass.

A perennial grass with ascending stems up to 2 feet long. Native to South Africa.

129588 and 129589. Eragrostis lehmanniana Nees. Poaceae. A native South African grass.

Grass.

The manager of the same of the

For previous introduction see 15343.

129588. The common type.

129589. Variety Robusta.

129590. Tricholaena repens (Willd.) Hitch. Poaceae.

Natal grass.

An annual or short-lived perennial grass with slender stems, often decumbent at the base, about 3 feet high. Native to South Africa.

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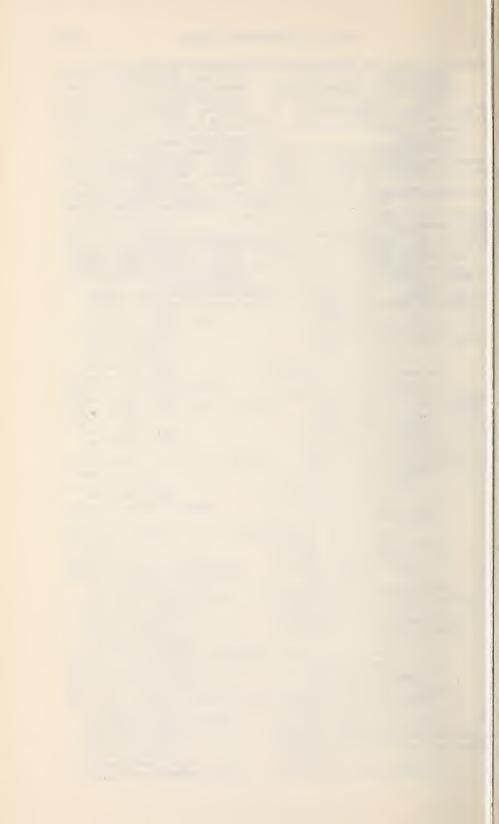
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# Plant Inventory No. 136

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., November 1949



# 9

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1938 (Nos. 129591 to 130579)

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#### INTRODUCTORY STATEMENT

This inventory, No. 136, is a record of the plant material (Nos. 129591 to 130579) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1938.

The manuscript was prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

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<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.



#### INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

# 129591 to 129595. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Puerto Rico. Tubers presented by Wallace K. Bailey, associate horticulturist, Puerto Rico Agricultural Experiment Station, Mayaguez. Received July 9, 1938.

A collection of Puerto Rican varieties of sweetpotatoes.

129591. Brava.

129594. Mina.

129592. Cayo Hueso.

129595. Oquenda.

129593. Don Juan.

129596. SACCHARUM. Poaceae.

Sugarcane.

From Mauritius. Cuttings presented by the Agricultural Department, Mauritius. Received July 11, 1938.

M-171-30.

129597. TERMINALIA OLIVERI Brandis. Combretaceae.

From India. Seeds presented by the Forest Research Institute, Dehra Dun, United Provinces, through F. G Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received July 7, 1938.

An evergreen tree becoming 40 to 60 feet high, with a trunk 4 to 5 feet in girth, often channelled; ovate-elliptic leaves about 2 inches long and dense panicles of small yellowish flowers. Native to dry areas in Burma.

129598. Bambusa Oliveriana Gamble. Poaceae.

Bamboo.

From Florida. Plant presented by the Royal Palm Nurseries, Oneco. Received July 8, 1938.

A clump bamboo which becomes about 20 feet high; origin unknown.

129599. Triodia sp. Poaceae.

Grass.

From Western Australia. Seeds presented by H. A. Mullet, Director of Agriculture, Melbourne, Victoria. Received July 8, 1938.

A grass, locally known as "spinifex," collected from the Port Headland-Marble Bar district of Western Australia, where the average annual rainfall is 12 inches.

129600 and 129601.

From California. Seeds grown at the United States Acclimatization Garden, Bard. Received July 7, 1938

129600. GLAUCOTHEA ARMATA (S. Wats.) O. F. Cook. Phoenicaceae.

Blue palm.

A stout fan-palm with a robust trunk up to 8 feet in diameter and 20 feet high, crowned by numerous glaucous-blue leaves, nearly circular in outline, and deeply cut into many segments. The flowers are dull purple. Native to Baja California, Mexico.

For previous introduction see 100980.

## 129600 and 129601—Continued

129601. Inodes exul O. F. Cook. Phoenicaceae.

Victoria palmetto.

A stout palmetto cultivated in some parts of Texas, and probably native to Mexico. It is distinguished from related species by its large size, the deepgreen foliage, the thickened branchlets of the inflorescence, the solitary fruit, and the large seed, not wrinkled above nor hollowed out below. It is closely related to *Inodes texana*.

For previous introduction see 118449.

### 129602 to 129643.

From Australia. Plants and scions purchased from J. Brunning & Sons, Somerville nurseries, Somerville, Victoria. Received July 9, 1938.

129602 to 129607. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

129602. Early Dawn.

129605. McDevitt's Late Cling.

129603. Gaume.

129606. Mary's Choice.

129604. Hauss.

129607. Peak Cling.

129608 to 129614. Amygdalus persica var. nectarina Ait. Amygdalaceae.

Nectarine.

129608. Albert Victor.

129612. Goldmine Late.

129609. Emmerson.

129613. Lippiats Prolific.

129610. Fertile du Poitou.

129614. Marina.

129611. Gigantic.

129615 to 129626. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

129615. Celo.

129621. Tasman's Pride.

129616, Cowell.

129622. Trivetts.

129617. Crown Beauty.

129623. Winter Majetin.

129618. Duke of Clarence.

129624, Widdup.

129619. Greevston Fanny.

129625. Yapeen Seedling.

129620. Granny Smith Red.

129626. Stewart's Seedling (Ballaret).

129627 to 129637. PRUNUS spp. Amygdalaceae.

129627 and 129628. PRUNUS AVIUM L.

Sweet cherry.

129627. Driver's Up-to-Date.

129628. Tangshii.

129629. PRUNUS DOMESTICA L.

Common plum.

Alpha.

129630 to 129632. PRUNUS SALICINA Lindl.

Japanese plum.

129630. Billington.

129631. Democrat.

129632. Eclipse.

129633 and 129634. PRUNUS DOMESTICA L.

Common plum.

129633, Excelsior.

129634. Lawford's Gage.

129635 and 129636. PRUNUS SALICINA Lindl.

Japanese plum.

129635. Norine.

129636. Paterson's Late.

129637. PRUNUS.

Wright's Hybrid.

## 129602 to 129643—Continued

129638 to 129643. Pyrus communis L. Malaceae.

Common pear.

129638. Baron de Mello.

129641. Giblins Nelis.

129639. Beacon.

129642. Tyford Monarch.

129640. Broome Park.

129643. Winter Cole.

# 129644. Arachis hypogaea L. Fabaceae.

Peanut.

From Paraguay. Seeds presented by Teodoro Rojas, Jardin Botanico, Santissima Trinidad. Received July 16, 1938.

A strain cultivated by the natives in the upper Parana region of Paraguay. 129645. Cynodon dactylon (L.) Pers. Poaceae. Bermuda grass.

From Puerto Rico. Seeds presented by V. W. Thalmann, Soil Conservation Service, Mayaguez. Received July 18, 1938.

Locally grown dwarf Bermuda grass.

# 129646 to 129650. VITIS spp. Vitaceae.

Grape.

From the Union of South Africa. Cuttings presented by F. C. Hugo, Government Viticulturist, Elsenburg. Received July 20, 1938.

129646. VITIS.

Aramon × Rupestris Ganzin No. 1.

129647. VITIS VINIFERA L.

European grape.

Barlinka.

129648. VITIS.

Cabernet × Berlandieri 333EM.

129649 and 129650. VITIS VINIFERA L.

European grape.

129649. Cape Currant.

129650. Jacquez.

# 129651 to 129660. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Australia. Tubers presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received July 20, 1938.

129651. Calabash Leaf; originally from Rhodesia.

129652. R 3049-2; originally from the Virgin Islands.

129653. Early butter; originally from Rhodesia.

129654. Russia 85.

129655. R. 2358-1; originally from Hawaii.

129656. Shijunichi; originally from Japan.

129657. Statia; originally from the British West Indies.

129658. Taino 10; originally from Japan.

129659. Taino 19; originally from Japan.

129660. White Maltese.

# 129661. Gossypium. Malvaceae.

Cotton.

From Honduras. Seeds presented by W. R. Meadows, Board of Trade, Chicago, Ill. Received June 29, 1938. Numbered in July 1938.

129662. Cynodon transvaalensis Burtt Davy. Poaceae. Grass.

From the Union of South Africa. Plants presented by R. E. Foster, Assistant Professional Officer, Pasture Research, Department of Agriculture, Pretoria. Received July 22, 1938.

A densely cespitose perennial grass with slender culms and green acute leaves 1 inch or more in length. It spreads rapidly, is compact, and is excellent for lawn and bowling greens, for which purpose it is now the principal grass in the Transvaal. It is known under the names Florida Kweek or Florida grass (after the town of Florida, near Johannesburg), Germiston grass, etc.

For previous introduction see 95349.

## **129663 to 129666.** Gossypium. Malvaceae.

Cotton.

From Africa. Seeds presented by C. G. Hansford, the Agricultural Laboratories, Department of Agriculture, Kampala, Uganda. Received July 9, 1938.

Cotton varieties, developed for resistance to the blackarm disease.

129663. Bukalasa, B. P. 52.

129665. Serere, S. P. 84.

129664. Bukalasa, B. P. 79.

129666. Serere, S. P. 102.

129667 to 129669. Melilotus spp. Fabaceae.

Sweetclover.

From Germany. Seeds presented by Dr. Hans Winkler, Director, Botanic Garden, Hamburg. Received July 20, 1938.

129667. MELILOTUS ALBA Desr.

White sweetclover.

129668. MELILOTUS ALTISSIMA Thuill.

129669. MELILOTUS OFFICINALIS (L.) Lam.

Yellow sweetclover.

129670 to 129673. Melilotus spp. Fabaceae.

Sweetclover.

From Italy. Seeds presented by the Director, Botanic Garden, Palermo. Received July 21, 1938.

129670 and 129671. MELILOTUS INDICA (L.) All.

129672. Melilotus messanensis (L.) All.

For previous introduction see 33366.

129673. MELILOTUS SULCATA Desf.

For previous introduction see 90038.

### 129674 to 129685.

From the Union of South Africa. Plants presented by H. E. V. Pickstone & Bros., Ltd., nurserymen, Simondium. Received July 27, 1938.

129674 to 129677. Amygdalus persica L. Amygdalaceae.

Peach.

129674. Angel.

129676. Killiebrankie,

129675. Constantia. 129677. Sea Eagle.

129678. Amygdalus persica var. Nectarina Ait. Amygdalaceae. Nectarine. Stanwick.

129679 and 129680. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

- 129679. Ballarat Seedling.
- 129680. Chinemuri.
- 129681. PRUNUS ARMENIACA L. Amygdalaceae.
   Old Cape.

Apricot.

129682. Prunus domestica L. Amygdalaceae.

Common plum.

Reid's Late Gem.

129683. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

Giant Hedelfingen. (Received as "Giant Heidelfinger.")

129684. Vitis sp. Vitaceae.

Grape.

Barbarossa.

Grape.

129685. VITIS sp. Vitaceae.

Barlinka.

# 129686 to 129692. Lycopersicon esculentum Mill. Solanaceae.

From South America. Seeds obtained through H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received in July 1938.

129686. Currant tomato. From Guayaquil, Ecuador, June 25, 1938. Supplied by the American consulate general.

Nos. 129687 to 129692. Presented by Swift & Co., Buenos Aires, Argentina.

129687. No. 777. Var. Campana. From Hudson, Argentina.

129688. No. 773. Var. Ciro. From the Villa Elisa, Argentina, April 22, 1938.

129689. No. 772. Var. Las Talas. From Las Talas, Rio Santiago, Argentina, May 22, 1938.

129690. No. 774. Var. *Palo Blanco*. From Palo Blanco, Rio Santiago, Argentina, April 22, 1938.

129691. No. 775. Var. Sino. From Florencio Vasela, Argentina, April 22, 1938.

129692. No. 776. Var. Vasela. From Florencio Vasela, Argentina, April 22, 1938.

#### 129693 to 129695.

From Peru. Seeds presented by C. Vargas C., Sección Botanica, Universidad de Cuzco, Cuzco. Received July 28, 1938.

129693. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

No. 1014.

129694. Rubus peruvianus Fritsch. Rosaceae.

Blackberry.

No. 1013. A blackberry with trifoliolate leaves, the ovate-elliptic leaflets about  $2\frac{1}{2}$  inches long. Native to Peru.

129695, Rubus sp. Rosaceae.

No. 418. Collected between 3,400 and 3,700 m. in Ampay, Abancay, June 9, 1938.

# 129696 to 129698. Melilotus spp. Fabaceae. Sweetclover.

From Sweden. Seeds presented by the Director, Botanic Garden, Uppsala. Received July 27, 1938.

129696. MELILOTUS INDICA (L.) All.

For previous introduction see 120055.

129697. MELILOTUS ALTISSIMA Thuill.

A perennial melilotus attaining a height of from 4 to 6 feet and in general growth habits similar to the more common *Melilotus alba*.

For previous introduction see 129668.

129698. MELILOTUS SULCATA Desf.

For previous introduction see 129673.

# 129699 to 129705. Melilotus spp. Fabaceae.

Sweetclover.

From Malta. Seeds presented by the Director, Argotti Botanic Gardens, Floriana. Received July 27, 1938.

129699. MELILOTUS ELEGANS Salzm.

129700. MELILOTUS INDICA (L.) All.

129701. Melilotus segetalis (Brot.) Seringe.

129702. MELILOTUS ITALICA (L.) Lam.

For previous introduction see 90034.

129703. Melilotus messanensis (L.) All.

For previous introduction see 129672.

129704 and 129705. MELILOTUS SULCATA Desf.

129706. Cyrtostachys renda Blume. Phoenicaceae.

Palm.

From Trinidad. Seeds presented by Mrs. Mora C. Fitt-André, Port-of-Spain. Received August 1, 1938.

A slender palm, 25 to 30 feet high, crowned by a graceful cluster of dark-green. semierect, pinnate leaves 6 to 8 feet long with linear or ensiform segments and brownish-red petioles. Native to Sumatra.

For previous introduction see 105822.

129707 to 129746. Gossypium spp. Malvaceae.

Cotton.

Seeds presented by the Institute of Plant Industry, Indore. From India. ceived August 5, 1938.

129707 to 129741. Gossypium.

129707. No. 1. 47F.

129708. No. 2. 289F.

129709. No. 3. L. S. S.

129710. No. 4. 43F.

129711, No. 5. 4F-18. Short staple 4F.

129712, No. 6. 4F-98. (Improved Sind.) (American cotton.)

129713. No. 7. Sind-Sudhar. Imp. Sind-American.

129714, No. 8. B. D. 8 (selfed). (Bombay).

129715. No. 9. Broach Local (general). (Bombay).

129716. No. 10. Parbhani 710. Unselfed.

129717, No. 11. 1027-A. L. F. (selfed).

129718. No. 12. 1-A, cylindrical boll.

129719. No. 13. 1-A, long boll (selfed).

129720. No. 14 Bani.

129721. No. 15. Buri.

129722. No. 16. Selected Roseum.

129723. No. 17. Verum.

129724. No. 18. Wagad 8 (selfed).

129725. No. 19. Wagad local.

129726, No. 20. Gadag I.

129727. No. 21. Jayawaut.

129728. No. 22. D. A. ordinary (Dharwar American).

129729. No. 23. Kumpta.

129730. No. 24. Banilla.

129731. No. 25. Jarila.

129732, No. 26, Comilla.

129733. No. 27. 129734. No. 28. Bourbon N. F. Bulk.

129735. No. 29. C. 7 S. F. Bulk.

129736, No. 30, Nadam S. F. Bulk.

129737, No. 31, Coconadas 171. S. F. Bulk.

Matheo.

129738. No. 32. Coconadas 43. S. F. Bulk.

129739. No. 33. Buganda S. F. Bulk.

129740. No. 34. Durango S. F. Bulk.

129741. No. 35. K. P. T. 1. S. F. Bulk.

## 129707 to 129746—Continued

129742. Gossypium neglectum Todaro.

No. 36. Ptalvi 9.

For previous introduction see 89201.

129743 to 129746. Gossypium.

129743. No. 37. Cawnpore 520.

129744. No. 38. Indore Cambodia No. 1.

129745. No. 39. Indore Cambodia MU4.

129746, No. 40. Mollisoni 39.

## 129747. Borassus aethiopum Mart. Phoenicaceae.

Palm.

From Africa. Seeds presented by the Conservator of Forests, Accra, Gold Coast Colony. Received August 5, 1938.

A tall palm with the trunk finally thickened above the middle, fan-shaped leaves flabellately divided to about the middle, the lobes linear-lanceolate, and large fruits. Native to western tropical Africa, where the trunks of the old male palms are used for telegraph poles, wharf piles, etc., as the wood is highly resistant to insect attack and decay.

## 129748 to 129750. Gossypium spp. Malvaceae.

Cottor

From Puerto Rico. Seeds presented by Atherton Lee, Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received August 9, 1938.

129748. Gossypium hirsutum L.

Upland cotton.

129749 and 129750. Gossypium.

129749. Haitian tree cotton E. 6-8-29. Barker's tree cotton grown at Mayaguez.

129750. Haitian tree cotton, 36-8-34. Barker's tree cotton grown at Mayaguez.

#### 129751 and 129752. SACCHARUM. Poaceae.

Sugarcane.

From Argentina. Cuttings presented by Dr. William E. Cross, Estación Experimental Agrícola, Tucumán. Received August 10, 1938.

129751. Tucumán No. 472.

129752. Tucumán No. 1406.

# 129753. Prunus subhirtella Miquel. Amygdalaceae. Higan cherry.

From Maryland. Scions presented by Peter Bisset, Bethesda. Received August 8, 1939.

Yae-schidare-higan. A double-flowered weeping, pink-flowered variety.

#### 129754 to 129767. ZEA MAYS L. Poaceae.

Corn.

From Peru. Seeds presented by Dr. Albert A. Giesecke, United States Embassy, Lima, at the request of Dr. H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received August 8, 1938.

From Andahuaylas, Peru.

# 129768. NEANTHE ELEGANS (Mart.) O. F. Cook (Chamaedorea elegans Mart.). Phoenicaceae. Palm.

From California. Plants presented by David Barry, Jr., Los Angeles. Received August 11, 1938.

An erect, spineless, pinnate-leaved palm, with a stout trunk up to 6 feet high and leaves up to 4 feet long. Native to the State of Vera Cruz, Mexico.

For previous introduction see 124967.

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# 129769. Rooseveltia frankliniana O. F. Cook. Phoenicaceae. Palm.

From the Cocos Islands, Costa Rica. Seeds and plants collected by Dr. Waldo L. Schmitt, United States National Museum. Received August 12, 1938.

Material collected during the 1938 cruise of President Franklin D. Roosevelt on the U. S. S. *Houston*.

A tall handsome palm with a rigid, columnar trunk, the base rather abruptly thickened, and a crown of large pinnate leaves with many long and pendent pinnae. It is very similar in size and general appearance to the coconut palm. Native to the Cocos Islands, Costa Rica.

# 129770. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae.

Asparagus bean.

From Cuba. Seeds presented by Thomas R. Towns, Holguin. Received August 11, 1938.

String beans which become 12 to 15 inches long, maturing in about 60 days; very prolific and bearing for many months.

#### 129771 to 129802.

From New Zealand. Seeds presented by the Curator, Botanic Gardens, Christchurch. Received August 9, 1938.

Unless otherwise mentioned, these plants are all native to New Zealand.

129771. BEILSCHMIEDIA TAWA (A. Cunn.) T. Kirk. Lauraceae.

A tall forest tree up to 80 feet high and 4 feet in diameter, with alternate lanceolate leaves 2 to 4 inches long and slender panicles of minute flowers followed by dark-purple, ovoid fruits 1 inch long. The wood is white, straight-grained, and easily worked, being used for buckets, tubs, casks, etc. The pulp of the plumlike fruit is eaten raw, and the kernels are eaten after steaming.

For previous introduction see 77174.

129772. CARMICHAELIA UNIFLORA T. Kirk. Fabaceae.

A dwarf matted shrub with slender, often subterranean stems, 1 to 2 inches high, forming large patches, and solitary purplish flowers ½ inch long.

For previous introduction see 128860.

129773 to 129778. Celmisia spp. Asteraceae.

129773. CELMISIA CORIACEA (Forst. f.) Hook. f.

A herbaceous perennial with a short stout stem crowned with lanceolate leaves 1 to 2 feet long from the bases of which arise several stout woolly scapes 3 feet high bearing heads of white flowers more than 3 inches broad.

For previous introduction see 77550.

#### 129774. CELMISIA DISCOLOR HOOK. f.

A herbaceous perennial with stems branching at the base, often forming broad, flat-topped cushions. The leaves are crowded, imbricated, leathery, and the large heads of daisylike flowers are white-rayed.

129775. CELMISIA HOLOSERICEA (Forst. f.) Hook. f.

A herbaceous perennial with lanceolate, spreading, radical leaves 6 to 12 inches long and few slender scapes bearing large heads of white-rayed flowers. Native to South Island, New Zealand.

129776. CELMISIA INCANA HOOK. f.

A short stout branching herbaceous perennial with broad plaited leathery leaves and large heads of white-rayed flowers.

129777. CELMISIA MAJOR Cheeseman.

A low stout spreading herbaceous perennial with thick leathery narrow-linear leaves  $4\ {\rm to}\ 15$  inches long and large flower heads.

129778. Celmisia novae-zealandiae (Buch.) Cheesem.

A densely tufted perennial with woody stems 7 to 8 inches high, many leathery, linear leaves, and 2 to 3 scapes of large heads of white-rayed flowers.

## 129771 to 129802—Continued

120779. Coprosma robusta Raoul. Rubiaceae.

A stout shrub 2 to 12 feet high, with pale-brown bark, shining-green leaves up to 5 inches long and 2 inches broad, and small greenish flowers in dense heads. The small red or yellow drupes are thickly set.

For previous introduction see 89230.

129780. COROKIA BUDDLEIOIDES A. Cunn. Cornaceae.

A small tree with long narrow leaves, shining above and downy beneath. The small yellow flowers, ¼ inch long, are in slender panicles and are followed by small orange-red fruits. The native name is korokia-taranga.

129781. COXELLA DIEFFENBACHII (F. Muell.) Cheesem. and Hemsl. Apiaceae.

A stout, erect, herbaceous perennial 2 to 3 feet high, with flaccid, 3- to 4-pinnate radical leaves 1 to 2 feet long, the blade oblong or ovate-oblong in outline, and loosely panicled umbels of small white flowers. Native to damp places on the Chatham Islands,

129782 to 129785. Hebe spp. Scrophulariaceae.

129782. HEBE GIBBSH (T. Kirk) Cockayne and Allan.

A shrub up to 1½ feet high, with leathery, imbricating, ovate leaves ½ to ¾ of an inch long and small white flowers in short dense racemes. Native to South Island, New Zealand.

129783. HEBE RAKAIENSIS (Armstrong) Cockayne.

A small rounded woody evergreen bush of compact habit, 2 to 5 feet high; with linear-oblong, flat leaves about 1 inch long and white flowers in dense oblong clusters.

For previous introduction see 89299.

129784. Hebe salicifolia (Forst. f.) Pennell.

An erect much-branched shrub 3 to 10 feet high, sometimes 15 feet, with thin, pale-green, lanceolate or oblong-lanceolate leaves 2 to 6 inches long and many small, white to pale bluish-purple flowers in slender racemes 3 to 10 inches long.

129785. Hebe traversh (Hook. f.) Cockayne and Allan.

A small compact evergreen shrub 2 to 5 feet in diameter, with spreading leathery leaves 1 inch long and racemes of small white flowers at the tips of the branches.

For previous introductions see 89313.

129786. Leucogenes grandiceps (Hook. f.) Beauvard. Asteraceae.

A densely tufted perennial herb, 2 to 3 inches high. The densely imbricated, spreading or recurved leaves,  $\frac{1}{4}$  to  $\frac{1}{3}$  inch long, are obovate-spatulate, flat or concave, and clothed on both surfaces with appressed silvery tomentum. The small flowers are congested into a densely bracteate head.

For previous introduction see 101283.

129787. LIBERTIA IXIOIDES (Forst. f.) Spreng. Iridaceae.

A low herbaceous perennial, with a short creeping rhizome, which forms a compact clump like a beardless iris. It has rigid coriaceous linear leaves 1 foot long and large panicles of small white flowers on a stem 2 feet high.

For previous introduction see 125146.

129788. LINUM MONOGYNUM Forst. f. Linaceae.

Flax.

A smooth perennial herb 1 to 2 feet high, with scattered linear-lanceolate leaves 1 inch long and large white flowers 1 inch across, in terminal corymbs.

For previous introduction see 77565.

## 129771 to 129802—Continued

129789. Metrosideros tomentosa A. Rich. Myrtaceae.

Irontree.

Pohutukawa. This becomes eventually a tree 70 feet tall, with leaves which vary from lanceolate to broadly oblong and from 1 to 4 inches long. The large dark-crimson flowers are in dense terminal cymes. It is one of the most beautiful flowering trees of New Zealand. Because it flowers toward the end of the year, the European settlers often call this the "Christmas tree."

For previous introduction see 89338.

129790. Myosotis australis R. Br. Boraginaceae.

A slender erect herbaceous perennial 6 to 10 inches high, with linear stem leaves, oblong or linear, rather leathery radical leaves, and many small yellow or white flowers in elongated, terminal racemes. Native to Australia and New Zealand.

129791. MYRTUS Sp. Myrtaceae.

Introduced under the name Myrtus bullata purpurea, which appears to be a horticultural varietal name "purpurea" added to a name which is a homonym.

129792, OLEARIA CHATHAMICA T. Kirk. Asteraceae.

A stout branching evergreen shrub 3 to 6 feet high, with elliptic lanceolate to oblong-obovate leaves 1 to 3 inches long and large solitary flower heads with white or purple ray flowers.

129793. OLEARIA ODORATA Petrie. Asteraceae.

An erect, sweet-scented, much-branched shrub 6 to 12 feet high, with leathery, linear-spathulate or linear-obovate leaves ½ to 1 inch long, and small purplish flower heads in fascicles of 2 to 5. Native to New Zealand between 1,000 and 5,000 feet altitude.

129794. PITTOSPORUM COLENSOI Hook, f. Pittosporaceae.

A tree up to 50 feet high, with lanceolate to obovate leathery leaves 2 to 4 inches long. The solitary axillary dark-purple flowers, ½ inch long, are followed by thick woody globose capsules.

For previous introduction see 99450.

129795. Plagianthus betulinus A. Cunn. Malvaceae.

A handsome leafy tree varying from 30 to 50 feet in height, with ovate or ovate-lanceolate, lobed or coarsely toothed leaves 1 to 3 inches long. The small, very numerous white flowers are in terminal and axillary panicles 4 to 9 inches long. Found growing on alluvial flats and by the side of streams, always in moist situations. Native to New Zealand and the Chatham Islands.

For previous introduction see 38969.

129796. Podocarpus ferruginea G. Benn. Taxaceae.

A large evergreen tree with gray or blackish bark which peels off in large flakes, and small narrow pointed leaves arranged in 2 rows on the branches. The bright-red fruits, the size of small plums, have the taste and odor of turpentine, but are eagerly eaten by native pigeons.

129797. Pomaderris rugosa Cheesem. Rhamnaceae.

An erect branching shrub up to 7 feet high or more, with lanceolate leaves  $\frac{1}{2}$  to  $\frac{1}{2}$  inches long and many small inconspicuous flowers in terminal and axillary cymes.

129798. Pratia treadwellii G. W. Robinson. Campanulaceae.

A prostrate branching herbaceous perennial with stems 6 to 12 inches long, small dark-green broadly ovate leaves, and solitary white flowers which are large for the genus; these are followed by purplish red berries.

129799. RANUNCULUS MONROI Hook. f. Ranunculaceae.

A herbaceous perennial with stout erect stems 4 to 12 inches high, leathery or almost fleshy, sometimes thinner, reniform or ovate leaves 1 to 4 inches across and simple or branched scapes of 1 to 3 yellow flowers about 1 inch in diameter.

## 129771 to 129802—Continued

129800. Senecio compactus T. Kirk. Asteraceae.

A much-branched, compact shrub 2 to 3 feet high and 3 to 6 feet in diameter, with leathery oboyate leaves 1 to 2 inches long and campanulate flower heads about 1 inch across with yellow ray flowers.

129801. Sophora tetraptera J. Miller. Fabaceae.

Fourwing sophora,

A large shrub or small tree up to 30 feet high, found in sandy soil at the edge of woods. The green pinnate leaves and large clusters of yellow flowers make it an attractive ornamental.

For previous introduction see 98039.

129802. Veronica catarractae Forst. Scrophulariaceae.

Speedwell.

A sparingly branched, suberect shrub with rather distant spreading ovatelanceolate, coarsely serrate leaves 1 to 4 inches long and white or pale-rose flowers in slender racemes 3 to 9 inches long.

For previous introduction see 89350.

### 129803 to 129849.

From Australia. Plants purchased from C. A. Nobelius & Sons, Pty. Ltd., Emerald, Victoria. Received August 17, 1938.

129803 to 129816. Amygdalus persica L. Amygdalaceae.

Peach.

129803, Beale.

129804. Black Prince.

129805. Finlayson's Seedling.

129806. Gold Dust.

129807. Healesville Cling.

129808, Kia Ora.

129809, Millicent.

129810. Noonan.

129811, Palora,

129812, Peak Cling.

129813. Pump's Seedling.

129814. Sim's Cling.

129815. Thiele's Cling.

129816. Yarra Yarra Cling.

129817 and 129818. Amygdalus persica var. Nectarina. Amygdalaceae.

Nectarine.

129817. Fripp's Late.

129818. Hunt's Tawney.

129819 to 129833. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

129819. Alfriston.

129820. Cole.

129821, Coronation,

129822. Crofton Pearmain.

129823. Dougherty.

129824. Foster.

129825. Glengyle Red.

129826. Granny Mac.

129827. Lady Carrington.

129828. Lady Hopetown.

## 129803 to 129849—Continued

129829. London Pippin.

129830. Lord Nelson.

129831. Munroe's Favourite.

129832. Royal Late Cooking.

129833. Swardlands.

129834 to 129843. Prunus spp. Amygdalaceae.

129834 to 129836. PRUNUS DOMESTICA L.

Common plum.

129834. Blue Rock

129835. Evans' Early.

129836. King Billy.

129837 to 129839. PRUNUS SALICINA Lindl.

Japanese plum.

129837. Ballena.

129838. Federation.

129839. Sharp's Early.

129840 to 129843. PRUNUS AVIUM L.

Sweet cherry.

129840. Twyford.

129841. Black Diamond.

129842. Burgsdorf Seedling.

129843. Williams' Favourite.

129844 to 129849. PYRUS COMMUNIS L. Malaceae.

Common pear.

129844. Black Achan.

129845, Corona.

129846. Fernbank.

129847. Packham's Late.

129848. Ray's Seedling.

129849. Stanley.

# 129850. OPUNTIA sp. Cactaceae.

From Mexico. Seeds collected by Dr. Donald Reddick, Cornell University, in collaboration with Paul Russell and Max Souviron, Bureau of Plant Industry, United States Department of Agriculture. Received November 19, 1930. Numbered in August 1938.

No. 298. From Pachuca, Hidalgo, November 7, 1930.

# 129851 to 129857. AGAPANTHUS spp. Liliaceae.

From Africa. Roots presented by the National Botanic Gardens, Kirstenbosch, Cape Province. Received August 24, 1938.

129851 and 129852. AGAPANTHUS AFRICANUS (L.) Hoffmannsegg.

For previous introduction see 91783.

129851. An unknown variety.

129852. Table Mountain variety.

129853. AGAPANTHUS CAMPANULATUS Leighton.

A deciduous agapanthus with 12 to 14 suberect leaves up to 18 inches long and a flower stalk about 3 feet high, with showy blue campanulate flowers. Native to Natal.

129854. AGAPANTHUS HOLLANDII Leighton.

An agapanthus with about 10 narrow deciduous leaves up to 18 inches long and an umbel of showy blue, pendulous flowers. Native to the Transvaal.

## 129851 to 129857—Continued

129855. AGAPANTHUS LOGISPATHUS Leighton.

A deciduous agapanthus with ascending leaves about 1 foot long and an umbel of about 20 blue flowers with the perianth about 2 inches long. Native to the Cape of Good Hope.

129856 and 129857. AGAPANTHUS PENDULUS L. Bolus.

An agapanthus with linear, deciduous leaves about 18 inches long and numerous blue flowers over 1 inch long. Native to the Transvaal.

129856. A form with light-blue flowers.

129857. A form with dark-blue flowers.

## 129858 to 129870. Zea mays L. Poaceae.

Corn.

From Peru. Seeds presented by S. P. Vallejo, Estación Agrícola de Ancash, Huaras, at the request of Dr. H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received August 25, 1938.

129858. No. 6. Alazán.

129859. No. 11. Amarillo Comúm.

129860. No. 2. Amarillo de Casilda.

129861. No. 12. Amarillo.

129862. No. 7. Blanco del Cuzco. 129863. No. 8. Blanco del Cuzco × Negro. 129865. No. 10. Hhine.

129866. No. 1. Huarutambo.

129867. No. 9. Mishqui Paru.

129868. No. 13. Morado.

129869. No. 5. Morocho. 129870. No. 3. Negro.

129864. No. 4. Chileno.

## 129871. Triticum aestivum L. Poaceae.

Wheat.

From China. Seeds presented by D. K. Faris, Changte, Honan Province. Received August 30, 1938.

# 129872. Allium Karataviense Regel. Liliaceae.

Onion.

From the Netherlands. Bulbs purchased from C. G. Van Tubergen, Haarlan. Received November 1, 1930. Numbered in August 1938.

An onion, native to Turkistan, with very ornamental broad leaves of a striking blue-green color and dense umbels of dull-pink flowers.

For previous introduction see 124936.

# 129873. Ptychococcus paradoxus (Scheff.) Beccari. Phoenicaceae. Palm.

From Africa. Seeds presented by the Director, East African Agricultural Research Station, Amani, Tanganyika Territory. Received August 15, 1938.

A slender palm, native to New Guinea, with a trunk 9 to 13 feet high, covered with a dense white tomentum. The regularly pinnately divided leaves have 6 to 15 broadly lanceolate segments with obliquely truncate tips.

For previous introduction see 103171.

## 129874 to 129877. Poa Alpina L. Poaceae.

Bluegrass.

From Sweden. Seeds presented by Dr. A. Muntzing, Institutionen För Ärftlighetsforskning, Svalöf. Received August 19, 1938.

129874. Apomictic (35-3) 2 U-33.

129875. Apomictic (35-1) 2 U-38.

129876. (45) Sexual. Seeds from a plant with 2 U-25 (open pollination).

129877. (111) Sexual. Seeds from a plant with 2 U-31 (open pollination 1) and isolation.

# 129878. Solidago sp. Asteraceae.

Goldenrod.

From Brazil. Seeds collected by A. A. Bitancourt, Cantareira, São Paulo. Received August 22, 1938.

# 129879 to 129882. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

From Peru. Seeds presented by Dr. Alberto Giesecke, through the American Embassy, Lima, at the request of Dr. H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received August 31, 1938.

129883. Garcinia mangostana L. Clusiaceae.

Mangosteen.

From the Canal Zone. Seeds presented by Walter E. Lindsay, Director, Canal Zone Experiment Gardens, Summit.

129884. Bornoa crassispatha (Mart.) O. F. Cook. Phoenicaceae.

Palm.

From Haiti. Seeds presented by E. H. A. Groth, Fond des Negres. Received September 9, 1938.

A large cocoid palm with a tall columnar trunk and an ample crown of spreading leaves closely and regularly pinnate. The inflorescences are very short and compact, bearing large numbers of rather thin-shelled edible nuts, somewhat similar to those of Jubaea. Native to Haiti.

# 129885 and 129886. NERINE spp. Amaryllidaceae.

From the Union of South Africa. Bulbs presented by the National Botanic Gardens, Kirstenbosch, Newlands, Cape Province. Received September 9, 1938.

129885. NERINE APPENDICULATA Baker.

A nerine with few linear leaves about 1 foot long and a stout scape bearing an umbel of 10 to 15 red flowers. The perianth segments, about 1 inch long, are crisped in the upper half. Native to Natal.

129886. NERINE MASONORUM L. Bolus.

A tender bulbous plant with narrow channeled leaves about 1 foot long appearing with the rose-colored flowers. There are 4 to 6 flowers in an umbel, the segments being recurved, undulate, and about ½ inch long. Native to South Africa.

For previous introduction see 116633.

#### 129887. Citrus sp. Rutaceae.

From China. Plant growing at the United States Plant Introduction Garden, Glenn Dale, Md. Numbered September 12, 1938.

C. P. B. 10690. Song Ma Yau.

## 129888. Saccharum. Poaceae.

Sugarcane.

From Australia. Cuttings presented by Arthur F. Bell, Assistant Director, Bureau of Sugar Experiment Stations, Department of Agriculture, Brisbane, Queensland. Received September 13, 1938.

Originally from New Guinea.

#### 129889 to 130439.

From China. Seeds collected by T. T. Yu, with the Yunnan Expedition of the Fan Memorial Institute of Biology, Peiping. Presented through the Arnold Arboretum, Jamaica Plain, Mass. Received September 15, 1938.

129889 to 129896. Abies spp. Pinaceae.

Fir.

129889 and 129890. Abies Chensiensis Van Tieghem.

From Tehching, Dokerla, between 2,800 and 3,200 m. altitude. A tree about 40 m. high, native to central China. The horizontally spreading 2-ranked leaves, about 1 inch long, are shining dark-green above with 2 graygreen bands beneath. The cinnamon-brown, ovoid-oblong cones are 3 to 5 inches long.

For previous introduction see 100848.

129889. No. 7952.

129890. No. 7957.

129891. Abies delavayi Franch.

No. 14267. From Kulu, Muli, at 3,400 m. altitude. A tall tree, often about 30 m. high, native to western China. The slightly grooved branchlets are lustrous red brown and the emarginate, linear leaves, about 1 inch long, are revolute on the margin, dark-green above and with 2 white bands beneath. The violet-black, cylindric to ovoid cones are 2 to 4 inches long.

For previous introduction see 128991.

129892. Abies sp.

No. 8008. From the Likiang Snow Range at 2,950 m. altitude.

129893. ABIES SD.

No. 8692. From Mount Miyetzumu, near Atuntze, at 3,600 m. altitude.

129894. ABIES Sp.

No. 10628. From Weihsi, north of Tungchuling, at 4,000 m. altitude.

129895. Abies sp.

No. 13983. From Kungsinshuh, Chungtien, at 3,400 m. altitude.

129896. ABIES Sp.

No. 15050. From the Likiang Snow Range at 3,000 m. altitude.

129897 to 129907. ACER Spp. Aceraceae.

Maple.

129897. ACER Sp.

No. 8475. From Mount Kaakerpu, near Atuntze, at 3,000 m. altitude.

129898. ACER Sp.

No. 8508. From Mount Kaakerpu, near Atuntze, at 3,400 m. altitude.

129899. ACER Sp.

No. 8576. From Mount Miyetzumu, near Atuntze, at 3,250 m. altitude.

129900. ACER Sp.

No. 10462. From Mount Kaakerpu, near Atuntze, at 2,800 m. altitude.

129901. Acer sp.

No. 14377. From Wachin, Muli, at 3,100 m. altitude.

129902. ACER Sp.

No. 14394. From Wachin, Muli, at 3,000 m. altitude.

129903. ACER Sp.

No. 14414. From Wachin, Muli, at 3,100 m. altitude.

129904. ACER Sp.

No. 14788. From Longi, Muli, at 2,800 m. altitude.

129905. ACER Sp.

No. 14801. From Wachin, Muli, at 3,000 m. altitude.

129906. ACER Sp.

No. 15041. From the Likiang Snow Range at 3,000 m. altitude.

129907. ACER Sp.

No. 15100. From the Likiang Snow Range at 3,000 m. altitude.

129908 to 129918. ACONITUM spp. Ranunculaceae.

129908. ACONITUM Spp.

No. 10547. From Mount Miyetzumu, near Atuntze, at 3,400 m. altitude.

129909. ACONITUM Sp.

No.13481. From Grouzah, Chungtien, at 3,000 m. altitude.

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129910. ACONITUM sp.

No. 13824. From Tehgoh, Chungtien, at 3,300 m. altitude.

129911. ACONITUM Sp.

No. 13852. From Tehgoh, Chungtien, at 3,200 m. altitude.

129912. ACONITUM Sp.

No. 13988. From Kungsinshuh, Chungtien, at 3,300 m. altitude.

129913. ACONITUM SD.

No. 14518. From Sigenii, Muli, at 3,300 m. altitude.

129914. ACONITUM Sp.

No. 14613. From Tinchang, Muli, at 4,000 m. altitude.

Nos. 129915 to 129918. From the Likiang Snow Range at 2,800 m. altitude.

129915. ACONITUM SD.

No. 15389.

129916. ACONITUM Sp.

No. 15524.

129917. ACONITUM sp.

No. 15546.

129918. ACONITUM sp.

No. 15555.

129919 to 129921. Adenophora spp. Campanulaceae.

129919. ADENOPHORA Sp.

No. 14433. From Wachin, Muli, at 3,100 m. altitude.

129920. ADENOPHORA Sp.

No. 14575. From Tinchang, Muli, at 3,800 m. altitude.

129921. ADENOPHORA SD.

No. 14690. From Wati, Muli, at 3,250 m. altitude.

129922. AJUGA sp. Menthaceae.

No. 14294. From Kulu, Muli, at 3,200 m. altitude.

129923. Alangium sp. Cornaceae.

No. 14043. From Woosi, Muli, at 2,600 m. altitude.

129924. Albizzia sp. Mimosaceae.

No. 14819. From Guhtzun, Muli, at 3,100 m. altitude.

129925. ARALIA Sp. Araliaceae.

No. 13493. From Haba, Chungtien, at 3,000 m. altitude.

129926. ALNUS Sp. Betulaceae.

No. 14979. From Haba, Chungtien, at 2,500 m. altitude.

129927. AMPHICOME sp. Bignoniaceae.

No. 10210. From Atuntze at 2,500 m. altitude.

129928. AMPHICOME ARGUTA Royle. Bignoniaceae.

No. 14855. From Guhtzun, Muli, at 2,500 m. altitude. A perennial herb with pink flowers.

For previous introduction see 111765.

129929 and 129930. Amygdalus spp. Amygdalaceae.

From Muli at 2,500 m. altitude.

129929. AMYGDALUS Sp.

No. 7659.

129930. AMYGDALUS SD.

No. 7659-A.

129931 to 129933. Androsace spp. Primulaceae.

Rockjasmine.

129931. Androsace sp.

No. 13686. From the Chungtien Plateau at 3,100 m. altitude.

129932. Androsace sp.

No. 13863. From Tehgoh, Chungtien, at 3,200 m. altitude.

129933. Androsace sp.

No. 14345. From Yehtze, Muli, at 3,100 m. altitude.

129934 to 129941. Anemone spp. Rananculaceae.

129934. ANEMONE Sp.

No. 10577. From Mount Miyetzumu, near Atuntze, at 3.400 m. altitude.

129935. ANEMONE Sp.

No. 10813. From Baimashan, near Atuntze, at 4,000 m. altitude.

129936. ANEMONE Sp.

No. 10942. From Lomahua, Chungtien, at 2,750 m. altitude.

129937. ANEMONE Sp.

No. 13747. From Shianrentung, Chungtien, at 3,600 m. altitude.

129938. ANEMONE Sp.

No. 13856. From Tehgoh, Chungtien, at 3,300 m. altitude.

129939. ANEMONE Sp.

No. 14759. From Deongomba, Muli, at 3.500 m. altitude.

129940. Anemone sp.

No. 15065. From the Likiang Snow Range at 3,000 m. altitude.

129941. ANEMONE Sp.

No. 15169. From the Likiang Snow Range at 2,400 m. altitude.

129942. AQUILEGIA Sp. Ranunculaceae.

Columbine.

No. 14332. From Yehtze, Muli, at 3,100 m. altitude.

129943. Arisaema sp. Araceae.

No. 14410. From Wachin, Muli, at 3,100 m. altitude.

129944. ASTER Sp. Asteraceae.

No. 13513. From Haba, Chungtien, at 3,500 m. altitude.

129945. Erigeron sp. Asteraceae.

No. 14260. From Kulu, Muli, at 3,400 m. altitude.

129946 to 129949. ASTER Spp. Asteraceae.

Nos. 129946 to 129948. From Tinchang, Muli, between 4,000 and 4,100 m. altitude.

129946. ASTER Sp.

No. 14631.

129947. ASTER Sp.

No. 14639.

129948. ASTER Sp.

No. 14657.

129949. ASTER Sp.

No. 15151. From the Likiang Snow Range at 3,400 m. altitude.

129950. ASTILBE Sp. Saxifragaceae.

No. 13767. From Shianrentung, Chungtien, at 3,400 m. altitude.

129951. ASTILBE Sp. Saxifragaceae.

No. 14303. From Kulu, Muli, at 3,400 m. altitude.

129952 to 129957. ASTRAGALUS Spp. Fabaceae.

129952. ASTRAGALUS Sp.

No. 14368. From Kulu, Muli, at 3,300 m. altitude.

129953. ASTRAGALUS Sp.

No. 14761. From Deongomba, Muli, at 3,500 m. altitude.

129954. ASTRAGALUS Sp.

No. 14768. From Puhchang, Muli, at 3,250 m. altitude.

129955. ASTRAGALUS Sp.

No. 14817. From Wachin, Muli, at 3,000 m. altitude.

129956. ASTRAGALUS Sp.

No. 14886. From Lilang, Muli, at 3,600 m. altitude.

129957. ASTRAGALUS Sp.

No. 14932. From Paitih, Chungtien, at 2,000 m, altitude.

129958. Berberis sp. Berberidaceae.

Barberry.

No. 7999. From Hungpoh, near Atuntze, at 3,700 m. altitude.

129959. Berberis sp. Berberidaceae.

Barberry.

No. 10943. From Lomahua, Chungtien, at 2,700 m. altitude.

129960. Bergenia purpurascens (Hook. f. and Thoms.) Engler. Saxifragaceae.

No. 7884. From Dokerla, near Atuntze, at 3,700 m. altitude. A beautiful herbaceous rock plant, native to the temperate regions of the Sikkim Himalayas between 3,000 and 5,000 m. altitude. The bright glossy green leaves are elegantly margined with red, and the scape and inflorescence are bright vinous-red purple.

For previous introduction see 102326.

129961 Bergenia sp. Saxifragaceae.

No. 14692. From Wati, Muli, at 3,250 m. altitude.

129962. Betula sp. Betulaceae.

Birch.

No. 7850. From Dokerla, near Atuntze, between 3,200 and 3,700 m. altitude. 129963. (Undetermined.)

No. 15511. From the Likiang Snow Range at 3,000 m. altitude.

129964 to 129966. Betula spp. Betulaceae.

Birch.

129964. BETULA SD.

No. 10561. From Mount Miyetzumu, near Atuntze, at 3,400 m. altitude. 129965. Betula sp.

No. 13808. From Tehgoh, Chungtien, at 3,300 m. altitude.

129966. BETULA Sp.

No. 14704. From Wati, Muli, at 2,900 m. altitude.

129967. CARAGANA Sp. Fabaceae.

No. 10833. From Baimashan, near Atuntze, at 3,600 m. altitude.

129968. CARAGANA Sp. Fabaceae.

No. 15106. From the Likiang Snow Range at 3,000 m. altitude.

129969. Celastrus sp. Celastraceae.

No. 7978. From Hungpoh, near Atuntze, at 2,600 m. altitude.

129970. Celastrus sp. Celastraceae.

No. 14848. From Guhtzun, Muli, at 2,500 m. altitude.

129971 to 129973. CIMICIFUGA spp. Ranunculaceae.

129971. CIMICIFUGA Sp.

No. 10553. From Mount Miyetzumu, near Atuntze, at 3,400 m. altitude. 129972. CIMICIFUGA sp.

No. 14682. From Tinchang, Muli, at 3,800 m. altitude.

129973. CIMICIFUGA SD.

No. 15289. From the Likiang Snow Range at 3,200 m. altitude.

129974 to 129984. CLEMATIS spp. Ranunculaceae.

129974. CLEMATIS Sp.

No. 10421. From Mount Kaakerpu, near Atuntze, at 2,600 m. altitude. 129975. CLEMATIS Sp.

No. 10587. From southwest of Atuntze at 3,200 m. altitude.

129976. CLEMATIS Sp.

No. 10914. From Goluwan, Chungtien, at 2,000 m. altitude.

129977. CLEMATIS Sp.

No. 13726. From Shianrentung, Chungtien, at 3,300 m. altitude.

129978. CLEMATIS Sp.

No. 13890. From the Chungtien Plateau at 3,000 m. altitude.

129979. CLEMATIS Sp.

No. 13891. From the Chungtien Plateau at 3,000 m. altitude.

129980. CLEMATIS SD.

No. 13940. From Pica, Chungtien, at 3,100 m. altitude.

129981. CLEMATIS Sp.

No. 14158. From Muli at 2,600 m. altitude.

129982. CLEMATIS Sp.

No. 14741. From Yatsa, Muli, at 3,100 m. altitude.

129983. CLEMATIS Sp.

No. 14776. From Hungsa, Muli, at 2,900 m. altitude.

129984. CLEMATIS Sp.

No. 15083. From the Likiang Snow Range at 3,000 m. altitude. 129985. (Undetermined.)

No. 15632. From Hungpoh, near Atuntze, at 3,800 m. altitude.

129986. Codonopsis sp. Campanulaceae.

No. 13775. From Shianrentung, Chungtien, at 3,600 m. altitude.

129987. Codonopsis sp. Campanulaceae.

No. 14576. From Jinchang, Muli, at 3,800 m. altitude.

129988. Coluria sp. Rosaceae.

No. 15242. From the Likiang Snow Range at 3,000 m. altitude.

129989. Coriaria sp. Coriariaceae.

No. 13487. From Haba, Chungtien, at 2,500 m. altitude.

129990. CORIARIA Sp. Coriariaceae.

No. 14966. From Haba, Chungtien, at 2,600 m. altitude.

129991. CARUM sp. Apiaceae.

No. 14525. From Sigenii, Muli, at 3,300 m. altitude.

129992 to 129998. CORNUS spp. Cornaceae.

129992. CORNUS Sp.

No. 5879. From north of Muli, Muli, at 2,200 m. altitude.

129993. CORNUS Sp.

No. 7987. From Hungpoh, near Atuntze, at 2,600 m. altitude.

129994. CORNUS Sp.

No. 10186. From Mount Yangtsa, near Atuntze, at 3,250 m. altitude. 129995. Cornus sp.

No. 10519. From Mount Kaakerpu, near Atuntze, at 3,000 m. altitude. 129996. Cornus sp.

No. 10909. From Lomahua, Chungtien, at 2,400 m. altitude.

129997. CORNUS Sp.

No. 14056. From Woosi, Muli, at 2,600 m. altitude.

129998. CORNUS Sp.

No. 14971. From Haba, Chungtien, at 2,500 m. altitude.

129999 to 130001. Corylus spp. Betulaceae.

129999. CORYLUS Sp.

No. 10608. From Mount Miyetzumu, near Atuntze, at 3,000 m. altitude.

130000. Corylus Chinensis Franch.

Chinese hazelnut.

No. 13504. From Chungtien at 2,600 m. altitude. The Chinese hazelnut is closely allied to the Turkish hazelnut, *Corylus colurna*, differing in leaf form and stem characters. It becomes a tall tree, sometimes over 100 feet high, with heart-shaped leaves about 7 inches long. The nuts are borne in clusters of 4 to 6. It is native to western China.

For previous introduction see 91231.

130001. Corylus ferox Wall.

Hazelnut.

No. 10485. From Mount Kaakerpu, Tehching, at 3,000 m. altitude. A wild hazelnut whose small nuts closely resemble the common hazelnut in taste. The trees become 6 m. high and grow at altitudes between 3,000 and 4,000 m.

For previous introduction see 121593.

130002 to 130020. Cotoneaster spp. Malaceae.

130002. COTONEASTER Sp.

No. 5021. From Aywah, near Yunning, at 2,300 m. altitude.

130003. COTONEASTER Sp.

No. 7944. From Dokerla, near Atuntze, at 2,800 m, altitude.

130004. COTONEASTER Sp.

No. 8673. From Mount Miyetzumu, near Atuntze, at 3,500 m. altitude.

130005. COTONEASTER Sp.

No. 10459. From Mount Kaakerpu, near Atuntze, at 2,600 m. altitude.

Nos. 130006 and 130007. From Mount Kaaperpu, near Atuntze, at 3,200 m. altitude.

130006. COTONEASTER Sp.

No. 10497.

130007. COTONEASTER Sp.

No. 10498.

130008. COTONEASTER Sp.

No. 10917. From Lomahua, Chungtien, at 2,000 m. altitude.

130009. COTONEASTER Sp.

No. 12882. From Konkaling at 3,100 m. altitude.

130010. COTONEASTER Sp.

No. 13229. From Konkaling, Chungtuh, at 3,000 m. altitude.

130011. COTONEASTER Sp.

No. 13398. From Shiangcheng, Tungyung, at 3,200 m. altitude.

130012. COTONEASTER Sp.

No. 13687. From the Chungtien Plateau, at 3,100 m. altitude.

130013. COTONEASTER SD.

No. 14144. From Muli at 2,800 m. altitude.

130014. COTONEASTER Sp.

No. 14196. From Tuo-li-you, Muli, at 2,200 m. altitude.

130015. COTONEASTER Sp.

No. 14430. From Wachin, Muli, at 3,100 m. altitude.

130016. COTONEASTER Sp.

No. 14822. From Guhtzun, Muli, at 3,100 m. altitude.

130017. COTONEASTER Sp.

No. 14994, From Huachiaupoh, Chungtien, at 2,800 m. altitude.

130018. COTONEASTER Sp.

No. 15080. From the Likiang Snow Range at 2,700 m. altitude.

130019. COTONEASTER Sp.

No. 15116. From the Likiang Snow Range at 3,000 m. altitude.

130020. COTONEASTER SD.

No. 15628. From Hungpoh, near Atuntze, at 3,800 m. altitude.

130021. Crataegus sp. Malaceae.

No. 13442. From Tungwalung, Chungtien, at 3,000 m. altitude.

130022. CRATAEGUS SD. Malaceae.

No. 13588. From Haba, Chungtien, at 3,100 m. altitude.

130023. Cupressus sp. Pinaceae.

No. 13407. From Tungzung, Shiangcheng, at 3,000 m. altitude.

130024 to 130026. DATURA STRAMONIUM L. Solanaceae.

130024. DATURA STRAMONIUM L.

No. 14209. From Gu-tu, Muli, at 2,300 m. altitude.

130025. DATURA STRAMONIUM L.

No. 13509. From Haba, Chungtien, at 2,800 m. altitude.

Cypress.

130026. DATURA STRAMONIUM L.

No. 14931. From Paitih, Chungtien, at 2,000 m. altitude.

130027. Delphinium sp. Ranunculaceae.

Larkspur.

No. 15543. From the Likiang Snow Range at 2,800 m. altitude.

130028. Delphinium sp. Ranunculaceae.

Larkspur.

No. 14577. From Tinchang, Muli, at 3,800 m. altitude.

130029 to 130033. Desmodium spp. Fabaceae.

Tickclover.

130029. DESMODIUM REPANDUM (Vahl.) DC.

No. 10579. From Mount Miyetzumu, Atuntze, at 3.400 m. altitude.

130030. Desmodium sp.

No. 10724. From Weihsi, west of Tungchuling, at 3,000 m. altitude.

130031. DESMODIUM Sp.

No. 13447. From Tungwalung, Chungtien, at 3,000 m. altitude.

130032. DESMODIUM SD.

No. 15482. From the Likiang Snow Range at 3,000 m. altitude.

130033. DESMODIUM SD.

No. 15084. From the Likiang Snow Range at 2,700 m. altitude.

130034. DIOSCOREA Sp. Dioscoreaceae.

No. 14132. From Mui at 2,750 m. altitude.

130035. DIPELTA Sp. Caprifoliaceae.

No. 15004. From the Likiang Snow Range at 3,000 m, altitude.

130036 to 130040. DIPSACUS spp. Dipsacaceae.

Teasel.

130036. DIPSACUS Sp.

No. 10872, From Baimashan, Atuntze, at 3.900 m. altitude.

130037. DIPSACUS CHINENSIS Batal.

No. 13425. From Tungwalung, Chungtien, at 3,200 m. altitude. A teasel up to 6 feet high, with pinnatisect leaves composed of narrow oblong pairs of leaflets and globose flower heads about 2 inches across. Native to Szechwan Province, China.

130038. DIPSACUS ASPER DC.

No. 14420. From Wachni, Muli, at 3,100 m. altitude. An alpine teasel up to 6 feet high, with the lower leaves pinnatifid. The small white flowers are in subglobose heads. Native to the Khasi Hills at altitudes of 1,500 to 2,000 m.

130039. DIPSACUS ASPER DC.

No. 14963. From Haba, Chungtien, at 2,500 m. altitude.

See No. 14420 (P. I. 130038) for description.

130040. DIPSACUS CHINENSIS Batal.

No. 14517. From Sigenii, Muli, at 3,300 m. altitude.

For previous introduction and description see 130037.

130041. Docynia sp. Malaceae.

No. 14870. From Muli at 2.500 m. altitude.

130042. EHRETIA Sp. Boraginaceae.

No. 7658. From Muli at 2,520 m. altitude.

130043. Ehretia sp. Boraginaceae.

No. 13510. From Haba, Chungtien, at 2,850 m. altitude.

130044. Elaeagnus sp. Elaeagnaceae.

No. 7450. From Lilang, Muli, at 2,800 m. altitude.

130045. Elsholtzia sp. Menthaceae.

No. 7820. From Dokerla, Atuntze, at 2,700 m. altitude.

13046. Enkianthus sp. Ericaceae.

No. 7856. From Dokerla, Atuntze, at 3,100 m. altitude.

130047. ENKIANTHUS Sp. Ericaceae.

No. 10939. From Lomahua, Chungtien, at 2,700 m. altitude.

130048 and 130049. EPILOBIUM spp. Onagraceae.

From Kulu, Muli, at 3,200 m. altitude.

130048. EPILOBIUM Sp.

No. 14353.

130049. EPILOBIUM Sp.

No. 14357.

130050 to 130054. EUONYMUS spp. Celastraceae.

130050. EUONYMUS Sp.

No. 5320. From Shytzeshan, Yunning, at 2,600 m. altitude.

130051. EUONYMUS Sp.

No. 13552. From Haba, Chungtien, at 3,400 m. altitude.

130052. EUONYMUS Sp.

No. 14150. From Muli at 3,000 m. altitude.

130053. EUONYMUS Sp.

No. 14269. From Kulu, Muli, at 3,300 m. altitude.

130054. EUONYMUS Sp.

No. 14540. From Sigenii, Muli, at 3,300 m. altitude.

130055. Fragaria sp. Rosaceae.

No. 14280. From Kulu, Muli, at 3,300 m. altitude.

130056. Fraxinus sp. Oleaceae.

No. 10373. From Mount Kaakerpu, Atuntze, at 2,800 m. altitude.

130057. Fraxinus sp. Oleaceae.

Ash.

Ash.

No. 10711. From Weihsi, west of Tungchuling, at 3,000 m. altitude.

130058 to 130066. Gentiana spp. Gentianaceae.

Gentian.

130058. GENTIANA Sp.

No. 7918. From Dokerla, Atuntze, at 3,400 m. altitude.

120059. GENTIANA Sp.

No. 10537. From Mount Miyetzumu, Atuntze, at 3,200 m. altitude.

130060. GENTIANA Sp.

No. 10660. From Weihsi, north of Tungchuling, at 4,000 m. altitude.

130061. GENTIANA Sp.

No. 10719. From Weihsi, west of Tungchuling, at 3,000 m. altitude.

130062. GENTIANA Sp.

No. 10766. From Baimashan, Atuntze, at 4,100 m. altitude.

130063. GENTIANA Sp.

No. 10963. From Lichiashica, Chungtien, at 3,300 m. altitude.

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130064. GENTIANA Sp.

No. 14000. From Kungsinshuh, Chungtien, at 3,450 m. altitude.

130065. GENTIANA Sp.

No. 14551. From Tinchang, Muli, at 3,800 m. altitude.

130066. GENTIANA Sp.

No. 14760. From Deongomba, Muli, at 3,500 m. altitude.

130067. Geum Aleppicum Jacq. Rosaceae.

No. 10308. From Mount Kaakerpu, Atuntze, at 2,600 m. altitude. An erect perennial herb with branching stems up to 5 feet high and yellow flowers about ¾ inch across. Native to central and eastern Europe.

130068. Geum sp. Rosaceae.

No. 13836. From Tehgoh, Chungtien, at 3,150 m. altitude.

130069. GLYCYRRHIZA sp. Fabaceae.

No. 14442. From Wachin, Muli, at 3,100 m. altitude.

130070. Gueldenstaedtia sp. Fabaceae.

No. 14578. From Tinchang, Muli, at 3,800 m. altitude.

130071 to 130074. HALENIA spp. Gentianaceae.

130071. HALENIA Sp.

No. 7984. Hungoh, Atuntze, at 2,600 m. altitude.

130072. HALENIA SD.

No. 10559. From Mount Miyetzumu, Atuntze, at 3,200 m. altitude.

130073. HALENIA SD.

No. 10600. From southwest of Atuntze at 3,400 m. altitude.

130074. HALENIA Sp.

No. 14434. From Wachin, Muli, at 3,100 m. altitude.

130075. Helwingia sp. Cornaceae.

No. 15042. From the Likiang Snow Range at 3,000 m. altitude.

130076. HIPPOPHAE sp. Elaeagnaceae.

No. 8726. From Mount Miyetzumu, Atuntze, at 3,200 m. altitude.

130077. HYDRANGEA sp. Hydrangeaceae.

15307. From the Likiang Snow Range at 3,000 m. altitude.

130078 to 130081. HYPERICUM spp. Hypericaceae.

130078 and 130079. HYPERICUM HOOKERIANUM Wight and Arn.

For previous introduction see 128950.

130078. No. 7823. From Dokerla, Atuntze, at 2,800 m. altitude.

130079. No. 14729. From Yatsa, Muli, at 3,100 m. altitude.

130080. HYPERICUM Sp.

No. 14861. From Guhtzun, Muli, at 2,500 m. altitude.

130081. HYPERICUM Sp.

No. 14939. From Paitih, Chungtien, at 2,600 m. altitude.

130082 to 130087. ILEX spp. Aquifoliaceae.

130082. ILEX Sp.

No. 7826. From Dokerla, Atuntze, at 3,000 m. altitude.

130083. ILEX sp.

No. 7831. From Dokerla, Atuntze, at 3,100 m. altitude.

Holly.

130084. ILEX Sp.

No. 10610. From Mount Kaaperpu, Atuntze, at 3,000 m. altitude.

130085. ILEX Sp.

No. 13536. From Haba, Chungtien, at 3,400 m. altitude.

130086. ILEX Sp.

No. 14283. From Kulu, Muli, at 3,200 m. altitude.

130087. ILEX Sp.

No. 14921. From Paitih, Chungtien, at 2,700 m. altitude.

130088 and 130089. IMPATIENS SDD. Impatientaceae.

Snapweed.

From Kulu, Muli.

130088. No. 14227. Collected at 3,400 m. altitude.

130089. No. 14230. Collected at 3,500 m. altitude.

130090. Indigofera sp. Fabaceae.

No. 14407. From Wachin, Muli, at 3,100 m. altitude.

130091 to 130105. Iris spp. Iridaceae.

130091. IRIS CHRYSOGRAPHES Dykes.

Goldvein iris,

No. 6260. Northeast of Deongomba, Muli, at 3,600 m. altitude. One of the handsomest of the beardless irises; the velvety, dark-purple flowers are brightened by golden reticulations at the throat, running into a signal patch in the blade.

For previous introduction see 99880.

130092. Iris sp.

No. 10631. North of Tungchuling, Weihsi, at 4,100 m. altitude.

130093. Iris sp.

No. 10775. From Baimashan, Atuntze, at 4,100 m. altitude.

130094. Iris sp.

No. 10962. From Kungsinshuh, Chungtien, at 3,300 m. altitude.

130095. Iris bulleyana Dykes.

Hollowstem iris.

No. 13516. From Haba, Chungtien, at 3,500 m. altitude. An iris, native to western China, that resembles *Iris clarkei*, except that the stem is hollow. The narrow leaves are glossy above and glaucous beneath, and the stem, 15 to 16 inches long, bears a single head of 1 or 2 flowers. The falls have a greenish-yellow oblong haft, veined and dotted with purple. On the obovate blade, the coloring becomes cleared and consists of broken veins and blotches of bright blue purple, paler at the edges. The oblanceolate, channeled standards are pale blue purple with deeper veins and diverge at an angle of about 60°. The keeled dark-purple styles are held high above the falls.

For previous introduction see 92494.

130096. IRIS SD.

No. 13590. From Tungwalung, Chungtien, at 3,500 m. altitude.

130097. IRIS Sp.

No. 13617. From the Chungtien Plateau at 3,000 m. altitude.

130098. IRIS Sp.

No. 13711. From Shianrentung, Chungtien, at 3,550 m. altitude.

130099. IRIS SD.

No. 13935. From Pica, Chungtien, at 3,100 m. altitude.

130100. IRIS Sp.

No. 14228. From Kulu, Muli, at 3,500 m. altitude.

130101. IRIS Sp.

No. 14435. From Wachin, Muli, at 3,100 m. altitude.

130102. IRIS Sp.

No. 14534. Sigenii, Muli, at 3,300 m. altitude.

130103. IRIS Sp.

No. 14541. From Sigenii, Muli, at 3,300 m. altitude.

130104. IRIS Sp.

No. 14676. From Tinchang, Muli, at 3,800 m. altitude.

130105. IRIS Sp.

No. 14883. From Lilang, Muli, at 2,600 m. altitude.

130106 to 130110. JASMINUM Spp. Oleaceae.

Jasmine.

130106. JASMINUM Sp.

No. 7975. From Mount Yangtsa, near Atuntze, at 2,300 m. altitude.

**130107.** Jasminum sp.

No. 10205. From Atuntze, at 2,850 m. altitude.

130108. Jasminum sp.

No. 10586. From southwest of Atuntze at 3,200 m. altitude.

130109. Jasminum sp.

No. 14486. From Wachin, Muli, at 3.000 m. altitude.

130110. Jasminum sp.

No. 14816. From Wachin, Muli, at 3,000 m. altitude.

130111 to 130116. JUNIPERUS spp. Pinaceae.

Juniper.

130111. JUNIPERUS FORMOSANA Hayata.

Formosa juniper.

No. 5785. From Muli at 2,550 m. altitude. A tree 30 to 40 feet high, often with several trunks arising from near the base, native to Taiwan. The spreading or ascending branches have pendulous branchlets, the linear, sharp-pointed leaves, 1 inch long, have 2 broad white bands above, and the red or orange-brown globose fruits are  $\frac{1}{3}$  inch in diameter.

For previous introduction see 103127.

130112. JUNIPERUS Sp.

No. 7900. From Dokerla, Atuntze, at 3,700 m. altitude.

130113. JUNIPERUS Sp.

No. 13882. From Tehgoh, Chungtien, at 3,300 m. altitude.

130114. JUNIPERUS Sp.

No. 14359. From Kulu, Muli, at 3,400 m. altitude.

130115. JUNIPERUS Sp.

No. 15615. From the Likiang Snow Range at 3,000 m. altitude.

130116. JUNIPERUS Sp.

No. 15644. From Hungpoh, Atuntze, between 3,800 and 4,000 m. altitude. 130117. Koelreuteria sp. Sapindaceae.

No. 14214. From Kehsy, Muli, at 2,500 m. altitude.

130118. Koelreuteria sp. Sapindaceae.

No. 14860. From Guhtzun, Muli, at 2,500 m. altitude.

130119. LARIX Sp. Pinaceae.

Larch.

No. 13805. From Shianrentung, Chungtien, at 3,700 m. altitude.

130120. Leonurus sp. Menthaceae.

No. 10747. From west to Tungchuling, Weihsi, at 2,800 m. altitude.

130121. LEONURUS SIBIRECUS L. Menthaceae.

No. 14145. From Muli at 2,800 m. altitude.

130122 to 130124. LESPEDEZA SPP. Fabaceae.

130122. LESPEDEZA SD.

No. 13834. From Tehgoh, Chungtien, at 3,300 m. altitude.

130123. LESPEDEZA HIRTELLA Franch.

No. 1772. From Hungsa, Muli, at 3,000 m. altitude. A low shrub, sometimes 3 feet high, with leathery leaves. Native to southwestern China.

130124. LESPEDEZA Sp.

No. 14885. From Lilang, Muli, at 2,600 m. altitude.

130125. Leycesteria sp. Caprifoliaceae.

No. 13494. From Haba, Chungtien, at 3,000 m. altitude.

130126 to 130130. LIGUSTRUM spp. Oleaceae.

Privet.

130126. LIGUSTRUM Sp.

No. 10581. From Mount Miyetzumu, Atuntze, at 3,400 m. altitude.

130127. LIGUSTRUM Sp.

No. 10707. From west of Tungchuling, Weihsi, at 3,000 m. altitude.

130128. LIGUSTRUM Sp.

No. 10929. From Lomahua, Chungtien, at 2,400 m. altitude.

130129. LIGUSTRUM Sp.

No. 15290. From the Likiang Snow Range at 2,800 m. altitude.

130130. LIGUSTRUM Sp.

No. 15660. From Hungpoh, Atuntze, between 2,600 and 2,800 m. altitude. 130131. Litsea sp. Lauraceae.

No. 15003. From the Likiang Snow Range at 3,000 m. altitude.

130132 to 130139. Lonicera spp. Caprifoliaceae.

Honeysuckle.

130132. Lonicera sp.

No. 5361. From Yunning, between 2,600 and 2,800 m. altitude.

130133. LONICERA Sp.

No. 7315. From Kup-a-den, Muli, at 2,300 m. altitude.

130134. LONICERA Sp.

No. 7733. From Gu-ma-den, Muli, at 3,000 m. altitude.

130135. LONICERA SD.

No. 7776. From Shaw-shiang-liang-tze, Muli, at 3,900 m. altitude.

130136. LONICERA Sp.

No. 12840. From Mowuh, Taucheng, at 3,600 m. altitude.

130137. LONICERA Sp.

No. 14238. From Kulu, Muli, at 3,400 m. altitude.

130138. LONICERA SD.

No. 14278. From Kulu, Muli, at 3,300 m. altitude.

130139. LONICERA Sp.

No. 14310. From Wachin, Muli, at 3,400 m. altitude.

130140. LYSIMACHIA sp. Primulaceae.

Loosestrife.

No. 10991. From Lichiashica, Chungtien, at 3,200 m. altitude.

130141. Malus sp. Malaceae.

No. 13477. From Gouyah, Chungtien, at 3,000 m. altitude.

130142 to 130148. Meconopsis spp. Papaveraceae.

130142. MECONOPSIS Sp.

No. 7642. From Mount Gibboh, Muli, at 3,800 m. altitude.

130143. MECONOPSIS Sp.

No. 7913. From Dokerla, Atuntze, at 3,900 m. altitude.

130144. MECONOPSIS Sp.

No. 13274. From Bean, Konkaling, at 4,000 m. altitude.

130145. MECONOPSIS Sp.

No. 13653. From Tuatze, Chungtien, at 3,600 m. altitude.

130146. MECONOPSIS Sp.

No. 14274. From Kulu, Muli, at 3,300 m. altitude.

130147. MECONPSIS Sp.

No. 14615. From Jinchang, Muli, at 4,000 m. altitude.

130148. MECONOPSIS Sp.

No. 15127. From the Likiang Snow Range at 3,400 m. altitude.

130149. Medicago sp. Fabaceae.

No. 10507. From Mount Kaakerpu, Atuntze, at 2,500 m. altitude.

130150. Melia sp. Meliaceae.

No. 14863. From Muli at 2.500 m. altitude.

130151. Meliosma sp. Sabiaceae.

No. 14159. From Muli at 2,650 m. altitude.

130152. MIRABILIS Sp. Nyctaginaceae.

No. 10616. From Mount Kaakerpu, Atuntze, at 3,000 m. altitude.

130153. MIRABILIS HIMALAICA var. CHINENSIS Heim. Nyctaginaceae.

No. 14796. From Shawan, Muli, at 3,000 m. altitude.

130154 to 130156. MYRSINE spp. Myrsinaceae.

130154. MYRSINE Sp.

No. 5811. From northeast of Muli, Muli, at 2,700 m. altitude.

130155. MYRSINE Sp.

No. 7351. From Muli at 2,200 m. altitude.

130156. MYRSINE Sp.

No. 14124. From Muli at 2,500 m. altitude.

130157. OSTEOMELES Sp. Malaceae.

No. 14038. From Woosi, Muli, at 2,600 m. altitude.

130158 to 130161. PAEONIA spp. Ranunculaceae.

100 to 100101. I MEONIA Spp. Zeananeauceae

130158. PAEONIA Sp.
No. 10470. From Mount Kaakerny Atuntze at 2 400 m. altitude

No. 10470. From Mount Kaakerpu, Atuntze, at 2,400 m. altitude. 130159. Paeonia sp.

No. 13500. From Haba, Chungtien, at 3,000 m. altitude.

Peony.

130160. PAEONIA Sp.

No. 13581. From Haba, Chungtien. at 3,440 m. altitude.

130161. PAEONIA LUTEA Franch.

Golden peony.

No. 14147. East of Muli, Muli, at 3,000 m. altitude. A shrubby Chinese peony with a short woody stem 1 or 2 feet high and deep-green, leathery, 3-parted leaves, white beneath and about 1 foot long. The golden yellow single or slightly double flowers are not over 2 inches across.

For previous introduction see 100577.

130162. Paris sp. Convallariaceae.

No. 14411. From Wachin, Muli, at 3,100 m. altitude.

130163. Parnassia sp. Saxifragaceae.

No. 7919. From Dokerla, Atuntze, at 3,400 m. altitude.

130164. Peperomia sp. Piperaceae.

No. 14810. From Guhtzun, Muli, at 3,150 m. altitude.

130165 and 130166. PHILADELPHUS DELAVAYI L. Henry. Hydrangeaceae.

Mockorange.

A shrub 15 to 20 feet high, native to Yunnan Province. The remotely serrate, ovate leaves, 2 to 4 inches long, are dark green above and tomentose beneath. The very fragrant flowers, nearly 2 inches across, have a violet-purple calyx and white petals, slightly tinged with purple on the outside, and are borne in racemes.

For previous introduction see 100581.

130165. No. 10589. From southwest of Atuntze at 3,200 m. altitude.

130166. No. 14683. From Tinchang, Muli, at 3,800 m. altitude.

130167. PHILADELPHUS sp. Hydrangeaceae.

No. 15066. From the Likiang Snow Range at 3,000 m. altitude.

130168 to 130170. Photinia spp. Malaceae.

130168. Photinia sp.

No. 10908. From Lomahua, Chungtien, at 2,400 m. altitude.

130169. PHOTINIA Sp.

No. 14824. From Guhtzun, Muli, at 3,100 m. altitude.

130170. PHOTINIA Sp.

No. 15172. From Yeichih, Atuntze, at 2,400 m. altitude.

130171 to 130173. PhytoLacca spp. Phytolaccaceae.

130171. PHYTOLACCA SD.

No. 5526. From Mount Gibboh, Muli, at 2,300 m. altitude.

130172. PHYTOLACCA SD.

No. 10530. From Mount Mityetzumu, Atuntze, at 2,000 m. altitude.

130173. PHYTOLACCA ACINOSA ROXD.

Pokeberry.

No. 13567. From Haba, Chungtien, at 2,950 m. altitude. A stout, almost woody plant, closely resembling our native pokeberry and used as greens in the same way. Native to China and Japan.

For previous introduction see 81299.

130174 to 130176. PICEA spp. Pinaceae.

Spruce.

130174. PICEA Sp.

No. 7955. From Dokerla, Atuntze, at 3,200 m. altitude.

130175. PICEA SD.

No. 14717. From Jungchi, Muli, at 3,100 m. altitude.

130176. PICEA Sp.

No. 15119. From the Likiang Snow Range at 3,200 m. altitude.

130177 to 130190. PINUS Spp. Pinaceae.

Pine.

130177. PINUS Sp.

No. 8009. From the Likiang Snow Range at 2,800 m. altitude.

130178 and 130179. PINUS ARMANDI Franch.

Armand pine.

A tall 5-leaved pine 60 to 100 feet high, with a trunk often 6 feet in diameter that grows in western China on well-drained, moist mountain slopes between 3,000 and 5,000 m. altitude. The slender, bright-green leaves are about 4 inches long. The edible seeds are sold in Chinese markets.

For previous introduction see 111370.

130178. No. 8033. From the Likiang Snow Range at 2,850 m. altitude.

130179. No. 10500. From Mount Kaakerpu, Tehching, at 2,600 m. altitude. 130180. Pinus Yunnanensis Franch. Yunnan pine.

No. 10725. From west of Tungchuling, Weihsi, at 3,000 m. altitude. A large forest tree, native to Yunnan Province. The long, slender, drooping leaves are up to 10 inches long, and the cones, 2 to 4 inches long, have flat scales.

For previous introduction see 105025.

130181. PIPTANTHUS Sp. Fabaceae.

No. 13885. From the Chungtien Plateau at 3,250 m. altitude.

130182. PIPTANTHUS Sp. Fabaceae.

No. 14286. From Kulu, Muli, at 3,300 m. altitude.

130183 to 130185. PITTOSPORUM spp. Pittosporaceae.

130183. PITTOSPORUM Sp.

No. 10311. From Mount Kaakerpu, Atuntze, at 2,600 m. altitude.

130184. Ріттоѕровим ѕр.

No. 10922. From Lomahua, Chungtien, at 2,300 m. altitude.

130185. PITTOSPORUM Sp.

No. 14382. From Wachin, Muli, at 3,000 m. altitude.

130186. PLECTRANTHUS AMETHYSTOIDES Benth. Menthaceae.

No. 14884. From Lilang, Muli, at 2,600 m. altitude.

130187. PODOPHYLLUM sp. Berberidaceae.

No. 10658. From north of Tungchuling, Weihsi, at 4,000 m. altitude.

130188. Podophyllum sp. Berberidaceae.

No. 11318. From the Chungtien Plateau at 3,200 m, altitude.

130189. POLYGONATUM Sp. Convallariaceae.

No. 14297. From Kulu, Muli, at 3,200 m. altitude.

130190. Polygonatum sp. Convallariaceae.

No. 14797. From Shawan, Muli, at 3,000 m. altitude.

130191. Polygonum sp. Polygonaceae.

No. 10794. From Baimashan, Atuntze, at 4,100 m. altitude.

130192 to 130198. POTENTILLA spp. Rosaceae.

130192 to 130194. Potentilla siemersiana Lahm.

130192. No. 13469. From Wung, Chungtien, at 2,800 m. altitude.

130193. No. 13526. From Haba, Chungtien, at 2,200 m. altitude.

130194. No. 13605. From the Chungtien Plateau at 3,000 m. altitude.

130195. POTENTILLA GRIFFITHSII HOOK. f.

No. 14231. From Kulu, Muli, at 3,500 m. altitude. An erect or ascending herbaceous perennial 1 to 2 feet high, with compound leaves about 2 inches long and yellow flowers in panicled corymbs. Native to the Himalayas between 2,000 and 5,000 m. altitude.

For previous introduction see 111073.

130196 and 130197. POTENTILLA SIEMERSIANA Lehm.

130196. No. 14236. From Kulu, Muli, at 3,400 m. altitude.

130197. No. 14354. From Kulu, Muli, at 3,200 m. altitude.

130198. POTENTILLA Sp.

No. 14595. From Jinchang, Muli, at 3,800 m. altitude.

130199 to 130247. PRIMULA spp. Primulaceae.

130199. PRIMULA Sp.

No. 7702. From Gu-ma-den, Muli, at 3,300 m. altitude.

130200. PRIMULA Sp.

No. 7756. Shaw-shiang-liang-tze, Muli, at 3,700 m. altitude.

130201. PRIMULA Sp.

No. 8568. From Mount Kaakerpu, Atuntze, at 3,250 m. altitude. 130202. Primula sp.

No. 8681. From Mount Miyetzumu, Atuntze, at 3,600 m. altitude. 130203. Primula sp.

No. 10551. From Mount Miyetzumu, Atuntze, at 3,400 m. altitude. 130204. Primula sp.

No. 10652. From north of Tungchuling, Weihsi, at 4,000 m. altitude. 130205. Primula sp.

No. 10760. From Baimashan, Atuntze, at 4,100 m. altitude. 130206. Primula sp.

No. 10968. From Lichiashica, Chungtien, at 3,350 m. altitude. 130207. Primula sp.

No. 10970. From Lichiashica, Chungtien, at 3,450 m. altitude. 130208. Primula sp.

No. 10973. From Lichiashica, Chungtien, at 3,450 m. altitude. 130209. Primula sp.

No. 13144. From the Konkaling Snow Range at 4,000 m. altitude. 130210. Primula sp.

No. 13169. From the Konkaling Snow Range at 4,000 m. altitude. 130211. Primula sp.

No. 13433. From Tungwalung, Chungtien, at 3,600 m. altitude. 130212. Primula sp.

No. 13435. From Tungwalung, Chungtien, at 3,400 m. altitude.

130213. PRIMULA Sp.

No. 13520. From Haba, Chungtien, at 3,500 m. altitude.

130214. PRIMULA Sp.

No. 13521. From Haba. Chungtien, at 3,600 m. altitude.

130215. Primula sp.

No. 13541. From Haba, Chungtien, at 3,400 m. altitude.

130216. PRIMULA Sp.

No. 13603. From the Chungtien Plateau, at 3,000 m. altitude.

130217. PRIMULA Sp.

No. 13628. From Juatze, Chungtien, at 3,600 m. altitude.

130218. PRIMULA Sp.

No. 13629. From Juatze, Chungtien, at 3,600 m. altitude.

130219. PRIMULA Sp.

No. 13633. From Juatze, Chungtien, at 3,700 m. altitude.

130220. PRIMULA Sp.

No. 13651. From Juatze, Chungtien, at 3,600 m. altitude.

130221. PRIMULA Sp.

No. 13672. From the Chungtien Plateau, at 3,000 m. altitude.

130222. PRIMULA Sp.

No. 13738. From Shianrentung, Chungtien, at 3,700 m. altitude.

130223. PRIMULA Sp.

No. 13757. From Shianrentung, Chungtien, at 3,600 m. altitude.

130224. PRIMULA Sp.

No. 13843. From Tehgoh, Chungtien, at 3,150 m. altitude.

130225. PRIMULA Sp.

No. 13861. From Tehgoh, Chungtien, at 3,100 m. altitude.

130226. PRIMULA Sp.

No. 13879. From Tehgoh, Chungtien, at 3,150 m. altitude.

130227. PRIMULA Sp.

No. 13914. From Pica, Chungtien, at 3,400 m. altitude.

130228. PRIMULA SD.

No. 13930. From Pica, Chungtien, at 3,400 m. altitude.

130229. PRIMULA Sp.

No. 14222. From Kulu, Muli, at 3,500 m. altitude.

130230. PRIMULA Sp.

No. 14262. From Kulu, Muli, at 3,400 m. altitude.

130231. PRIMULA Sp.

No. 14321. From Yehtze, Muli, at 3,100 m. altitude.

130232. PRIMULA Sp.

No. 14535. From Sigenii, Muli, at 3,300 m. altitude.

130233. PRIMULA Sp.

No. 14543. From Sigenii, Muli, at 3,300 m. altitude.

130234. PRIMULA SD.

No. 14571. From Jinchang, Muli, at 3,800 m. altitude.

130235. PRIMULA Sp.

No. 14607. From Tinchang, Muli, at 4,000 m. altitude.

130236. PRIMULA Sp.

No. 14946. From Haba, Chungtien, at 3,400 m. altitude.

130237. PRIMULA SD.

No. 14972. From Haba, Chungtien, at 2,600 m. altitude.

130238. PRIMULA Sp.

No. 15132. From the Likiang Snow Range at 2,800 m. altitude.

130239. PRIMULA Sp.

No. 15133. From the Likiang Snow Range at 3,000 m. altitude. 130240. Primula sp.

No. 15143. From the Likiang Snow Range at 3,200 m. altitude. 130241. Primula sp.

No. 15161. From the Likiang Snow Range at 3,000 m. altitude. 130242. Primula sp.

No. 15167. From the Likiang Snow Range at 2,400 m. altitude. 130243. Primula sp.

No. 15211. From the Likiang Snow Range at 2,800 m. altitude. 130244. Primula sp.

No. 15299. From the Likiang Snow Range at 3,000 m. altitude. 130245. Primula sp.

No. 15351. From the Likiang Snow Range at 3,200 m. altitude. 130246. Primula sp.

No. 15539. From the Likiang Snow Range at 3,000 m. altitude. 130247. Primula sp.

No. 15637. From Hungpoh, Atuntze, at 3,800 m. altitude.

130248 and 130249. Prinsepia utilis Royle. Amygdalaceae.

A spiny, very ornamental shrub, native to Yunnan Province, between 3,000 and 4,000 m. altitude. In December and January the pendent branches bear a great profusion of white flowers. A cooking oil is expressed from the seeds, which are gathered by the Chinese and native tribes.

For previous introduction see 55719.

130248. No. 5364. From Yunning at 2,000 m. altitude.

130249. No. 6175. From Wachin, Muli, at 3,250 m. altitude.

130250 to 130256. Prunus spp. Amygdalaceae.

130250. PRUNUS Sp.

No. 8028. From the Likiang Snow Range at 2,700 m. altitude. 130251. Prunus sp.

No. 7728. Gu-ma-den, Muli, at 2,800 m. altitude.

130252. PRUNUS Sp.

No. 8410. From Mount Kaakerpu, Atuntze, at 3,200 m. altitude. 130253. Prunus sp.

No. 10822. From Baimashan, Atuntze, at 3,600 m. altitude.

130254. PRUNUS Sp.

No. 12775. From Wongshui, Chungtien, at 2,800 m. altitude.

130255. PRUNUS Sp.

No. 13474. From Puh, Chungtien, at 2,800 m. altitude.

130256. PRUNUS Sp.

No. 15046. From the Likiang Snow Range at 3,000 m. altitude.

130257 to 130259. PYRACANTHA spp. Malaceae.

130257. PYRACANTHA Sp.

No. 7985. From Hungpoh, Atuntze, at 2,600 m. altitude.

130258. PYRACANTHA Sp.

No. 14839. From Guhtzun, Muli, at 3,100 altitude.

130259. PYRACANTHA Sp.

No. 15074. From the Likiang Snow Range at about 3,000 m. altitude.

130260 to 130263. RHAMNUS spp. Rhamnaceae.

Buckthorn.

130260. RHAMNUS Sp.

No. 14086. From Muli at 2,500 m. altitude.

130261. RHAMNUS Sp.

No. 14123. From Muli at 2,500 m. altitude.

130262. RHAMNUS Sp.

No. 14415. From Wachin, Muli, at 3,100 m. altitude.

130263. RHAMNUS Sp.

No. 15077. From the Likiang Snow Range at 3,000 m. altitude.

130264 to 130270. RHEUM spp. Polygonaceae.

Rhubarb.

130264. Внеим вр.

No. 12849. From Mowuh, Taucheng, at 3,600 m. altitude.

130265. RHEUM Sp.

No. 13542. From Haba, Chungtien, at 3,400 m. altitude.

130266. Rнеим sp.

No. 13546. From Haba, Chungtien, at 3,500 m. altitude.

130267. RHEUM sp.

No. 13998. From Kungsinshuh, Chungtien, at 3,450 m. altitude.

130268. Rнеим sp.

No. 14364. From Kulu, Muli, at 3,300 m. altitude.

130269. RHEUM Sp.

No. 14586. From Jinchang, Muli, at 3,300 m. altitude.

130270. RHEUM sp.

No. 14656. From Jinchang, Muli, at 4,100 m. altitude.

130271 to 130315. Rhododendron spp. Ericaceae.

Nos. 130271 to 130276. Collected at Dokerla, Atuntze.

130271. RHODODENDRON Sp.

No. 7863. From 3,200 m. altitude.

130272. RHODODENDRON Sp.

No. 7868. From 3,200 m. altitude.

130273. RHODODENDRON Sp.

No. 7869. From 3,200 m. altitude.

130274. RHODODENDRON Sp.

No. 7872. From 3,700 m. altitude.

130275. RHODODENDRON Sp.

No. 7896. From 3,700 m. altitude.

130276. RHODODENDRON Sp.

No. 7934. From between 3,000 and 3,200 m. altitude.

Nos. 130277 to 130279. Collected at Hungpoh, Atuntze, at 3,700 m. altitude.

130277. RHODODENDRON Sp.

No. 7992.

130278. RHODODENDRON Sp.

No. 7994.

130279. RHODODENDRON Sp.

No. 8000.

130280. RHODODENDRON Sp.

No. 8610. From Mount Miyetzumu, Atuntze, at 3,350 m. altitude.

Nos. 130281 and 130282. Collected southwest of Atuntze at 3,400 m. altitude.

130281. RHODODENDRON Sp.

No. 10596.

130282. RHODODENDRON Sp.

No. 10599.

Nos. 130283 to 130287. Collected north of Tungchuling, Weihsi.

130283. RHODODENDRON Sp.

No. 10678. From 3,800 m. altitude.

130284. RHODODENDRON Sp.

No. 10682. From 4,000 m. altitude.

130285. RHODODENDRON Sp.

No. 10684. From 3,800 m. altitude.

130286. RHODODENDRON Sp.

No. 10685. From 3,800 m. altitude.

130287. RHODODENDRON Sp.

No. 10688. From 4,000 m. altitude.

130288. RHODODENDRON Sp.

No. 10937. From Lomahua, Chungtien, at 2,700 m. altitude.

130289 RHODODENDRON Sp.

No. 10993. From Lichiashica, Chungtien, at 3,200 m. altitude.

130290. RHODODENDRON Sp.

No. 14843. From Guhtzun, Muli, at 2,520 m. altitude.

130291. RHODODENDRON Sp.

No. 14935. From Chichih, Chungtien, at 2,500 m. altitude.

Nos. 130292 and 130293. From the Likiang Snow Range at 3,000 m. altitude.

130292. RHODODENDRON Sp.

No. 15027.

130293. RHODODENDRON Sp.

No. 15104.

130294. RHODODENDRON Sp.

No. 15656. From Hungpoh, Atuntze, between 3,500 and 3,600 m. altitude.

Nos. 130295 to 130297. From Shianrentung, Chungtien.

130295. RHODODENDRON SD.

No. 13723. From 3,300 m. altitude.

130296. RHODODENDRON Sp.

No. 13730. From 3,600 m. altitude.

130297. RHODODENDRON Sp.

No. 13806. From 3,700 m. altitude.

Nos. 130298 and 130299. From the Chungtien Plateau at 3,000 m. altitude.

130298. RHODODENDRON SD.

No. 13894.

130299. RHODODENDRON Sp.

No. 13895.

Nos. 130300 to 130302. From Pica, Chungtien, at 3,400 m. altitude.

130300. RHODODENDRON Sp.

No. 13919.

130301. RHODODENDRON Sp.

No. 13928.

130302. RHODODENDRON Sp.

No. 13931.

130303. RHODODENDRON SD.

No. 13986. From Kungsinshuh, Chungtien, at 3,400 m. altitude.

Nos. 130304 and 130305. From Wachin, Muli, at 3,100 m. altitude.

130304. RHODODENDRON Sp.

No. 14431.

130305. RHODODENDRON SD.

No. 14436.

Nos. 130306 to 130310. From Tinchang, Muli, between 4,000 and 4,100 m. altitude.

130306. RHODODENDRON Sp.

No. 14636.

130307. RHODODENDRON Sp.

No. 14641.

130308. RHODODENDRON Sp.

No. 14647.

130309. RHODODENDRON Sp.

No. 14662.

130310. RHODODENDRON Sp.

No. 14663.

130311. RHODODENDRON Sp.

No. 14703. From Wati, Muli, at 2,900 m. altitude.

130312. Rhododendron Searsiae Rehd, and Wils.

No. 14720. From Jungi, Muli, at 3,200 m. altitude. An upright evergreen shrub up to 15 feet high, with oblanceolate, acuminate leaves 2 to 3 inches long and terminal umbels of 3 to 8 white or pale-purple flowers of funnel-campanulate form and 1 to 2 inches across. Related to *Rhododendron concinnum* of the Triflorum series. Native to western China at altitudes of 2,500 to 3,500 m.

Nos. 130313 to 130315. From Deongomba, Muli, at 3,500 m. altitude.

130313. RHODODENDRON Sp.

No. 14752.

130314. RHODODENDRON Sp.

No. 14754.

130315. RHODODENDRON Sp.

No. 14757.

130316 to 130319. RHUS spp. Anacardiaceae.

Sumac.

130316. RHUS sp.

No. 10338. From Mount Kaakerpu, Atuntze, at 2,800 m. altitude.

130317. RHUS Sp.

No. 10374. From Mount Kaakerpu, Atuntze.

130318. RHUS Sp.

No. 14039. From Woosi, Muli, at 2,800 m. altitude.

130319. RHUS Sp.

No. 15664. From Hungpoh, Atuntze, at 2,200 m. altitude.

130320. Ribes sp. Grossulariaceae.

No. 13990. From Kungsinshuh, Chungtien, at 3,400 m. altitude.

130321 to 130338. Rosa spp. Rosaceae.

Rose.

130321. Rosa Brunonii Lindl.

Brown's rose.

No. 5381. From Yunning at 2,500 m. altitude. Also called the Himalayan Musk rose. A tall shrub with arching branches, short stout hooked prickles, and fragrant single white flowers about 2 inches across, borne in large, many-flowered clusters. Native to the Himalayas and also to western China.

For previous introduction see 58616.

130322. Rosa omeiensis Rolfe.

Mount Omei rose,

No. 13431. From Tungwalung at 3,700 m. altitude. A shrub up to 6 m. high, native to southwestern China between 3,000 and 4,000 m. altitude. The bush branches from the base, and the young branches, broadly winged, are carmine. The flowers are white.

For previous introduction see 129280.

130323. Rosa sp.

No. 10598. From southwest of Atuntze at 3,400 m. altitude.

Nos. 130324 and 130325. From west of Tungchuling, Weihsi, at  $3{,}000$  m. altitude.

130324. Rosa sp.

No. 10705.

130325. Rosa sp.

No. 10706.

130326. Rosa sp.

No. 10907. From Lomahua, Chungtien, at 2,400 m. altitude.

130327. Rosa sp.

No. 13232. From the Konkaling Snow Range, at 3,000 m. altitude.

130328. Rosa sp.

No. 13858. From Tehgoh, Chungtien, at 3,300 m. altitude.

130329. Rosa sp.

No. 13996. From Kungsinshuh, Chungtien, at 3,400 m. altitude.

130330. Rosa sp.

No. 14093. From Muli at 2,500 m. altitude.

130331. Rosa sp.

No. 14719. From Jungi, Muli, at 3,200 m. altitude.

130332. Rosa sp.

No. 14808. From Wachin, Muli, at 3,000 m. altitude.

130333. Rosa sp.

No. 14842. From Guhtzun, Muli, at 3,100 m. altitude.

130334. Rosa sp.

No. 14910. From Tahlah, Chungtien, at 3,480 m. altitude.

130335. Rosa sp.

No. 14942. From Haba, Chungtien, at 2,600 m. altitude.

130336. Rosa sp.

No. 15293. From the Likiang Snow Range at 2,800 m. altitude.

130337. Rosa sp.

No. 15634. From Hungpoh, Atuntze, at 3,800 m. altitude.

130338. ROSA SD.

No. 15657. From Hungpoh, Atuntze, at 3,600 m. altitude.

130339. Rubia sp. Rubiaceae.

No. 14833. From Mount Guhtzun, Muli, at 3,100 m. altitude.

130340 to 130343. Rubus spp. Rosaceae.
Nos. 130340 and 130341. From Gu-ma-den, Muli.

130340. RUBUS Sp.

No. 7731. From 3,000 m. altitude.

130341. RUBUS Sp.

No. 7740. From 2,900 m. altitude.

130342. Rubus sp.

No. 13556. From Haba, Chungtien, at 3,040 m. altitude.

130343. Rubus sp.

No. 14288. From Kulu, Muli, at 3,200 m. altitude.

130344 to 130347. Rumex spp. Polygonaceae.

130344. Rumex sp.

No. 10696. From west of Tungchuling, Weihsi, at 3,000 m. altitude. 130345. Rumex sp.

No. 10810. From Baimashan, Atuntze, at 4,000 m. altitude.

130346. RUMEX Sp.

No. 12883. From Konkaling at 3,100 m. altitude.

130347. Rumex sp.

No. 14908. From Tahlah, Chungtien, at 3,480 m. altitude.

130348. Salvia sp. Menthaceae.

No. 14501. From Wachin, Muli, at 3,000 m. altitude.

130349. Salvia sp. Menthaceae.

No. 14750. From Yatsa, Muli, at 3,280 m. altitude.

130350 to 130353. Sambucus spp. Caprifoliaceae.

130350. Sambucus sp.

No. 7442. From Lilang, Muli, at 2,800 m. altitude.

130351. Sambucus sp.

No. 10188. From Mount Yangtsa, Atuntze, at 3,250 m. altitude.

130352. Sambucus sp.

No. 10570. From Mount Miyetzumu, Atuntze, at 3,400 m. altitude.

130353. Sambucus sp.

No. 13206. From Tsungu, Konkaling, at 3,500 m. altitude.

130354. SAPINDUS Sp. Sapindaceae.

No. 15673. From Yeichih, Weihsi, at 2,400 m. altitude.

130355 to 130361. Saussurea sp. Asteraceae.

130355. SAUSSUREA Sp.

No. 13828. From Tehgoh, Chungtien, at 3,300 m. altitude.

130356. SAUSSUREA Sp.

No. 14234. From Kulu, Muli, at 3,500 m. altitude.

130357. SAUSSUREA Sp.

No. 14528. From Sigenii, Muli, at 3,300 m. altitude.

130358. SAUSSUREA Sp.

No. 14561. From Jinchang, Muli, at 3,800 m. altitude.

130359. SAUSSUREA Sp.

No. 14597. From Jinchang, Muli, at 3,800 m. altitude.

130360. SAUSSUREA Sp.

No. 14643. From Tinchang, Muli, at 4,000 m. altitude.

130361. SAUSSUREA Sp.

No. 15545. From the Likiang Snow Range at 2,800 m. altitude.

130362 to 130365. Saxifraga spp. Saxifragaceae.

130362. SAXIFRAGA Sp.

No. 13655. From Tuatze, Chungtien, at 3,700 m. altitude.

130363. SAXIFRAGA Sp.

No. 14627. From Tinchang, Muli, at 4,000 m. altitude.

130364. SAXIFRAGA Sp.

No. 14628. From Tinchang, Muli, at 4,000 m. altitude.

130365. SAXIFRAGA Sp.

No. 10672. From north of Tungchuling, Weihsi, at 3,800 m. altitude.

130366. Scabiosa sp. Dipsacaceae.

No. 13625. From the Chungtien Plateau at 3,100 m. altitude.

130367. Scabiosa sp. Dipsacaceae.

No. 14742. From Yatsa, Muli, at 3,100 m. altitude.

130368. SCHIMA sp. Theaceae.

No. 10924. From Lomahua, Chungtien, at 2,300 m. altitude.

130369. SCHIZANDRA Sp. Magnoliaceae.

No. 10483. From Mount Kaakerpu, Atuntze, at 3,000 m. altitude.

130370. SCHIZANDRA Sp. Magnoliaceae.

No. 13497. From Haba, Chungtien, at 3,000 m. altitude.

130371 to 130373. SEDUM spp. Crassulaceae.

130371. SEDUM Sp.

No. 10995. From Lichiashica, Chungtien, at 3,200 m. altitude.

130372. SEDUM SD.

No. 14432. From Wachin, Muli, at 3,100 m. altitude.

130373. SEDUM Sp.

No. 14826. From Guhtzun, Muli, at 3,100 m. altitude.

130374. SIBIRAEA Sp. Rosaceae.

No. 13093. From the Konkaling Snow Range, between 3,700 and 4,000 m. altitude.

130375. Sibiraea sp. Rosaceae.

No. 14359. From Kulu, Muli, at 3,200 m. altitude.

130376. Siegesbeckia orientalis L. Asteraceae.

No. 14500. From Wachin, Muli, at 2,800 m. altitude. An erect, yellow-flowered annual up to 3 feet high, native to the Tropics of both hemispheres.

For previous introduction see 114801.

130377. SILENE Sp. Silenaceae.

No. 14671. From Tinchang, Muli, at 4,100 m. altitude.

130378 to 130380. Sopнora davidii (Franch.) Komarow. Fabaceae. Vetchleaf sophora.

A spiny shrub up to 6 feet high, with slender spreading pubescent branchlets, native to central and western China. The pinnately compound leaves, 1 to 2 inches long, have 11 to 15 small elliptic leaflets, and the violet to white, peashaped flowers, ½ inch long, are in racemes of 6 to 12 on short terminal branchlets.

For previous introduction see 103469.

130378. No. 7330. From Muli at 2,000 m. altitude.

130379. No. 10213. From Atuntze at 2,850 m. altitude.

130380. No. 14381. From Wachin, Muli, at 3,000 m. altitude.

130381 to 130383. Sorbaria spp. Rosaceae.

False-spirea.

130381. Sorbaria arborea C. Schneid.

Tree-spirea.

No. 7821. From Dokerla, Atuntze, at 2,700 m. altitude. A tree from 10 to 35 feet high, with the young twigs olive gray. The leaves are lance-shaped or more often oblong, with the lower surfaces more or less hairy and the margin serrate. The white flowers are about ½ inch wide, and the fruit is probably 1/16 of an inch in diameter.

For previous introduction see 43727.

130382. Sorbaria sp.

No. 10591. From southwest of Atuntze at 3,200 m. altitude.

130383. Sorbaria sp.

No. 10715. From west of Tungchuling, Weihsi, at 3,000 m. altitude.

130384 to 130387. Sorbus spp. Malaceae.

130384. Sorbus sp.

No. 7845. From Dokerla, Atuntze, at 3,100 m. altitude.

130385. SORBUS Sp.

No. 10508. From Mount Kaakerpu, Atuntze, at 3,300 m. altitude.

130386. SORBUS Sp.

No. 14718. From Jungchi, Muli, at 3,200 m. altitude.

130387. SORBUS Sp.

No. 14919. From Paitih, Chungtien, at 3,000 m. altitude.

130388 and 130389. Spenceria ramalana Trimen. Rosaceae.

A free-flowering and attractive herbaceous perennial about 1 foot high, with erect or ascending stems covered with silvery hairs. The stem leaves are reduced to 1 or 2 pairs of narrowly oval leaflets, and the golden or red-yellow flowers are in stiff open racemes. Native to dry upland pastures of western Szechwan and Yunnan.

For previous introduction see 100225.

130388. No. 13699. From the Chungtien Plateau at 3,100 m. altitude.

130389. No. 14553. From Jinchang, Muli, at 3,800 m. altitude.

130390 to 130393. SPIRAEA Spp. Rosaceae.

130390. SPIRAEA Sp.

No. 14399. From Wachin, Muli, at 3,100 m. altitude.

Nos. 130391 to 130393. From Sigenii, Muli, at 3,300 m. altitude.

130391. SPIRAEA SD.

No. 14521.

130392. SPIRAEA Sp.

No. 14522.

130393. SPIRAEA Sp.

No. 14532.

130394 to 130398. SWERTIA spp. Gentianaceae.

130394. SWERTIA Sp.

No. 7983. From Hungpoh, Atuntze, at 2,600 m. altitude.

130395. SWERTIA Sp.

No. 14614. From Jinchang, Muli, at 4,000 m. altitude.

130396. SWERTIA Sp.

No. 14730. From Yatsa, Muli, at 3,100 m. altitude.

130397. SWERTIA Sp.

No. 14937. From Chichih, Chungtien, at 2,600 m. altitude.

130398. SWERTIA Sp.

No. 15108. From Likiang Snow Range at 3,000 m. altitude.

130399. TARAXACUM sp. Cichoriaceae.

Dandelion.

No. 7767. From Shaw-shiang-liang-tze, Muli, at 3,000 m. altitude.

130400. Taraxacum officinale Weber. Cichoriaceae.

Dandelion.

No. 14167. From Muli at 2,500 m. altitude.

130401 to 130410. THALICTRUM Spp. Ranunculaceae.

Meadowrue.

130401. THALICTRUM Sp.

No. 10185. From Mount Yangtsa, near Atuntze, at 3,250 m. altitude.

130402. THALICTRUM Sp.

No. 10511. From Mount Kaakerpu, Atuntze, at 3,300 m. altitude.

130403. THALICTRUM Sp.

No. 10568. From Mount Miyetzumu, Atuntze, at 3,400 m. altitude.

130404. THALICTRUM Sp.

No. 10992. From Lichiashica, Chungtien, at 3,200 m. altitude.

130405. THALICTRUM Sp.

No. 13623. From the Chungtien Plateau, at 3,100 m. altitude.

130406. THALICTRUM Sp.

No. 14273. From Kulu, Muli, at 3,200 m. altitude.

130407. THALICTRUM Sp.

No. 14409. From Wachin, Muli, at 3,100 m. altitude.

130408. THALICTRUM Sp.

No. 14421. From Wachin, Muli, at 3,100 m. altitude.

130409. THALICTRUM Sp.

No. 14746. From Deongomba, Muli, at 3,200 m. altitude.

130410. THALICTRUM Sp.

No. 15480. From the Likiang Snow Range at 3,000 m. altitude.

130411. TILIA sp. Tiliaceae.

No. 15540. From the Likiang Snow Range at 3,000 m. altitude. 130412. Tilia sp. Tiliaceae.

No. 14723. From Tungi, Muli, at 2,800 m. altitude.

130413. Trigonotis sp. Boraginaceae.

No. 14499. From Yunnanpuh, Muli, at 2,500 m. altitude.

130414. Triosteum sp. Caprifoliaceae.

No. 14246. From Kulu, Muli, at 3,400 m. altitude.

130415. Tsuga sp. Pinaceae.

No. 7939. From Dokerla, Atuntze, between 2,900 and 3,100 m. altitude.

130416. Verbena officinalis L. Verbenaceae.

European vervain.

No. 10518. From Mount Kaakerpu, Atuntze, at 3,000 m. altitude.

130417. Veronica sp. Scrophulariaceae.

No. 7699. From Mount Mitzuga, Mull, at 3,300 m. altitude.

130418. Veronica sp. Scrophulariaceae.

No. 10898. From Baimashan, Atuntze, at 3,200 m. altitude.

130419 to 130429. VIBURNUM spp. Caprifoliaceae.

130419. VIBURNUM SD.

No. 7948. From Dokerla, Atuntze, at 2,800 m. altitude.

130420. VIBURNUM Sp.

No. 10911. From Lomahua, Chungtien at 2,400 m. altitude.

130421. VIBURNUM Sp.

No. 13446. From Tungwalung, Chungtien, at 3,000 m. altitude.

130422. VIBURNUM Sp.

No. 13485. From Haba, Chungtien, at 2,300 m. altitude.

130423. VIBURNUM Sp.

No. 13557. From Haba, Chungtien, at 2,600 m. altitude.

130424. VIBURNUM Sp.

No. 13561. From Haba, Chungtien, at 2,800 m. altitude.

130425. VIBURNUM Sp.

No. 14116. From Muli at 2,520 m. altitude.

130426. VIBURNUM Sp.

No. 14383. From Wachin, Muli, at 3,000 m. altitude.

130427. VIBURNUM Sp.

No. 14856. From Guhtzun, Muli, at 2,500 m. altitude.

130428. VIBURNUM Sp.

No. 14961. From Haba, Chungtien, at 2,700 m. altitude.

130429. VIBURNUM Sp.

No. 15163. From the Likiang Snow Range at about 3,000 m. altitude.

130430. VITEX sp. Verbenaceae.

Chaste-tree.

No. 14714. From Jungchi, Muli, at 3,300 m. altitude.

130431. VITEX sp. Verbenaceae.

Chaste-tree.

No. 14879. From Lilang, Muli, at 2,600 m. altitude.

130432. VITIS sp. Vitaceae.

Grape.

No. 10575. From Mount Miyetzumu, Atuntze, at 3,400 m. altitude.

130433. Vitis sp. Vitaceae.

Grape.

No. 13506. From Haba, Chungtien, at 2,800 m. altitude.

130434 to 130439. Lyonia spp. Ericaceae.

130434. LYONIA Sp.

No. 7963. From Dokerla, Atuntze, at 2,800 m. altitude.

130435. LYONIA Sp.

No. 10896. From Baimashan, Atuntze, at 3,200 m. altitude.

130436. LYONIA Sp.

No. 13884. From Tehgoh, Chungtien, at 3,300 m. altitude.

130437. LYONIA Sp.

No. 14702. From Wati, Muli, at 2,900 m. altitude.

130438. LYONIA Sp.

No. 15045. From the Likiang Snow Range at 3,000 m. altitude.

130439. LYONIA Sp.

No. 15322. From the Likiang Snow Range at 2,800 m. altitude.

130440. Setaria sp. Poaceae.

Grass.

From Canada. Seeds presented by Rev. Kenneth H. Prior, Toronto. Received September 8, 1938.

Originally from Angola, Africa. A grass which tolerates considerable shade.

#### 130441. Figus carica L. Moraceae.

Common fig.

From India. Seeds presented by J. G. Burns, Superintendent, Kumaun, Government Gardens, Chaubattia, United Provinces. Received September 12, 1938.

130442. Rubus coreanus Miquel. Rosaceae. Korean raspberry.

From Maryland. Cuttings presented by George M. Darrow, Bureau of Plant Industry, Beltsville. Received July 8, 1938.

A deciduous shrub 8 to 10 feet high, native to China and Chosen, with erect or arching, stout biennial stems. The pinnate leaves, 6 to 10 inches long, are usually composed of 7 ovate, dark, lustrous green, coarsely toothed leaflets. The fruit, varying in color from red to nearly black, is edible but small and of poor flavor.

For previous introduction see 113814.

# 130443. Salvia Hispanica L. Menthaceae.

Sage.

From Mexico. Seeds presented by W. T. Swingle, Bureau of Plant Industry, United States Department of Agriculture. Received September 22, 1938.

Chia. For previous introduction see 47126.

# 130444 and 130445. Cortaderia spp. Poaceae.

Grass.

From South America. Plants collected by E. W. Brandes, Bureau of Plant Industry, United States Department of Agriculture. Received September 20, 1938.

130444. Cortaderia sp.

From Ipiales, Colombia.

130445. CORTADERIA BIFIDA Pilger.

From Tulcan, Ecuador. A grass with stems mostly 3 feet high, or taller, and loose panicles 4 to 8 inches long. Native to rocky or partially wooded slopes from Ecuador to Bolivia.

# 130446. Ananas comosus (L.) Merr. Bromeliaceae. Pineapple.

From Guatemala. Offshoots collected by J. L. Collins, Canal Zone Experiment Gardens, Summit, Canal Zone. Received September 23, 1938.

From near Antigua, at 5,100 feet altitude. A cultivated variety growing in a yard.

# 130447 to 130449. Poa pratensis L. Poaceae. Kentucky bluegrass.

From Canada. Seeds presented by Dr. O. McConkey, Ontario Agricultural College, Guelph. Received September 26, 1938.

130447. O. A. C. No. 1.

130448. O. A. C. No. 2.

130449. Weibull No. 5720.

# 130450. Cucurbita Moschata Duchesne. Cucurbitaceae. Cushaw.

From Florida. Seeds presented by Wyndham Hayward, Winter Park. Received September 22, 1938.

Indian Pumpkin. A rank-growing, very productive vine whose fruits make excellent pies.

# 130451. Puya Alpestris (Poepp. and Endl.) Gay. Bromeliaceae.

From England. Plants purchased from Clarence Elliott, Ltd., Six Hills Nursery, Stevenage, Herts. Received September 28, 1938.

A herbaceous perennial with leaves like a yucca and a flower stalk 3 to 4 feet high, bearing a much-branched panicle of large showy metallic-blue flowers. Native to Chile.

For previous introduction see 76485.

# 130452. Bougainvillea. Nyctaginaceae.

From Cuba. Seeds collected at the Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, by T. R. Fennell, Bureau of Plant Industry, United States Department of Agriculture. Received May 5, 1930. Numbered in September 1938.

Jasper. A seedling variety of uncertain parentage. The immature bracts are pomegranate purple to spinel red (Ridgway), becoming near jasper red with maturity, similar in these respects to Bougainvillea spectabilis var. lateritia, which is thought probably to be one of the parents. This new variety is superior to the latter, however, in being more compact in growth and freer flowering.

#### 130453 to 130463. Solanum. Solanaceae.

From the Dutch East Indies. Tubers presented by A. M. Cramer, Sr., Wonosobo, Java. Received September 28, 1938.

A collection of Russian hybrid potatoes.

130453. Solanum demissum  $\times$  Ailbeka  $\times$  Ailbeka-6506-172-18.

130454. Solanum demissum × Ailbeka × Ailbeka-6506-172-47.

130455. Solanum demissum  $\times$  Helka  $\times$  Ailbektar-6506-172-41.

130456. Solanum demissum × Stebika × Stebika-6506-172-91.

130457. Solanum demissum  $\times$  Alma  $\times$  Ka(d) margum-6506-173-15.

130458. Solanum demissum  $\times$  Alma  $\times$  Ka(d) margum-6506-173-17.

130459. Solanum demissum  $\times$  Ailbeka  $\times$  Tobello-6506-175-55.

130460. Solanum demissum  $\times$  Ailbeka  $\times$  Tobello-6506-175-60.

130461. Solanum demissum × Podhaparni × Pooudhaparni-6516-181-61.

130462. Solanum antipoviczii × Chupadninc F. 2. No. 22-44-210-25-86.

130463. Potladedruc × Solanum andigenum f. tocanum-7113-7-6589-58.

# 130464 and 130465. Figure Carica L. Moraceae.

Common fig.

From Texas. Cuttings presented by R. H. Stansel, Texas Agricultural Experiment Sub-Station 3, Angleton. Received March 9, 1934. Numbered in September 1938.

130464. Allison.

130465. Brown Turkey "E."

# 130466. Diospyros sinensis Hemsl. Diospyraceae. Persimmon.

From Washington, D. C. Plants growing in the Department of Agriculture greenhouse, under the direction of the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry. Numbered in September 1938.

C. P. B. No. 10526.

#### 130467 to 130545.

From China. Seeds collected by T. T. Yu, with the Yunnan Expedition of the Fan Memorial Institute of Biology, Peiping, and presented through the Arnold Arboretum, Jamaica Plain, Mass. Received September 29, 1938.

130467 to 130470. ACANTHOPANAX spp. Araliaceae.

130467. ACANTHOPANAX Sp.

No. 7852. From Dokerla, Atuntze, at 3,100 m. altitude.

130468. ACANTHOPANAX Sp.

No. 7980. From Hungpoh, Atuntze, at 2,600 m. altitude.

130469. ACANTHOPANAX SD.

No. 8426. From Mount Kaakerpu, Atuntze, at 3,200 m. altitude.

130470. ACANTHOPANAX Sp.

No. 10558. From Mount Miyetzumu, Atuntze, at 3,000 m. altitude.

130471. Alyssum sp. Brassicaceae.

No. 14270. From Kulu, Muli, at 3,300 m. altitude.

130472. Ampelopsis sp. Vitaceae.

No. 14044. From Woosi, Muli, at 2,600 m. altitude.

130473. Amygdalus sp. Amygdalaceae.

No. 14374. From Wachin, Muli, at 3,100 m. altitude.

130474. Andromeda sp. Ericaceae.

No. 4998. From Hungpoh, Atuntze, at 3,700 m. altitude.

130475. Aralia sp. Araliaceae.

No. 14162. From Muli at 2.650 m. altitude.

# 130467 to 130545—Continued

130476. Arctium sp. Asteraceae.

No. 13945. From Pica, Chungtien, at 3,100 m. altitude.

130477. Arisaema sp. Araceae.

No. 13565. From Haba, Chungtien, at 3,100 m. altitude.

130478. ASCLEPIAS Sp. Asclepiadaceae.

No. 13669. From Tuatze, Chungtien, at 3,400 m. altitude.

130479. Bergenia sp. Saxifragaceae.

No. 13518. From Haba, Chungtien, at 3,500 m. altitude.

130480. Betula utilis D. Don. Betulaceae.

Birch.

No. 14547. A tree 40 to 60 feet high, with a red-brown trunk and branches and bark which peels off in papery flakes. It is native to subtropical regions of the Himalayas. The oval, coarsely toothed, sharp-pointed leaves, 3 inches long, are dark green above and paler beneath. In winter the orange-chocolate color of the twigs is very striking.

For previous introduction see 128933.

130481. Brassaiopsis sp. Araliaceae.

No. 11322. From Chihren, Chungtien, at 2,400 m. altitude.

130482 to 130484. Carex spp. Cyperaceae.

130482. CAREX Sp.

No. 14624. From Tinchang, Muli, at 4,000 m. altitude.

130483. CAREX SD.

No. 14626. From Tinchang, Muli, at 4,000 m. altitude.

130484. CAREX Sp.

No. 14691. From Wati, Muli, at 3,250 m. altitude.

130485. CARUM Sp. Apiaceae.

No. 14251. From Kulu, Muli, at 3,400 m. altitude.

130486. CARUM Sp. Apiaceae.

No. 14579. From Jinchang, Muli, at 3,800 m. altitude.

130487. Chaerophyllum sp. Apiaceae.

No. 13612. From the Chungtien Plateau, at 3,000 m. altitude.

130488, Chrysanthemum sp. Asteraceae.

No. 13917. From Pica, Chungtien at 3,400 m. altitude.

130489. CIMICIFUGA Sp. Ranunculaceae.

No. 13480. From Gonzah, Chungtien, at 3,000 m. altitude.

130490. CLINTONIA sp. Convallariaceae.

No. 13455. From Tungwalung, Chungtien, at 3,400 m. altitude.

130491. Cortia sp. Apiaceae.

No. 14605. From Tinchang, Muli, at 4,000 m. altitude.

130492. Cortia sp. Apiaceae.

No. 15221. From the Likiang Snow Range at 2,800 m. altitude.

130493. Cyananthus sp. Campanulaceae.

No. 13733. From Shianrentung, Chungtien, at 3,600 m. altitude.

130494. Dicranostigma sp. Papaveraceae.

No. 13545. From Haba, Chungtien, at 3,500 m. altitude.

#### 130467 to 130545—Continued

130495 to 130497. ELSHOLTZIA Spp. Menthaceae.

130495. ELSHOLTZIA Sp.

No. 14712. From Buraton, Muli, at 2,900 m. altitude.

130496. ELSHOLTZIA Sp.

No. 14789. From Longi, Muli, at 2,800 m. altitude.

130497. ELSHOLTZIA Sp.

No. 14960. From Haba, Chungtien, at 2,500 m. altitude.

130498. EUPATORIUM JAPONICUM Thunb. Asteraceae.

No. 1206. From Atuntze, at 2,850 m. altitude. A tall herbaceous perennial, with lower leaves deeply 3-parted, simple upper leaves, and clusters of dull, purplish to greenish-white flower heads. Native to Japan.

130499. Ferula sp. Apiaceae.

No. 7889. From Dokerla, Atuntze, at 3,500 m. altitude.

130500. FILIPENDULA sp. Rosaceae.

No. 13964. From Chingkon, Chungtien, at 3,000 m. altitude.

130501. Fragaria sp. Rosaceae.

No. 13909. From Pica, Chungtien, at 3,200 m. altitude.

130502. Gentiana sp. Gentianaceae.

No. 10753. From Baimashan, Atuntze, at 4,100 m. altitude.

130503. GENTIANA sp. Gentianaceae.

No. 14787. From Longi, Muli, at 2,800 m. altitude.

130504. Hedychium sp. Zingiberaceae.

No. 10920. From Lomahua, Chungtien, at 2,200 m. altitude.

130505. HYOSCYAMUS NIGER L. Solanaceae.

Henbane.

No. 13684. From the Chungtien Plateau, at 3,100 m. altitude.

For previous introduction see 113170.

130506. IPOMOEA sp. Convolvulaceae.

No. 14809. From Wutzupuh, Muli, at 2,800 m. altitude.

130507. LACTUCA sp. Cichoriaceae.

Lettuce.

No. 10588. From southwest of Atuntze, at 3,200 m. altitude.

130508. LYCHNIS sp. Silenaceae.

No. 13753. From Shianrentung, Chungtien, at 3,600 m. altitude.

130509. LYCIUM Sp. Solanaceae.

No. 13692. From the Chungtien Plateau at 3,100 m. altitude.

130510. Marsdenia sp. Asclepiadaceae.

No. 14851. From Guhtzun, Muli, at 2,500 m. altitude.

130511 to 130513. Pastinaca spp. Apiaceae.

130511. PASTINACA Sp.

No. 10981. From Lichiashica, Chungtien, at 3,600 m. altitude.

130512. PASTINACA Sp.

No. 13483. From the Chungtien Plateau, at 3,000 m. altitude.

130513. PASTINACA Sp.

No. 14153. From Muli at 3,000 m. altitude.

#### 130467 to 130545—Continued

130514. PITTOSPORUM Sp. Pittosporaceae.

No. 14825. From Guhtzun, Muli, at 3,100 m. altitude.

130515. Plectranthus sp. Menthaceae.

No. 14545. From Sigenii, Muli, at 3,300 m. altitude.

130516. Pleurospermum sp. Apiaceae.

No. 13714. From Shianrentung, Chungtien, at 3,500 m. altitude.

130517. Pogostemon sp. Menthaceae.

No. 10927. From Lomahua, Chungtien, at 2,400 m. altitude.

130518. POLYGONATUM sp. Convallariaceae.

No. 10458. From Mount Kaakerpu, Atuntze, at 2,600 m. altitude.

130519. Polygonum sp. Polygonaceae.

No. 10593. From southwest of Atuntze at 3,200 m. altitude.

130520. PRUNELLA VULGARIS L. Menthaceae.

No. 14242. From Kulu, Muli, at 3,400 m. altitude.

130521 to 130523. Salvia spp. Menthaceae.

130521. SALVIA Sp.

No. 14221. From Kulu, Muli, at 3,400 m. altitude.

130522. SALVIA Sp.

No. 15450. From the Likiang Snow Range at 2,800 m. altitude. 130523. Salvia sp.

No. 14533. From Sigenii, Muli, at 3,300 m. altitude.

130524. Plectranthus sculponeatus Vaniot. Menthaceae.

No. 14706. From Buraton, Muli, at 2,900 m. altitude.

130525. Sanicula sp. Apiaceae.

No. 10208. From Atuntze at 2,850 m. altitude.

130526. SANICULA Sp. Apiaceae.

No. 10306. From Kaakerpu, Atuntze, at 2,600 m. altitude.

130527 to 130529. Selinum spp. Apiaceae.

130527. SELINUM Sp.

No. 13721. From Shianrentung, Chungtien, at 3,600 m. altitude. 130528. Selinum sp.

No. 14232. From Kulu, Muli, at 3,500 m. altitude.

130529. SELINUM Sp.

No. 15478. From the Likiang Snow Range at 3,000 m. altitude. 130530. Seseli sp. Apiaceae.

No. 13865. From Chiren, Chungtien, at 3,100 m. altitude.

130531. SILENE VISCIDULA Franch. Silenaceae.

No. 14291. From Kulu, Muli, at 3,200 m. altitude.

130532. Swertia sp. Gentianaceae.

No. 13514. From Haba, Chungtien, at 3,500 m. altitude.

130533. Swertia sp. Gentianaceae.

No. 15391. From the Likiang Snow Range at 2,900 m. altitude.

# 130467 to 130545-Continued

130534. TAGETES ERECTA L. Asteraceae.

Aztec marigold.

No. 14818. From Guhtzun, Muli, at 3,000 m. altitude.

For previous introduction see 24085.

130535. Tephrosia sp. Fabaceae.

No. 10520. From Mount Kaakerpu, Atuntze, at 3,000 m. altitude.

130536. THLADIANTHA DUBIA Bunge. Cucurbitaceae.

No. 14152. From Muli at 2,500 m. altitude. A tuberous-rooted climber with pale-green, heart-shaped leaves and numerous campanulate yellow flowers. Native to northern China.

For previous introduction see 110502.

130537 to 130539. Trollius spp. Ranunculaceae.

130537. TROLLIUS Sp.

No. 13826. From Tehgoh, Chungtien, at 3,300 m. altitude.

130538. TROLLIUS Sp.

No. 14235. From Kulu, Muli, at 3,500 m. altitude.

130539. Trollius sp.

No. 14748. From Deongomba, Muli, at 3,200 m. altitude.

130540 to 130544. Verbascum thapsus L. Scrophulariaceae. Common mullein.

130540. No. 7953. From Dokerla, Atuntze, at 2,700 m. altitude.

130541. No. 10517. From Mount Kaakerpu, Atuntze, at 3,000 m. altitude.

130542. No. 14417. From Wachin, Muli, at 3,100 m. altitude.

130543. No. 14940. From Haba, Chungtien, at 2,600 m. altitude.

130544. No. 15228. From the Likiang Snow Range at 2,800 m. altitude.

130545. VITIS sp. Vitaceae.

No. 14094. From Woosi, Muli, at 2,500 m. altitude.

#### 130546 to 130552.

From Uruguay. Seeds presented by J. A. Scasso, Director of Public Parks, Montevideo. Received September 27, 1938.

130546. Berberis Laurina Thunb. Berberidaceae.

Barberry.

A barberry with leathery, entire, ovate-elliptic leaves, mostly over 2 inches long, and dense lax racemes of yellow flowers, followed by small black fruits. Native to southern Brazil.

130547. CLEMATIS HILARII Spreng. Ranunculaceae.

A tropical climbing shrub with ternate or nearly ternate leaves 2 to 4 inches wide and fragrant, blue-white flowers. It is native to southeastern Brazil.

For previous introduction see 102736.

130548. HIPPEASTRUM BIFIDUM (Herbert) Baker. Amaryllidaceae.

A hippeastrum with 2 or 3 linear leaves 1 foot long, appearing after the flowers, and 3 to 6 bright-red, erect or nearly erect flowers about 2 inches long in an umbel. Native to Argentina.

130549. VERBENA LACINIATA (L.) Briq. Verbenaceae.

A prostrate herb with purple flowers.

For previous introduction see 119916.

#### 130546 to 130552—Continued

130550. Verbena venosa Gill. and Hook. Verbenaceae.

A tuberous rooted, herbaceous perennial with simple or branching stems up to 3 feet high, sharply toothed oblong leaves 2 to 3 inches long, and dense spikes of purplish-pink flowers. Native to Argentina.

130551. Habranthus andersoni Herbert. Amaryllidaceae.

A bulbous perennial, native to Argentina, with narrowly linear, pale-green leaves 6 inches long and a scape as long as the leaves, bearing a lilylike flower 1 inch long, bright yellow inside and coppery red outside.

For previous introduction see 92501.

130552. ZEPHYRANTHES MESOCHLOA Herbert. Amaryllidaceae.

A zephyrlily with about 8 narrow linear leaves and a scape 4 to 9 inches long, with a flower, greenish on the lower half and white or slightly reddish, rarely yellowish above.

Native to Argentina.

# 130553. Gossypium. Malvaceae.

Cotton.

From Egypt. Seeds presented by the Société Royale d'Agriculture, Cairo. Received September 30, 1938.

Maarad cotton, strain 368 (selfed seeds).

#### 130554 to 130556.

From Africa. Seeds presented by the Department of Agriculture, Nairobi, Kenya Colony. Received September 19, 1938.

130554 and 130555. Sorghum vulgare Pers. Poaceae.

Sorghum.

130554. Dobbs.

130555. Kano.

130556. ZEA MAYS L. Poaceae.

Corn.

#### 130557 to 130564.

From Mexico. Seeds collected in Baja California by and purchased from Howard E. Gates, Anaheim, Calif. Received September 29, 1938.

130557. ECHINOCACTUS LATISPINUS (Haw.) Hemsl. (Ferocactus latispinus Britt. and Rose). Cactaceae. Cactus.

A simple globular or depressed cactus about 1 foot high, with numerous prominent ribs, large areoles, 6 to 10 slender, annulate, white to rose radical spines 1 inch long, and 4 or more stouter and more highly colored central spines. The campanulate flowers, varying in color from white to rose, are 1 inch long. Native to Mexico.

130558. Echinocactus acanthodes Lem. (Ferocactus acanthodes Britt. and Rose). Cactaceae. Cactus.

A tall, very spiny, cylindrical cactus, globular at first, sometimes 10 feet high, with numerous acute ribs; it has large, closely set areoles and white, purplish, or bright-red spines, the central ones subulate, spreading, the radical spines usually pungent. The yellow to orange campanulate flowers are about 2 inches long and usually broader than long. Native to southeastern California, northern Baja California, and southern Nevada.

130559. ECHINOCACTUS PENINSULAE Weber (Ferocactus peninsulae Britt. and Rose). Cactaceae. Cactus.

A simple erect plant becoming cylindric in age and attaining a height of 8 feet, which is unusual for the genus. The ribs number 12 to 20 and are close set with areoles bearing 11 radical and 4 central spines. The red spines, with yellow tips, make this a very colorful plant. Native to Baja California.

## 130557 to 130564—Continued

130560. ECHINOCACTUS RECTISPINUS (Engelm.) Britt. and Rose (Ferocactus rectispinus Britt. and Rose). Cactaceae. Cactus.

A spiny, globose to cylindric cactus, 3 to 6 feet high, with stout straight or curved spines up to 5 inches long and yellowish flowers about 3 inches long. Native to Baja California.

130561. ECHINOCACTUS VIRIDESCENS TORR. and Gray (Ferocactus viridescens (Torr. and Gray) Britt. and Rose). Cactaceae. Cactus.

A deep-green, somewhat glossy cactus, nearly globose when young, becoming cylindric in age, with a diameter of 10 to 15 inches. It has 13 to 30 rounded and undulate ribs. The areoles have 9 to 20 radial spines and 4 central spines, of which the lowest one is stoutest and flattest. The spines are bright red at first, but later become yellowish or horn-colored. The flowers are yellowish green. Native to Baja California.

130562. ECHINOCACTUS Sp. Cactaceae.

Cactus.

130563. Fouquieria splendens Engelm. Fouquieriaceae.

An American desert plant which produces graceful clumps of thorny, arching stems up to 15 feet high. Each stem is terminated in the spring by one or more racemes of scarlet flowers. The stems throughout their length are clothed with leaves on short spurs. In extreme droughts the leaves are shed, but are replaced after each rain.

130564. FOUQUIERIA Sp. Fouquieriaceae.

130565 to 130568. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Africa. Tubers presented by the Department of Agriculture, Nairobi, Kenya Colony. Received September 19, 1938.

130565. Kiganda.

130567. Muburi.

130566. Rumora.

130568. Nduhia.

#### 130569 to 130579.

From China. Seeds collected by T. T. Yu, with the Yunnan Expedition of the Fan Memorial Institute of Biology, Peiping, and presented by Mrs. J. Norman Henry. Received September 13, 1938.

130569. Anemone sp. Ranunculaceae.

No. 10999.

130570. Anemone sp. Ranunculaceae.

No. 15055.

130571. ASTER Sp. Asteraceae.

No. 13670.

130572. Iris sp. Iridaceae.

No. 13259.

130573 to 130577. Polygonum spp. Polygonaceae.

130573. POLYGONUM Sp.

No. 7915.

130574. POLYGONUM Sp.

No. 10733.

130575. POLYGONUM AUBERTI L. Henry.

No. 14121.

130576. Polygonum cymosum Trevir. (Fagopyrum cymosum Meissn.).

No. 14478. A tall branching herbaceous perennial with large leaves, used in India as greens. Native to the temperate Himalayan region.

# 130569 to 130579—Continued

130577. Polygonum sp.

No. 14965.

130578. Senecio sp. Asteraceae.

No. 10989.

130579. Senecio sp. Asteraceae.

No. 13547.

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Opuntia sp., 129850. Osteomeles sp., 130157.

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Armand. See P. armandi. Yunnan. See P. yunnanensis.

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Pittosporum spp., 130183-130185, 130514. colensoi, 129794.

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Pleurospermum sp., 130516. Plum, common. See Prunus domestica.

Japanese. See P. salicina. Poa alpina, 129874-129877. pratensis, 130447-130449.

Podocarpus ferruginea, 129796. Podophyllum spp., 130187, 130188. Pogostemon sp., 130517.

Pokeberry. See Phytolacca acinosa. Polygonatum spp., 130189, 130190. 130518.

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cymosum, 130576. Pomaderris rugosa, 129797.

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Sapindus sp., 130354.
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# Plant Inventory No. 137

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. November 1949



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PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, OCTOBER 1 TO DECEMBER 31, 1938 (Nos. 130580 to 131243)

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#### INTRODUCTORY STATEMENT

This inventory, No. 137, is a record of the plant material (Nos. 130580 to 131243) received by the Division of Plant Exploration and Introduction during the period from October 1 to December 31, 1938. The manuscript was prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

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Principal Horticulturist, in Charge,
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Introduction, Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

130580. Agrostis canina L. Poaceae.

European bentgrass; Rhode Island bentgrass.

From the Netherlands. Seeds presented by Barenburg's Zaadhandel, Arnhem. Received October 10, 1938.

130581 to 130594. Hordeum spp. Poaceae.

Barley.

From Italy. Seeds presented by Dr. G. R. Giglioli, Ministero Dell 'Africa Italiana, Firenze (Florence). Received October 12, 1938.

A collection of native varieties from Ethiopia.

130581 to 130587. Hordeum deficiens Steud.

Deficient barley.

For previous introduction see 95110.

130581. No. 461. From Ascianghi Lake, 1937.

130582. No. 462. Black barley from Tigrai, 1937.

130583. No. 463. From Tigrai, 1937.

130584. No. 470. Tucur Gebs. Black barley from Oletta, 1937.

130585. No. 472. Senef Colò. From Mettalia, 1937.

130586. No. 473. Samarieta. Black barley from Addis Alem (Scioa), 1937.

130587. No. 474. Samarieta. White barley from Addis Alem (Scioa), 1937.

130588 to 130594. Hordeum vulgare L.

130588. No. 464. Tucur Gebs. From Addis Alem (Scioa), 1937.

130589. No. 465. From Ascianghi Lake, 1937.

130590. No. 466. From Oletta (Scioa), 1937.

130591. No. 467. From Oletta (Scioa), 1937.

130592. No. 469. From Oletta (Scioa), 1937.

130593. No. 471. Ghebber Tucur. Black barley from Coda R. Res. di Ada (Scioa), 1937.

130594. No. 475. Tomex. From Careccià-Addis Alem (Scioa), 1937.

130595. Amygdalus andersonii (A. Gray) Greene. Amygdalaceae. Wild peach.

From Nevada. Collected by W. A. Archer, Bureau of Plant Industry. Received October 11, 1938.

No. A-7300. Collected 2 miles west of Reno.

For previous introduction see 26297.

130596. Antigonon Leptopus Hook, and Arn. Polygonaceae.

Rosa-de-montana.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in October 1938.

Variety Alba. A variety with white flowers.

130597 to 130599. Magnolia spp. Magnolia ceae.

From France. Seeds presented by A. Gérard, La Fosse, Montoire sur Loir, Loir-et-Cher. Received October 24, 1938.

130597. Magnolia wilsonii f. taliensis (W. W. Smith) Rehd.

A form which differs from the species in having glaucescent leaves which are glabrescent beneath except for the rufus-pilose midrib.

130598. MAGNOLIA SIEBOLDII K. Koch.

A small handsome Japanese tree with broad elliptic to obovate-oblong leaves 3 to 6 inches long and fragrant white, cup-shaped flowers 3 to 4 inches across, with large pink sepals and crimson stamens.

130599. Magnolia wilsonii (Finet and Gagn.) Rehd.

A large shrub with pure-white, deliciously fragrant flowers which are produced freely during late May and early June. It is native to western Szechwan, China.

For previous introduction see 106672.

# 130600 and 130601.

From Mexico. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry, United States Department of Agriculture, and presented by Mrs. Floy Bracelin, University of California, Berkeley, Calif. Received October 1, 1938.

130600. Bomarea sp. Amaryllidaceae.

No. 9085–A. From Barranca del Ranchito, Petacala, State of Guerrero, at about 1,900 m. altitude, on a mountain slope covered with pine forest. A climbing shrub with scarlet fruits.

130601. Solanum tequilense A. Gray. Solanaceae.

No. 8737-A. From Barranca El Salto, Temisco, State of Guerrero, on an overgrown cleared space at 370 m. altitude. An herb 1.5 m. high with abundant orange fruits the size of a golf ball and covered with stinging fuzz; the edible sweetish pulp contains many seeds.

130602. Malus sp. Malaceae.

From India. Seeds obtained through Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received October 4, 1938.

From Kyelang, Lahul, Punjab. A handsome flowering apple from the high Himalayas of the Punjab.

130603 to 130606. Gossypium. Malvaceae.

Cotton.

From Egypt. Seeds presented by the Horticultural Station, Giza, through the Ministry of Agriculture. Received October 4, 1938.

130603. Giza No. 7.

130605. Giza No. 29,

130604. Giza No. 26.

130606. Sakha No. 4.

130607. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Africa. Tubers presented by the Government Botanist, Department of Agriculture, Khartoum North, Anglo-Egyptian Sudan. Received October 4, 1938.

A locally grown variety.

130608. Avena sativa L. Poaceae.

Oats.

From England. Seeds presented by the National Institute of Agricultural Botany, Cambridge. Received October 6, 1938.

No. S-147.

#### 130609 to 130625.

From the Netherlands.Bulbs purchased from C. G. van Tubergen, Ltd., Zwanenburg Nurseries, Haarlem. Received October 11, 1938.

130609 to 130611. ALLIUM spp. Liliaceae.

130609. ALLIUM ATROPURPUREUM Waldst. and Kit.

Onion.

An upright, rather tall onion, sometimes over 3 feet high, with 2 to 4 narrow-linear leaves much shorter than the stem. The small, dark-purple flowers, sometimes rose purple with a darker middle stripe, are in dense hemispherical or spherical clusters. Native to meadows in southeastern Europe.

For previous introduction see 124932.

130610. ALLIUM TRIQUETRUM L.

A bulbous plant with a 3-angled stem, common on the coast of Algeria. In its usual surroundings this plant is a rather dwarfed weed of dry texture, but it has been found that when transplanted to good garden soil and plenty of fresh water, it produces, during the winter, large plants with white, tender succulent underground parts. If the green leaves are removed, the rest of the stem forms a delicate vegetable with no odor of garlic.

For previous introduction see 105748.

130611. ALLIUM URSINUM L.

Onion.

A wild European onion which grows in large masses in the open woods. When in flower it is very effective, clothing the ground with its broad green leaves, above which the numerous umbels of white flowers are borne on scapes.

For previous introduction see 124950.

130612. X Brunsdonna parkeri Lawrence. Amaryllidaceae.

Tubergen's Variety. A hybrid, Brunsvigia josephinae×Amaryllis belladonna var. Purpurea Major, closely resembling the seed parent, but the pedicels are much shorter and the flowers larger and brighter, in color a warm purple rose. Received as Brunsdonna tubergeni.

130613. Brunsvigia gigantea Heist. Amaryllidaceae.

A brunsvigia with about 4 tongue-shaped leaves 2 to 5 inches broad and about 1-foot long. The 20 to 30 bright-red flowers, about 2 inches long, are in an umbel on a scape 1 foot or more high. Native to South Africa.

For previous introduction see 115317.

130614. Brunsvigia Josephinae (Red.) Ker.

A bulbous plant 2 to 3 feet high, with 8 or 10 thick, closely ribbed, strap-shaped leaves and large bright-red flowers. Native to South Africa.

For previous introduction see 115318.

130615 to 130618. Hippeastrum spp. Amaryllidaceae.

130615. HIPPEASTRUM ADVENUM (Ker) Herbert.

A hippeastrum with narrow-linear leaves and an umbel of 2 to 6 yellow or red flowers, each about 2 inches long. Native to Chile.

130616. HIPPEASTRUM PHYCELLOIDES (Herbert) Baker.

A hippeastrum with several narrow linear leaves and an umbel of 3 to 6 erect or ascending, bright-red, narrowly funnel-shaped flowers, with short tubes and equally short perianth segments. Native to the Andes of Chile.

130617. HIPPEASTRUM PRATENSE (Poepp.) Baker.

A hippeastrum with linear leaves to 1½ feet long and an umbel of 2 to 4 bright-red, ascending or horizontal flowers, the segments over 1 inch long. Native to Chile.

130618. HIPPEASTRUM ADVENUM (Ker) Herbert.

For previous introduction and description see 130615.

## 130609 to 130625—Continued

130619. HAEMANTHUS ALBIFLOS Jacq. Amaryllidaceae.

A haemanthus with 2 to 4 thick, fleshy, obtuse, nearly erect leaves about 8 inches long and 4 inches broad and a pale-green scape about 1 foot high, bearing a dense globose umbel of white flowers. Native to South Africa.

130620. HAEMANTHUS ALBIFLOS VAR. BRACHYPHYLLUS Baker.

A variety with oblong leaves 3 or 4 inches long and the peduncle a little shorter than the leaves.

130621. LYCORIS INCARNATA Sprenger. Amaryllidaceae.

A bulbous herb with a scape 18 inches or more high and 6 to 12 flesh-colored or bright-rose, large fragrant, widely expanded flowers in an umbel. Native to Japan.

130622. NERINE SARNIENSIS (L.) Herbert. Amaryllidaceae. Guernsey-lily.

A bulbous perennial, native to South Africa, with bright-crimson flowers which are borne in an umbel of 10 to 12 on a scape 12 to 18 inches high.

For previous introduction see 77592.

130623 to 130625. TECOPHILAEA spp. Amaryllidaceae.

130623. TECOPHILAEA CYANO-CROCUS Leyb.

A bulbous plant with several linear, channeled, undulate radical leaves and 1 to 3 erect scapes up to 6 inches high, each with a single blue campanulate flower about  $\frac{1}{2}$  inch long. Native to Chile.

130624. TECOPHILAEA CYANO-CROCUS Leyb.

Var. Leichtlinii. Deep-blue flowers.

130625. TECOPHILAEA CYANO-CROCUS Levb.

Var. Violacea. Bluish-violet flowers.

# 130626 to 130648. Triticum Aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by Dr. H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received October 12, 1938.

130626. Egypt N. A. 95, C. 12095. (Original Kenya.)

130627. Kenya C. 6040.

130628. Kenya C. 6041.

130629. Kenya C. 6042.

130630. Kenya C. 9968.

130631. Kenya C. 10857.

130632. Kenya C. 10860.

130633. Kenya C. 10861.

130634. Kenya C. 10865.

130635. Kenya × Reward × Dundee. 80278.

130636. Kenya  $\times$  Reward  $\times$  Dundee. 80279.

130637. Kenya × Reward × Dundee. 80280.

130638.  $Kenya \times Florence \times Dundee \times Dundee$ . 80372.

130639. Kenya × Florence × Dundee × Dundee. 80373.

130640. Kenya × Florence × Dundee × Pusa 4 × Ford. 80393.

130641. Kenya × Florence × Dundee × Pusa 4 × Ford. 80395.

130642. Kenya × Gular. 80456.

130643. Kenya × Florence × Dundee. 81001.

130644. Yenya  $\times$  Florence  $\times$  Dundee. 81002.

130645. Kenya  $\times$  Florence  $\times$  Dundee. 81003.

# 130626 to 130648—Continued

130646. Kenya × Florence × Dundee. 81004.

130647. Kenya × Florence × Dundee. 81005.

130648. Kenya × Florence × Dundee × Pusa 4 × Ford. 81330.

## 130649. Oryza glaberrima Steud. Poaceae.

Rice.

From India. Seeds presented by Sri. C. R. Srinivasa Ayyangar, paddy specialist, Lawley Road, P. O. Coimbatore. Received October 12, 1938.

#### 130650 to 130662. ORYZA SATIVA L. Poaceae.

Rice.

From Australia. Seeds from the Rice Experiment Station, Leeton, presented by the Department of Agriculture, New South Wales. Received October 12, 1938.

130650. Amber Y. 4704. (Scented.)

130651. Agostane Y. 5048.

130652. Asaki. 5005. Late.

130653, Bangoa K. V. 22. Late.

130654.  $Basantabahar \times bd$ . Seln. 10-1. Midseason.

130655, Buakkoku, 5006.

130656. Chehkiang No. 129. Y. 4724. Late.

130657. Greggio Y. 5049. Midseason.

130658. Kagiban No. 2 Y. 5008. Late.

130659. Manzano 6. Y. 5220.

130660. Taichu No. 65. V. 5009. Midseason.

130661. Tile. Y. 5115. Late.

130662. Yangambi Y. 5219. Late.

#### 130663 to 130675.

From Japan. Material purchased from W. Wada, Hakoneya Nurseries, Numazushi. Received October 19, 1938.

Unless otherwise mentioned, the material was received as bulbs.

130663. Crinum asiaticum L. Amaryllidaceae.

Poisonbulb.

For previous introduction see 25800.

130664. LILIUM ELEGANS Thunb. (L. thunbergianum Schultes). Liliaceae. Japanese lily.

130665 to 130669. Lycoris spp. Amaryllidaceae.

130665. Lycoris albiflora Koidz.

A lycoris, cultivated in Japan, allied to *Lycoris radiata*, but with smaller white flowers. The linear leaves, about 8 inches long, are produced in the winter.

130666. Lycoris Aurea (L'Her.) Herbert.

Cluster-amaryllis.

A bulbous perennial, native to China, with sword-shaped leaves which die down before the appearance of the golden-yellow flowers; the latter are 3 to 4 inches across, borne in an umbel on a scape 1 to 3 feet high.

For previous introduction see 77989.

130667 and 130668. Lycoris radiata (L'Her.) Herbert. Cluster-amaryllis.

A bulbous perennial with bright-red flowers. Native to Japan.

For previous introduction see 77990.

#### 130669. Lycoris squamigera Maxim.

Hardy cluster-amaryllis.

A bulbous perennial with linear leaves which die down before the appearance of the flowers. These vary in appearance from bright red to rosy lilac and are borne in an umbel on a scape up to 18 inches high. Native to Japan.

For previous introduction see 77992.

#### 130663 to 130675—Continued

130670. SCILLA THUNBERGII Miyabe and Kudo (S. japonica Baker). Liliaceae.

A scilla with 2 or 3 fleshy leaves 6 to 12 inches long and 1 to 3 erect scapes with many small rose-purple flowers borne in racemes. Native to Japan.

130671 to 130675. TRICYRTIS spp. Melanthiaceae.

This material was received as roots.

130671. TRICYRTIS Sp.

Received under the specific name "albida," for which a place of publication has not been found.

130672. TRICYRTIS HIRTA Hook.

Hairy toadlily.

A perennial herb 1 to 2 feet high, covered with soft whitish spreading hairs. The cordate-lanceolate leaves clasp the stem, and the white, lilylike flowers are covered with purple spots.

For previous introduction see 103384.

130673. TRICYRTIS LATIFOLIA MAXIM.

A tricyrtis with zigzag stems up to 3 feet high, broadly oblong or ovate leaves, and a terminal corymb of whitish flowers with small purple spots. Native to Japan.

For previous introduction see 114195.

130674. TRICYRTIS MACRANTHOPSIS Masamune.

A tricyrtis with a slightly flexuose stem 1 to 2 feet high, oblique oblong-lanceolate or lanceolate leaves, usually clasping,  $2\frac{1}{2}$  inches long, and campanulate yellow flowers spotted with dark purple. Native to Japan.

130675. TRICYRTIS Sp.

# 130676 to 130687. Triticum Aestivum L. Poaceae. Common wheat.

From Germany. Seeds presented by Prof. Th. Roemer, University of Halle-Saale, Halle-Saale. Received October 19, 1938.

130676. Halle 17	24 3f.	130682. Hali	le 1820 3f.
130677. Halle 17	66 3f.	130683. Hall	le 1862 <mark>3f</mark> .
130678. Halle 17	82 3f.	130684. Hall	le 1879 3f.
130679. Halle 17	92 3f.	130685. Hall	le 1900 <b>3f</b> .
130680. Halle 18	05 3f.	130686. Hall	le 1937 3f.
130681. Halle 18	10 3f.	130687. Hall	le 1953 3f.
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#### 130688 to 130718.

From New Zealand. Seeds presented by V. Launder Millin, Napier. Received October 13, 1938.

130688 to 130695. ACACIA spp. Mimosaceae.

130688. ACACIA ACINACEA Lindl.

A handsome small tree with ornamental foliage and pretty flowers. Native to Australia.

For previous introduction see 88732.

130689. ACACIA ACUMINATA Benth.

A tree 30 to 40 feet high, native to Western Australia, with falcate linear phyllodes 3 to 10 inches long and small flower spikes 1 inch long. The wood, which has an odor resembling raspberry jam, is dark reddish brown, closegrained, and hard and is suitable for ornamental woodwork and for fence posts.

For previous introduction see 95314.

130690. ACACIA FALCIFORMIS DC.

A tree allied to *Acacia penninervis*, but the phyllodia are usually longer and more falcate. Native to Australia.

#### 130688 to 130718—Continued

130691. ACACIA HOWITTI F. Muell.

A shrub, often 15 feet high, native to Australia. The branchlets are slender and flexible, bearing curved, lanceolate, dark-green phyllodes and axillary clusters of small yellow flower heads.

For previous introduction see 75539.

130692. ACACIA MYRTIFOLIA Willd.

A tall shrub with angular branchlets and ovate phyllodes edged with pink and with heads of rather large yellow flowers in racemes. Native to Australia.

For previous introduction see 76856.

130693. ACACIA PENTADENIA Lindl.

A tall shrub with bipinnate leaves of many small leaflets and globular, clustered flower heads. Native to Western Australia.

130694. ACACIA SOPHORAE (Labill.) R. Br.

An evergreen shrub or small tree with obovate-oblong phyllodia 2 to 3 inches long. Native to Australia.

130695. ACACIA STRICTA (Andrews) Willd.

A shrub 3 to 6 feet high with linear phyllodia. The paired axillary heads of yellow flowers are borne freely in spring on short peduncles well down from the leafy tips of the branches. The wood is of beautiful texture, sound and durable, but too small for general use. Native to Tasmania and southeastern Australia.

For previous introduction see 48065.

130696. Aciphylla squarrosa Forst. Apiaceae.

A stout erect herbaceous perennial 2 to 6 feet high, with numerous spreading 2- to 3-pinnate radical leaves 1 to 3 feet long. The leaflets are very narrow-linear and spiny pointed. The dense spikelike panicle has many umbels of very small greenish-white flowers, almost concealed in the axils of the spiny bracts. Native to New Zealand.

130697. Baeckea Virgata Andrews. Myrtaceae.

An erect loosely branched shrub up to 12 feet high. Native to Australia. The narrowly oblong leaves, less than 1 inch in length, are opposite, and the small white flowers are in clusters of 2 or 3 in the axils of the upper leaves.

For previous introduction see 57744.

130698. Burtonia Villosa Meissn. Fabaceae.

An erect shrub with virgate stems, digitate leaves of 3 small, narrow-linear leaflets, and large solitary, pale-purple flowers. Native to Australia.

130699 to 130701. Callistemon spp. Myrtaceae.

130699. Callistemon speciosus (Sims) DC.

Showy bottlebrush.

A large shrub, native to New South Wales, Australia, but cultivated in the British Isles and in the United States. The leaves are lance-shaped with prominent midribs, and the bright-red flowers occur in terminal spikes 2 to 6 inches long. The golden-yellow anthers, contrasting with the dark-red filaments, make this a beautiful ornamental. It may be grown anywhere except in places subject to frost.

For previous introduction see 43647.

130700. Callistemon phoeniceus Lindl.

A tall shrub with narrowly lanceolate leaves 2 to 4 inches long and spikes of large flowers with rich-red stamens. Native to Australia.

For previous introduction see 76934.

130701. CALLISTEMON SPECIOSUS (Sims) DC.

For previous introduction and description see 130699.

# 130688 to 130718—Continued

130702. Cassia Javanica L. Caesalpiniaceae.

A small tree with gorgeous pink flowers over 2 inches across, borne in large clusters during the spring and early summer. It is deciduous in the dry season. Native to tropical Asia.

For previous introduction see 123168.

130703. CASUARINA BAXTERIANA Miquel. Casuarinaceae.

A densely branched shrub 3 to 6 feet high, with numerous erect branches, distinctly 7- to 8-angled, and with pale-green internodes up to ¼ inch long.

For previous introduction see 93781.

130704. CASUARINA CAMPESTRIS Diels.

A dioecious shrub, 3 to 6 feet high, with numerous erect branches. The internodes are glaucous or shining green and striate. Native to Western Australia.

For previous introduction see 105791.

130705. CHORIZEMA CORDATUM Lindl. Fabaceae.

A tall slender glabrous evergreen shrub 7 to 10 feet high, with weak branches, more or less prickly leaves about 2 inches long, and numerous red flowers. It is propagated from cuttings and may be grown in the open in southern California and southern Florida, being excellent for training on pillars and trellises. In colder regions it is an attractive plant for the cool greenhouse. Native to Western Australia.

For previous introduction see 106706.

130706. Conospermum bracteosum Meissn. Proteaceae.

An undershrub with, usually, simple stems 1 to 2 feet high and petioled basal leaves having nearly orbicular blades 1 inch long. The stem leaves are bractlike, closely appressed, and only ½ inch long. The flexuose spikes, 2 to 3 inches long, are in the axis of the upper leaves and bear small violet flowers, densely covered with silky white hairs. It is native to Western Australia.

For previous introduction see 106328.

130707. Eucalyptus tetragona (R. Br.) F. Muell. Myrtaceae.

A low scrubby shrub or small tree, with thick, rigid, leathery, broadly ovate to lanceolate-falcate leaves up to 4 inches long. Native to Western Australia.

130708. Gaultheria Rupestris (L. f.) Don. Ericaceae.

A very variable erect or prostrate bush, with small white flowers in racemes, occurring among rocks throughout both islands of New Zealand.

For previous introduction see 34917.

130709, Goodia Lotifolia Salish. Fabaceae.

An ornamental shrub, native to Australia, with 3 ovate leaflets and loose racemes of purple-spotted yellow flowers.

For previous introduction see 77969.

130710. Kennedya Nigricans Lindl. Fabaceae.

A large twining vine, native to Western Australia. The broad ovate leaflets, 2 to 3 inches long, are often only 1 to each leaf. The deep violet-purple flowers are about 1 inch long and are borne in racemes shorter than the leaves.

For previous introduction see 113769.

130711. Leschenaultia biloba Lindl. Goodeniaceae.

An evergreen shrub 2 to 3 feet high, native to Western Australia, with small, slender, scattered leaves ½ inch long. The flowers are either in small clusters in the upper axils or borne in large leafy terminal clusters. The corolla, about 1 inch long, has spreading dark-blue wings marked with parallel transverse veins, and the sepals are narrow like the leaves.

For previous introduction see 79136.

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#### 130688 to 130718—Continued

130712 to 130714. MELALEUCA spp. Myrtaceae.

130712. Melaleuca hypericifolia J. E. Smith.

Dotted melaleuca.

A tall glabrous shrub with opposite lanceolate leaves 1 to 2 inches long, dotted beneath. The rich-red flowers are borne in dense spikes 2 inches long and nearly as wide. It is native to Australia.

For previous introduction see 106719.

130713. MELALEUCA PUBESCENS Schauer.

A tall shrub or small tree with small linear leaves ½ inch long, crowded on the pubescent branches, and small white flowers, borne in loose cylindrical spikes. Native to Australia.

For previous introduction see 106720.

130714. MELALEUCA STYPHELIOIDES J. E. Smith.

A tree sometimes 80 feet high, with thick spongy bark. The leaves are very small, and the small creamy-white flowers are in dense spikes about 2 inches long.

For previous introduction see 76940.

130715, Prostanthera Lasianthos Labill. Menthaceae.

The so-called *Christmas lilac* of Tasmania. An erect evergreen shrub or tree up to 30 feet high, with lanceolate-serrate leaves 3 inches long and terminal compound racemes of white flowers marked with purple.

For previous introduction see 80530.

130716. Prostanthera nivea A. Cunn.

A beautiful evergreen shrub 6 feet high, with linear terete leaves 1 inch long and snow-white or pale-blue axillary flowers, the upper ones forming leafy racemes. Native to Australia.

For previous intoduction see 76943.

130717. Pultenaea daphnoides Wendl. Fabaceae.

An erect evergreen shrub about 6 feet high, with cuneate-oblong leaves less than 2 inches long and small yellow flowers in large terminal heads. Native to southern Australia.

For previous introduction see 113776.

130718. Tristania laurina (J. E. Smith) R. Br. Myrtaceae.

A tall evergreen tree with glaucous or silky pubescent branchlets, native to Australia. The lanceolate or obovate leaves are 2 to 4 inches long, and the small yellow flowers are in short axillary cymes.

For previous introduction see 99465.

# 130719. (Undetermined.)

From Indo-China. Seeds presented by M. Poilane, Annam. Received October 24, 1938.

A euphorbiaceous tree said to be of rapid growth, up to 5 to 8 meters high, forming an excellent shade tree for coffee plantations.

#### 130720 to 130722.

From the Union of South Africa. Seeds purchased from John Marley, South African Floral Farm, Banhoek, Stellenbosch. Received October 25, 1938.

130720. Gardenia globosa Hochst. Rubiaceae.

An evergreen shrub or small tree with glossy, lanceolate leaves 2 to 4 inches long and terminal or sub-aggregated, bell-shaped, white flowers with tubes 1 inch long and lobes  $\frac{1}{3}$  inch long. Native to South Africa.

# 130720 to 130722—Continued

130721. GARDENIA THUNBERGIA L. f.

A small, much-branched tree, 8 to 15 feet high, with a smooth grayish-white trunk up to 8 inches in diameter and elliptic, acute leaves 4 to 6 inches long. The terminal, solitary, strongly scented, large white flowers are about 4 incles long, and the oval or oblong woody fruits, 2 to 4 inches long and 2 inches in diameter, remain on the trees for several years. Native to South Africa.

For previous introduction see 34167.

130722. HAEMANTHUS NATALENSIS Pappe. Amaryllidaceae.

A haemanthus with 8 or 9 membranous, bright-green leaves more than 1 foot long, the lower ones spotted on the back with red brown. The small flowers, in a very dense globular mass 3 to 4 inches in diameter, surrounded by several large deep-purple bracts, are obscured by the long scarlet filaments and bright-yellow anthers. Native to South Africa.

For previous introduction see 118766.

#### 130723 to 130732.

From Mexico. Seeds presented by E. O. Matthews, Parral, Chihuahua. Received October 24, 1938.

130723 to 130729. Amygdalus persica L. Amygdalaceae.

Peach.

130723. A yellow seedling from Parral, Chihuahua. Fruit large, 1½ to 2½ inches in diameter; flesh bright yellow, of excellent flavor; skin deep red.

130724. A white cling from Aguascalientes, Aguascalientes. Fruit about 2 inches in diameter; flesh yellow, flavor good.

130725. A yellow cling from Aguascalientes, Aguascalientes. Fruit about 2 inches in diameter; flesh yellow, flavor good.

130726. A lemon-yellow cling seedling from Parral, Chihuahua. Fruit about 2 inches in diameter, round; flesh lemon yellow, flavor good.

130727. From Santa Barbara, Chihuahua. Fruit 2½ inches in diameter, elliptical, cling; flesh white of good flavor.

130728. A freestone seedling from Torreon, Coahuila. Fruit 2½ inches in diameter, elongate, similar to Elberta; flavor good; skin red.

130729. From Imuruis, Sonora. Fruit about 2 inches in diameter, round, yellow, with red cheek, clingstone; flavor good.

130730 to 130732. CARICA PAPAYA L. Papayaceae.

Papaya.

130730. From San Felipe de Hijar ranch, Jalisco, near Ahuacatlan, Nayarit. Fruit of good flavor and large size.

130731. From the San Felipe de Hijar ranch, Jalisco, near Ahuacatlan, Nayarit. Fruit smaller than P. I. 130730, but of excellent flavor.

130732. From Montzorongo, Veracruz. Fruit very large (over 13.2 pounds); of excellent quality.

130733. CITRUS AURANTIFOLIA (Christm.) Swingle. Rutaceae. Lime.

From Surinam. Budwood presented by D. D. Fernandes, Director, Department of Agricultural Economics. Received October 26, 1938.

Budwood of a spineless and seedless lime.

130734. Ananas ananassoides var. nanus L. B. Smith. Bromeliaceae.

From Brazil. Offshoots collected in the botanical gardens, Rio de Janeiro, by the Collins-Baker expedition. Received October 26, 1938.

A bromeliad with a rosette of numerous narrow, recurved, serrate leaves and a long, weak, slender scape bearing a small few-flowered and nearly seedless syncarp, with a relatively large coma. The plant is cultivated in Brazil.

130735. Calocarpum sapota (Jacq.) Merr. Sapotaceae. Sapote.

From the Canal Zone. Seeds presented by the Canal Zone Experiment Garden, Summit. Received October 27, 1938.

For previous introduction see 103411.

130736. PIGAFETTIA ELATA (Mart.) Wendl. Phoenicaceae. Palm.

From Sumatra. Seeds presented through Col. R. H. Montgomery, Coconut Grove, Fla. Numbered October 28, 1938.

A tall ornamental palm with a stout trunk, spiny on the upper part and with spreading pinnate foliage resembling that of the coconut palm. Native to the East Indies.

For previous introduction see 98504.

130737 to 130739. Citrus aurantifolia (Christm.) Swingle. Rutaceae.

From Trinidad, British West Indies. Scions presented by C. C. Skeete, Assistant Commissioner of Agriculture, Trinidad and Tobago, Port-of-Spain. Received October 28, 1938.

130737. T-145.

130739. Kudzi Nebu.

130738. Spineless.

130740. Hordeum vulgare var. coeleste L. Poaceae.

Six-rowed barley.

From the Orkney Islands. Seeds presented through Collingwood Ingram, Benenden, Kent, England. Received October 31, 1938.

Bere, From the island of Hoy. A barley which requires (or at least thrives under) warm, rainy, and rather sunless conditions.

130741. ZEPHYRANTHES CITRINA Baker. Amaryllidaceae.

From Nassau, British West Indies. Seeds presented by William A. Geiger, Miami Beach, Fla. Received in 1937. Numbered November 9, 1938.

A zephyranthes with a lemon-chrome (Ridgway) flower about 2 inches across, borne on a stalk 10 or 12 inches high. The plant grows wild in the fields in the vicinity of Fort Fincastle, Nassau. It is very attractive for mass planting, and it seeds freely.

130742. Ptychoraphis augusta (Kurz) Beccari. Phoenicaceae.

Palm.

From the Canal Zone. Seeds presented by the Canal Zone Experiment Gardens, Summit. Received October 31, 1938.

A very tall feather palm from 80 to 100 feet high and 1 foot in diameter at the base. The crown of leaves, 8 to 12 feet long, with leaflets 2 to 3 feet long, makes a most graceful object in the landscape. Native to the Nicobar Islands, India.

For previous introduction see 99629.

130743. Berberis sp. Berberidaceae.

Barberry.

From Nepal. Seeds presented by Collingwood Ingram, Benenden, Kent, England. Received November 2, 1938.

130744. Myrciaria cauliflora (Mart.) Berg. Myrtaceae.

Jaboticaba.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered November 5, 1938.

A tree up to 35 feet high, with narrowly elliptic, acuminate leaves, short pedicelled flowers produced directly from the bark of the trunk and branches, and purplish-violet, globose, edible fruits up to nearly 2 inches in diameter.

For previous introduction see 114690.

Native to Brazil.

# 130745 to 130879. ZEA MAYS L. Poaceae.

Corn.

From Guatemala. Seeds collected by Raymond Stadelman, in cooperation with Robert E. Smith, Carnegie Institution of Washington, Guatemala City. Received November 7, 1938.

130745. No. 1. Salpor. From Santa Cruz Barillas.

130746. No. 2. Salpor. From San Pedro Soloma.

130747. No. 3. Crespo. From Santa Ana Huista.

130748. No. 4. Blanco. From San Ramon.

130749. No. 5. Tejar. From Jacaltenango.

130750. No. 6. Oshep shxau. From Jacaltenango.

130751. No. 7. Tejar. From La Libertad.

130752. No. 8. Blanco. From Santa Cruz Barrilas.

130753. No. 9. Breve blanco. From Santa Ana Huista.

130754. No. 10. Breve blanco. From San Antonio Huista.

130755. No. 11 Te wa. From San Benito Nenton.

130756. No. 12. Chiapaneco. From San Andres Cuilco.

130757. No. 13. Sag xal. From San Martin C.

130758. No. 14. Cuarentano amarillo. From Santa Ana Huista.

130759. No. 15. Cuarentano. From San Miguel Acatan.

130760. No. 16. Colima. From San Andres Cuilco.

130761. No. 17. Sag b: au. From San Martin C.

130762. No. 18. Sag nal. From Jacaltenango.

130763. No. 19. Sax sat. From San Juan Ixoy.

130764. No. 20. Sag ital. From Concepción.

130765. No. 21. Tegua blanco. From Santa Ana Huista.

130766. No. 22. Blanco de año. From San Antonio Huista.

130767. No. 23. Costeño. From San Benito Nenton.

130768. No. 24. Sag nal. From San Miguel.

130769. No. 25. Sag xal. From Santiago Chimaltenango.

130770. No. 26. Costeño blanco. From La Libertad.

130771. No. 27. Sag sat. From San Pedro Soloma.

130772. No. 28. Guarentano blanco. From Santa Ana Huista,

130773. No. 29. Guarentano. From San Benito Nenton.

130774. No. 30. S-k'al. From Colotenango.

130775. No. 31. Sag t-wits. From San Juan Atitlan,

130776. No. 32. Sag wal. From San Juan Atitlan.

130777. No. 33. 'Aqal. From San Pedro Necta.

130778. No. 34. Qoq ishi'. From San Martin C.

130779. No. 35. Agal blanco. From La Libertad.

130780. No. 36. Sag sat q'an wa'. From Concepción.

130781. No. 37. Sag sat. From San Pedro Soloma.

130782. No. 38. Saq'aqal. From Santiago Chimaltenango.

130783. No. 39. Saq iial. From El Quetzal.

130784. No. 40. Nime?saq sat q'an wa? From Concepción,

130785. No. 41. Jex ti? From Jacaltenango.

130786. No. 42. Tegua. From La Democracia.

# 130745 to 130879—Continued

130787. No. 43. Tegua criollo. From Santa Ana Huista.

130788. No. 44. Guarentano amarillo. From La Libertad.

130789. No. 45. Q'an b'au. From Jacaltenango.

130790. No. 46. Kokh shiin. From Colotenango.

130791. No. 47. Tj-kwa. From Ixtahuacan.

130792. No. 48. Qoqh sin. From San Pedro Necta.

130793. No. 49. Breve amarillo. From San Benito Nenton.

130794. No. 50. Kokh shiin. From Colotenango.

130795. No. 51. Chimbo. From La Libertad.

130796. No. 52. Koky q'ex wa'. From Jacaltenango.

130797. No. 53. Nime 'kokx ex wa'. From Concepción.

130798. No. 54. Teguá amarillo. From Santa Ana Huista.

130799. No. 55. Kek wa'. From San Sebastian Coatan.

130800, No. 56. Q'an nal. From Amelco.

130801. No. 57. Papa q'ex wa'. From Concepción.

130802. No. 58. K'ex wa'. From San Rafael Independencia.

130803. No. 59. Nime g'ex wa'. From Jacaltenango.

130804. No. 60. Amarillo de año. From San Antonio Huista.

130805. No. 61. Us wa'. From San Mateo Ixtatan.

130806. No. 62. Qog ishim. From San Rafael Independencia.

130307. No. 63. Patshon. From San Pedro Soloma.

130808. No. 64. Patshon. From San Pedro Soloma.

130809. No. 65. Q'an sat. From San Miguel Acatan.

130810. No. 66. Q'an mal. From El Quetzal.

130811, No. 67. Nimax k'an sat. From San Pedro Soloma.

130812. No. 68. Q'an nal. From San Rafael Independencia.

130813. No. 69. Nime' famaltin. From Concepción.

130314. No. 70. Pa shiok. From Santiago Chimaltenango.

133815, No. 71. Q'an ishi, From San Martin C.

130816. No. 72. Nimax k'an sat. From San Pedro Soloma.

130817. No. 73. Q'an sat. From San Juan Ixcoy.

130818. No. 74. Nishte shamaltin. From Concepción.

130319. No. 75. Us wa'. From San Mateo Ixtatan.

130020. No. 76. Ak wa'. From Colotenango.

130821. No. 77. Q'an sat q'an wa'. From Concepción.

139822. No. 78. Nishte kokh qex wa'. From Concepción.

130823. No. 79. Q'an xal. From San Pedro Necta.

130324. No. 80. Ak wa'. From Colotenango.

130325. No. 81. Qaqh wa'. From San Ildefonso Ixtahuacan.

1338\_6. No. 82. Kokh nal, From San Mateo Ixtatan.

130827. No. 83. Q'an sat. From San Mateo Ixtatan.

130828. No. 84. Q'an t-wits. From San Juan Atitlan.

130829. No. 85. Q'an nal. From Santa Eulalia.

133830, No. 86, Xun kana', From San Andres Cuilco.

# 130745 to 130879—Continued

130831. No. 87. Tsh-kwa'. From San Andres Cuilco.

130832. No. 88. Xun kana'. From La Democracia.

130833. No. 89. Kekh wa'. From San Miguel Acatan.

130834. No. 90. Q'an sat. From San Mateo Ixatan.

130835. No. 91. Ni max qaq wa. From Santiago Chimaltenango.

130836. No. 92. S-k'al. From Colotenango.

130837. No. 93. Kakh tshin. From San Rafael Independencia.

130838. No. 94. Kokh qex wa'. From Concepción.

130839. No. 95. Tshaq shin. From San Sebastian Coatan.

130840. No. 96. Kakh tshin. From San Miguel Acatan.

130841. No. 97. Kjak t-wits. From San Ildefonso Ixtahuacan.

130842. No. 98. Kak tshin. From San Pedro Soloma.

130843. No. 99. Kjak t-wits. From San Ildefonso Ixtahuacan.

130844. No. 100. Kakh tshin. From San Rafael Independencia.

130845. No. 101. Kakh tshin. From San Rafael Independencia.

130846. No. 102. Quax tshin. From San Juan Ixcoy.

130847. No. 103. Kekh tshitam wa'. From San Miguel Acatan.

130848. No. 104. Qex tshitam wa'. From Jacaltenango.

130849. No. 105. Negro de año. From San Antonio Huista.

130850. No. 106. Q'ex sat nal. From Concepción.

130851. No. 107. 'Aqal negro. From La Libertad.

130852. No. 108. K'ex sat. From San Rafael Independencia.

130853. No. 109. Negro. From San Juan Ixcoy.

130854. No. 110. Shaaq xo'l. From San Juan Atitlan.

130855. No. 111. Pinto. From San Antonio Huista.

130856. No. 112. Q'ex ishi'. From San Martin C.

130857. No. 113. S-k' al. From Colotenango.

130858. No. 114. Tsib nal. From San Miguel Acatan.

130859. No. 115. Kokh shi'n. From Colotenango.

130860. No. 116. Tshin il. From San Sebastian Coatan.

130861. No. 117. Saq xal. From Ixtahuacan.

130862. No. 118. Nime'sh q'ex wa'. From Concepción.

130863. No. 119. K'i' tshitam. From San Sebastian Coatan.

130864. No. 120. Ts'ib sat sag nal. From Jacaltenango.

130865. No. 121. Ts' ib sat saq nal. From Concepción.

130866. No. 122. Shxo'l. From Ixtahuacan.

130867. No. 123. Nimex ts'ib sat nal. From San Rafael Independencia.

130868. No. 124. 'Agal. From San Ildefonso Ixtahuacan.

130869. No. 125. Shamaltin (San Martin). From Jacaltenango.

130870. No. 126. Ts'ib sat. From Santa Eulalia.

130871. No. 127. Q'an nal. From Santa Eulalia.

130872. No. 128. Ts'ib sat. From San Juan Ixcoy.

130873. No. 129. Ts'ib sat nal. From San Rafael Independencia.

130874. No. 130. Qaqy wa'. From San Ildefonso Ixtahuacan.

## 130745 to 130879—Continued

130875. No. 131. Ts'ib sat. From Santa Eulalia.

130876. No. 132. Ts'ib sat. From San Sebastian Coatan.

130877. No. 133. Ts'ib nal. From El Quetzal.

130878. No. 134. Ts'ib sat (pinto). From San Pedro Soloma.

130879. No. 135. Ts'ib nal. From Mateo Ixtatan.

# 130880 and 130881. Triticum Aestivum L. Poaceae.

Common wheat.

From England. Seeds purchased from Gartons Limited, Warrington. Received November 7, 1938.

130880. Warden.

130881. Wilma.

# 130882. Chrysalidocarpus lucubensis Beccari. Phoenicaceae.

Palm.

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received November 3, 1938.

A rather tall palm with elongated pinnate leaves composed of rigid swordlike segments up to 3 feet in length. The obovate fruits are about ½ inch long. Native to Madagascar.

For previous introduction see 70748.

# 130883. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From Canada. Scions presented by W. R. Leslie, Superintendent, Dominion Experimental Farm, Morden, Manitoba. Received November 9, 1938.

Scout.

# 130884 to 130887. SACCHARUM. Poaceae.

Sugarcane.

From Colombia: Seeds presented by Ingenio Manullita, Palmira. Received October 21, 1938, and numbered November 10, 1938.

130884. 2725 POJ × Amu Darya 59.

130885. Caña Blanca X Amu Darya 59.

130886. 2725  $POJ \times S$ . spontaneum.

130887. Caña Blanca X S. officinale.

#### 130888. Avena sativa L. Poaceae.

Oats.

From Canada. Seeds presented by P. J. Bowe, West Calgary, Alberta. Received November 7, 1938.

[Received without notes.]

#### 130889 to 130893.

From Australia. Seeds presented by W. G. Wells, Department of Agriculture and Stock, Brisbane, Queensland. Received November 7, 1938.

A collection of locally grown grass types.

130889. ASTREBLA ELYMOIDES Bailey and Muell. Poaceae.

Grass.

Weeping Mitchell grass.

For previous introduction see 107191.

130890. ASTREBLA LAPPACEA (Lindl.) Domin.

Hook Mitchell grass.

Curly Mitchell grass.

For previous introduction see 111876.

#### 130889 to 130893—Continued

130891 and 130892. Bromus Catharticus Vahl. Poaceae.

Grass.

An annual or biennial grass up to 2 feet high, which forms a large stool and spreads rapidly from the root divisions. It is native to South America and is a good forage grass.

For previous introduction see 128192.

130893. Phalaris Tuberosa L. Poaceae.

Grass.

For previous introduction see 119670.

#### 130894 to 130924.

From England. Plants purchased from Thomas Rivers & Son, Ltd., Sawbridgeworth, Hertfordshire. Received November 18, 1938.

130894 to 130901. Amygdalus persica L. Amygdalaceae.

Peach.

130894. Alexandra Noblesse. 130895. Crimson Galande. 130898. Kestrel. 130899. Magdala.

130896. Duke of York.

130900. Prince of Wales.

130897. Golden Eagle. 130901. Sea Eagle.

130902 to 130907. Amygdalus persica var. nectarina Ait. Amygdalaceae.

Nectarine.

130902. Dryden.

130905. Spenser.

130903. Humboldt.

130906. Stanwick Elruge.

130904. Newton. 130907. Victoria. 130908 and 130909. Malus sylvestris Mill. Malaceae.

Apple.

130908. Rivers Early Peach.

130909. Thomas Rivers.

130910 to 130912. PRUNUS-AVIUM L. Amygdalaceae.

Sweet cherry.

130910. Peggy Rivers.

130911. Turkey Black Heart.

130912. Ursula Rivers.

130913. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.

Blue Rock.

130914 and 130915. PRUNUS INSITITIA L.

Plum.

130914. Bradley's King Damson.

130915. New Large Bullace.

130916 to 130918. PRUNUS DOMESTICA L.

Common plum.

130916. Pershore.

130917. President.

130918. Purple Pershore.

130919. PRUNUS INSITITIA L.

Plum.

Rivers' Early Damson.

130920. PRUNUS DOMESTICA L.

Common plum.

Wyedale:

130921 to 130924. Pyrus communis L. Malaceae.

Common pear.

130921. Charles Ernest.

130923. Michaelmas.

130922. Fondante de Thirriot.

130924. Thompson's.

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## 130925. Magnolia kobus DC. Magnoliaceae. Kobus magnolia.

From France. Seeds presented by A. Gerard, La Fosse, Montoire sur Loir, Loiret-cher. Received November 14, 1938.

A deciduous tree up to 30 feet high in Japan, but usually shrubby in cultivation elsewhere. The white flowers, about 4 inches across, appear before the leaves, which are broadly obovate, light green, and 4 to 5 inches long.

For previous introduction see 95310.

## 130926. Suaeda fruticosa (L.) Forsk. Chenopodiaceae.

From England. Seeds presented by Mr. Bryce, East Anglian Institute of Agriculture, Chelmsford. Received November 16, 1938.

Shrubby suacda; seablite. An erect, much-branched shrub up to 3 feet high, of heathlike habit. Growing in saline or sandy soil. Native to north temperate regions of both hemispheres.

#### 130927. Saccharum. Poaceae.

Sugarcane.

From Mauritius. Cuttings presented by the Director of Agriculture, Royal Botanic Garden. Received November 18, 1938.

M. 171/30.

#### 130928. ERYTHRINA GRISEBACHII Urban. Fabaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received November 15, 1938.

Piñon Botijo or Piñon Real. A large tree with trifoliolate leaves; these are roundish, about 4 inches long, and membranous. The scarlet flowers, about 2 inches long, are produced in short racemes. Native to Cuba.

For previous introduction see 104125.

#### 130929 to 130933. Triticum Aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by R. H. Carr, Department of Agriculture, Sydney, New South Wales. Received November 21, 1938.

130929. Baringa.

130932. Koala.

130930. Ford.

130933. Nabawa.

130931. Ideal.

## 130934 to 130937. Amygdalus persica L. Amygdalaceae. Peach.

From New Jersey. Trees presented by Prof. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received November 21, 1938.

130934. Afterglow.

130936. Golden Globe.

130935. Golden East.

130937. Summercrest.

#### 130938 and 130939. Ananas spp. Bromeliaceae.

From Brazil. Offshoots presented by J. L. Collins, Experiment Station of the Pineapple Cooperative Association, Ltd., University of Hawaii, Honolulu, Hawaii. Received November 21, 1938.

130938. Ananas comosus (L.) Merr.

Pineapple.

No. 8. Abacaxi Vermelho. Collected October 9, 1938, between Sorocaba and Itapetininga, south of São Paulo. Grown commercially in the neighborhood of São Paulo.

130939. Ananas ananassoides (Baker) L. B. Smith.

No. 6. Collected October 6, 1938, between Sorocaba and Itapetininga, south of São Paulo. A plant native to Brazil, very much like the pineapple, with rigid linear leaves over 3 feet long and less than 1 inch broad above the dilated base. The flower head is borne on a stem 1 to 2 feet high, but the individual flowers are surrounded by separate bracts instead of being united as in the pineapple.

For previous introduction see 102742.

## 130940 to 130942. Trifolium Alexandrinum L. Fabaceae. Berseem.

From Czechoslovakia. Seeds presented by the Seed Testing Station, Institute of Agricultural Research, Erno. Received November 18, 1938.

130940. Fahl.

130942. Miskawi.

130941. Khadrani.

#### 130943. Cratylia mollis Mart. Fabaceae.

From Brazil. Seeds presented by the Instituto de Biologia Animal, Deodoro, Distrito Federal, through the Ministerio de Agricultura. Received November 18, 1938.

A scandent shrub 6 feet or higher, with pubescent, ternate leaves, ovate, acuminate leaflets about 2 inches long, and racemes of rather large, rose-colored flowers. Native to Brazil,

#### 130944. Solanum Rostratum Dun. Solanaceae.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Amsterdam. Received November 18, 1938.

For previous introduction see 115537.

#### 130945 and 130946.

From Costa Rica. Seeds presented by the Goodyear Rubber Plantations Co., Gatun, Canal Zone, at the request of W. E. Klippert, San José. Received November 19, 1938.

130945. Phaseolus sp. Fabaceae.

A yellow-flowered species, native to Panama.

130946. Pueraria Phaseoloides (Roxb.) Benth. Fabaceae.

A twining, semishrubby plant densely covered with brown hairs. The leaflets are green above and densely matted beneath with gray hairs, and the reddish flowers are in long-stemmed racemes. Native to tropical regions of the Himalayas.

For previous introduction see 102775.

## 130947. LACTUCA PLUMIERI (L.) Gren. and Godr. Cichoriaceae.

Lettuce.

From the Netherlands. Seeds presented by the Director, Botanic Garden, Amsterdam. Received November 19, 1938.

A perennial lettuce with stout stems about 6 feet high and purple flower heads in terminal cymes. Native to Europe.

For previous introduction see 115527.

## 130948 and 130949. LACTUCA spp. Cichoriaceae.

From Scotland. Seeds presented by the Director, Royal Botanic Garden, Edinburgh. Received November 19, 1938.

130948. LACTUCA BOURGAEI (Boiss.) Irish and Taylor.

A thick-stemmed, bristly leaved herbaceous perennial often 6 feet high, with small lilac-colored flower heads. Native to the Mediterranean region.

For previous introduction see 114645.

#### 130949. LACTUCA BRACTEATA Hook, f. and Thoms.

A tall perennial lettuce with loose panicles of large blue flower heads. Native to the Sikkim Himalaya at altitudes of 8,000 to 10,000 feet.

For previous introduction see 114646,

#### 130950. Lactuca perennis L. Cichoriaceae.

Lettuce.

From England. Seeds presented by the Director, Royal Botanic Gardens, Kew. Received November 12, 1938.

A perennial lettuce about 2 feet high, with pale-blue flower heads. Native to Europe.

For previous introduction see 114534.

#### 130951. Lactuca serriola L. Cichoriaceae.

From Sweden. Seeds presented by the Director, Botanic Garden, Göteborg. Received November 21, 1938.

#### 130952 to 130957. Zea mays L. Poaceae.

Corn.

From Bolivia. Seeds presented by J. W. Webster, La Paz, at the request of Dr. H. L. Blood, Agricultural Experiment Station, Logan, Utah, cooperating with the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received November 23, 1938.

130952. Amarillo. From the lower La Paz region at 8,000 feet altitude (1938 crop).

130953. Amarillo. From the Sucre region at 7,000 feet altitude (1937 crop).

130954 and 130955. From the lower La Paz region at 8,000 feet altitude (1938 crop).

130954. Blanco.

130955. Chuspillo.

130956. Gros. From the lower La Paz region at 8,000 feet altitude (1938 crop).

130957. Pacheco. From the Sucre region at 7,000 feet altitude (1937 crop).

## 130958. Crataegus durobrivensis Sarg. Malaceae.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered November 23, 1938.

Growing under Chico P. I. G. 14253. Originally received as seeds from the Royal Botanic Garden, Kew, England. A shrub up to 18 feet high, with ovate leaves and many large showy flowers in compact corymbs. Native to the northern United States.

## 130959. BIGNONIA RADICANS × CHINENSIS. Bignoniaceae.

From Florida. Seeds presented by Hubert Buckley, Ruskin. Received November 27, 1937. Numbered in November 1938.

A woody vine, intermediate in character between its two well-known parents, the variety Aurea of the native trumpet creeper and the Chinese trumpet creeper. It may be trained as a bush or may be used as a low climber. The orange to scarlet flowers are borne profusely in early summer, even after winter-killing of the tops.

#### 130960 to 130962. ORYZA SATIVA L.

Rice.

From Peru. Seeds presented by Alberto Martin Lynch, Chief, Lambayeque Experiment Station, Lambayeque. Received November 17, 1938.

130960. Benllok.

130962. Rubio.

130961. EAS 3.

#### 130963 and 130964.

From California. Seeds purchased from Howard S. Gates, Anaheim. Received November 22, 1938.

130963. Echinocactus acanthodes Lem. Cactaceae.

A very spiny cactus, globular, becoming cylindric, sometimes 8 feet high, with many acute ribs about  $\frac{1}{2}$  inch high; white to bright-red, weak radial spines and awllike central spines. The campanulate yellow to orange flowers are  $\frac{1}{2}$  to  $\frac{2}{2}$  inches long. Native to southern California.

130964. Ferocactus Johnstonianus Britton and Rose. Cactaceae.

A simple, short-cylindric cactus up to 2 feet high, with many spines in a cluster and red-tinged, yellowish flowers about 2 inches long. Native to Baja California.

#### 130965 to 130976.

From France. Plants purchased from Pépinières A. Veauvy, Chantegrillet, Crest. Received November 29, 1948.

130965 to 130971. Amygdalus persica L. Amygdalaceae. Peach.

130965. Aribaud.

130969. Hative du Flachat.

130966. Belle de Sanzy.

130970. Opoix.

130967, Combet No. 2.

130971. Susanne-Darnon.

130968. Guilloux No. 41.

130972 and 130973. MALUS SYLVESTRIS Mill. Malaceae.

130972. Courbis (ou Barbe).

130973. Vaurias.

130974 and 130975. Prunus armeniaca L. Amygdalaceae.

Apricot.

130974. Poizat.

130975. Precoce de Bruel.

130976. PRUNUS AVIUM L.

Sweet cherry.

Hative de Bale.

130977. Lactuca serriola L. Cichoriaceae.

From England. Seeds presented by Humphrey Gilbert-Carter, Director, University Botanic Garden, Cambridge. Received November 26, 1938.

130978. NICOTIANA TABACUM L. Solanaceae.

Tobacco.

From Guatemala. Seeds presented by Raymond Stadelman, Todos Santos Cuchumatán, Department of Huehuetenango. Received November 30, 1938.

130979. LOLIUM REMOTUM Schrank. Poaceae.

From Rumania. Seeds presented by the Director, Botanic Garden, Cluj. Received November 28, 1938.

An annual grass, native to Europe, with stems over 2 feet high.

For previous introduction see 111298.

#### 130980 to 130991.

From Germany. Plants purchased from the Baumschule Wildsdruff, Wildsdruff. Received December 3, 1938.

130980. Amygdalus persica L. Amygdalaceae.

Peach.

Proskauer.

130981. Malus sylvestris Mill. Malaceae.

Apple.

Hage dorn.

130982. Prunus armeniaca L. Amygdalaceae.

Apricot.

Luizet.

130983 to 130987. PRUNUS AVIUM L.

Sweet cherry.

130983. Frazens Wilde.

130986. Schwarze Herz.

130984. Lucienskirsche. 130987. Schwarzwilde.

130985. Marienhöhe.

130988 and 130989. PRUNUS DOMESTICA L.

Common plum.

130988. Rote Eierpflaume.

130989, Victoria.

130990 and 130991. Pyrus communis L. Malaceae.

Common pear.

130990. Madame Verté.

130991, Petersbirne.

#### 130992 and 130993.

From Mexico. Seeds collected by Mrs. Ynes Mexia, Bureau of Plant Industry, United States Department of Agriculture, and presented by Mrs. Floy Bracelin, University of California, Berkeley, Calif. Received December 12, 1938.

130992, CHELONANTHUS ACUTANGULUS (Ruiz and Pav.) Gilg. Gentianaceae.

No. 9144. Oaxaca, Mexico, March 1938. A herbaceous perennial with erect, branching stems up to 6 feet high, distant leaves, the lower ones cordate, the upper ovate, and terminal panicles of numerous subringent yellow flowers. Native to the Peruvian Andes.

130993. CISSAMPELOS TROPAEOLIFOLIA DC. Menispermaceae.

No. 9199. Collected March 23, 1938, on the Yaveo Trail, Rio Yaveo to Arroyo San Pedro, Distrito de Choapam, State of Oaxaca, at about 1,400 feet altitude. A woody vine with membranous, ovate-orbicular, peltate leaves, 2 to 3 inches long, and axillary racemes of small white flowers followed by scarlet fruits. Native to South America.

## 130994 to 130999. Melilotus spp. Fabaceae.

Sweetclover.

From Denmark. Seeds presented by the Director, Botanic Garden, Copenhagen. Received December 2, 1938.

130994. MELILOTUS DENTATA (Waldst. and Kit.) Pers.

130997. Melilotus speciosa Durieu. 130998. Melilotus sulcata Desf.

130995. MELILOTUS INDICA (L.) All. 130996. MELILOTUS ITALICA (L.) Lam. 130999. MELILOTUS WOLGICA Poir.

## 131000 to 131028.

From Germany. Plants and roots purchased from J. Timm & Co., Baumschulen, Elmshorn. Received December 7, 1938.

Unless otherwise mentioned, the material was received as plants.

131000 to 131014. Malus sylvestris Mill. Malaceae.

Apple.

131000. Burchardts Renette. 131008.

131003. Pommerscher Schneeapfel.

131001. Claudius Herbstapfel.
131002. Dithmarscher Paradies.

131010. Seestermuher Zitronenapfel.

131003. Fesefeld.

131011. Schöner aus Itzstedt. 131012. Stahls Winterprinz.

131004. Finkenwärder Herbstprinz.

131013. Stina Lohmann.

131009. Prinzenapfel.

131005. Langsüsser. 131006. Maren Nissen.

131014. Wilstedter Apfel.

131007. Minister von Hammerstein.

131015 to 131018. PRUNUS AVIUM L. Amygdalaceae.

dalaceae. Sweet cherry.
131017. Frühe Schwarze Alten-

131015. Altendländer Blanke.131016. Altendländer Spätkirsche.

131018. Minners Spitze.

länder.

131019 to 131022. PRUNUS DOMESTICA L.

Common plum.

131019. Anna Späth.

131022. Säure Altenländer Frühzwetsche.

131020. Borssuner Zwetsche.

131021. Emma Leppermann.

131023 and 131024. Pyrus communis L. Malaceae. Common pear.

131023. Herrenhauser Winterchrist-

131024. Kampervenus.

131025 to 131028. RHEUM RHAPONTICUM L. Polygonaceae.

Polygonaceae. Common rhubarb.

Received as roots.

131027. Holsteiner Blut.

 $131025.\ Elms feuer.$ 

131028. Loher Blut.

131026. Elmsjubiläum.

#### 131029 to 131031.

From New Jersey. Plants presented by Prof. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received December 9, 1938.

ment Station, New Brunswick. Received December 9, 1938.

131029 and 131030. Amygdalus Persica L. Amygdalaceae. Peach.

131029. Newday.

131030. Sunhigh.

131031. Amygdalus persica var. Nectarina Ait.

Nectarine.

131032. Chamaedorea sp. Phoenicaceae.

Palm.

From Costa Rica. Plants collected at San Josè by Loren G. Polhamus, Bureau of Plant Industry, United States Department of Agriculture. Received December 12, 1938.

Pacaya.

131033. Gossypium. Malvaceae.

Cotton.

From Cuba. Seeds presented by Thomas R. Towns, Holguin. Received August 8, 1938. Numbered in December 1938.

131034 to 131045.

From Poland. Plants purchased from Szkola Ogrodnicza Wielkopolskiej izby Rolniczej, W. Kozminie (Wlkp). Received December 14, 1938.

131034. Amygdalus persica L. Amygdalaceae.

Peach.

Apple.

Spathe de Hallen.
131035 to 131039. Malus sylvestris Mill. Malaceae.

maraceae.

131035. Flintynskie.

131038. Szczecinskie Zolte.
131039. Winnik Francuski.

131036. Ohm Paul.

131037, Reneta Muskatowa.

131040 to 131043. Prunus spp. Amygdalaceae.

131040. PRUNUS ARMENIACA L.

Apricot.

Meksykanka.

131041 and 131042. PRUNUS AVIUM L.

Sweet cherry.

131041. Olbryzmka Natolinska.

131042. Rozowa Wezesna.

131043. Prunus cerasus L.

Sour cherry.

Wczesna z Prinn.

131044 and 131045. Pyrus communis L. Malaceae.

Common pear.

131044. Pomaranczowka.

131045. Jakobowka Hanowerska.

#### 131046 and 131047.

From China. Seeds presented by B. C. Patterson, Tenghsien, Shantung. Received December 7, 1938.

131046. Capsicum frutescens L. Solanaceae.

Common redpepper.

An ornamental pepper.

131047. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

A yellow tomato, said to be wiltproof.

131048. Annona reticulata L. Annonaceae.

Custard-apple.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove, under the P. I. G. No. 9775. Numbered December 15, 1938.

#### 131049 to 131067.

From Manchuria. Seeds collected and presented by B. V. Skvortzov, Harbin. Received December 6, 1938.

131049 to 131051. ADENOPHORA spp. Campanulaceae.

131049. ADENOPHORA CORONOPIFOLIA (Roem. and Schult.) Fisch.

A perennial herb 1 to 2 feet high with petiolate, cordate radical leaves, sessile, linear-lanceolate cauline leaves and racemes of 3 to 10 large blue flowers. Native to eastern Asia.

131050. Adenophora verticillata var. angustifolia Korsch.

This differs from Adenophora coronopifolia in its smaller flowers which are paler and disposed in more open, candelabralike inflorescences. It also differs in the narrower leaves. It is an attractive plant, well worth while in the herbaceous border. The blooming season is July and August. Native to eastern Asia.

131051. Adenophora verticillata var. princeps Korsch.

131052. AGASTACHE RUBOSA (Fisch, and Mey.) Kuntze. Menthaceae. Wrinkled giant-hyssop.

A summer-flowering perennial herb, 2 to 4 feet high, with cordate, serrate, rugose, scented leaves and attractive lavender flowers in reddish calyces, crowded into dense oblong spikes. Native to China.

For previous introduction see 101400.

131053. Polygonum orientale L. Polygonaceae.

Princesplume.

For previous introduction see 65640.

131054. ANGELICA DAHURICA (Fisch.) Benth. and Hook. f. Apiaceae.

A herbaceous perennial with compound umbels of small white flowers. Native to eastern Asia.

131055. AQUILEGIA OXYSEPALA Trautv. and Mey. Ranunculaceae.

Early columbine.

A very early flowering herbaceous perennial, 2 to 3 feet high, with large blue, yellow, and white flowers. The spurs are short and bent forward.

For previous introduction see 103212.

131056. ASTER AGERATOIDES Turcz. Asteraceae.

An aster with ovate leaves and few blue-flowered corymbs. Allied to Aster trinervius. Native to northern China.

131057. BOLTONIA LAUTUREANA Debeaux (Aster lautureanus (Debeaux) Franch.). Asteraceae.

A herbaceous perennial with erect, branching stems about 2 feet high, leathery, ovate-lanceolate or linear-lanceolate leaves and small solitary, terminal flower heads. Native to northeastern China.

131058. Hypochaeris grandiflora Ledeb. Cichoriaceae.

131059. LILIUM CALLOSUM Sieb, and Zucc. Liliaceae.

A martagon lily with slender stems 1 to  $2\frac{1}{2}$  feet high, scattered strap-shaped or linear leaves, usually 1 to 3 inches long, and dull-red to orange-red solitary nodding flowers in racemes of 2 to 9. Native to eastern Asia from Manchuria to Taiwan.

131060. LYCHNIS FULGENS Fisch. Silenaceae.

Campion

San dio lau yang. A herbaceous perennial of a dwarf habit, bearing brilliant scarlet flowers. Grown as an ornamental pot plant by the Chinese.

For previous introduction see 23011.

131061. PHILADELPHUS SCHRENKII Rupr. Hydrangeaceae.

Schrenk mockorange.

131062. RHEUM UNDULATUM L. Polygonaceae.

Rhubarb.

For previous introduction see 115426.

#### 131049 to 131067—Continued

131063. Rumex sp. Polygonaceae.

131064 to 131066. VERONICA spp. Scrophulariaceae.

131064. VERONICA KOMAROVII Monjuschko.

A perennial with stems up to 3 feet high, lanceolate or broad lanceolate leaves  $2\frac{1}{2}$  to 5 inches long, and a dense spikelike raceme of numerous small blue flowers. Allied to  $Veronica\ longifolia$ . Native to the Amur region, Manchuria and Chosen.

131065. VERONICA SIBIRICA L.

A perennial veronica, related to *Veronica virginica*, with sessile or nearly sessile blue or white flowers in terminal racemes. Native to the northern hemisphere.

131066. VERONICA TUBIFLORA Fisch. and Mey.

A herbaceous perennial about 2 feet high, with scattered linear leaves and dense terminal racemes of blue flowers. Native to eastern Asia.

131067. VITIS AMURENSIS Rupr. Vitaceae.

Amur grape.

A wild grape.

For previous introduction see 113698.

## 131068. Ceiba aesculifolia (H. B. K.) Britten and Baker. Bombacaceae.

From Cuba. Seeds presented by Sr. Alberto J. Fors, Director of the Forestry Department, Department of Agriculture, Havana, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received December 12, 1938.

A medium-sized diffusely branched tree 20 to 30 feet high, with the trunk and larger branches bearing stout coarse spines. The leaves are palmately compound with 5 to 7 elliptic or obovate leaflets 2 to 8 inches long, usually glaucescent beneath. The flowers, which are white at first and turn brown with age, appear in May, and the fruits ripen in October. The down may serve the same purpose as kapok for mattresses, cushions, life preservers, and insulation. The tree is native from Veracruz across southern Mexico and southward to Guatemala.

For previous introduction see 90782.

#### 131069 to 131097.

From England. Plants and roots purchased from Clibrans Ltd., Altringham. Received December 19, 1938.

Unless otherwise mentioned the material was received as plants.

131069 to 131071. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131069. James Walker.

131070. Stirling Castle.

131071. Thomas Rivers.

131072 to 131075. Amygdalus persica var. Nectarina Ait. Nectarine.

131072. Elruge.131074. Prince of Wales.131073. Hardwicke.131075. Violette Hative.

131076 to 131083. Malus sylvestris Mill. Malaceae. Apple.

131076. Arthur W. Barnes. 131080. Norfolk Beauty.

 131077. Howgate Wonder.
 131081. Renown.

 131078. King George V.
 131082. S. T. Wright.

 131079. Millicent A. Barnes.
 131083. Winter King.

131084 and 131085. Prunus armeniaca L. Amygdalaceae. Apricot.

131084. Early Moorpark.

131085. Turkey.

#### 131069 to 131097—Continued

131086 to 131091. PRUNUS DOMESTICA L.

Common plum.

131086. Cox's Emperor.

131089. River's Late Prolific.

131087. Early Transparent Gage.

131090. The Czar.

131088. Golden Transparent Gage.

131091. Wierton Gage.

131092 to 131096. Pyrus communis L. Malaceae.

Common pear.

131092. Beurré Fouqueray.

131095. Marie Louise d'Uccle.

131093. Comte de Lamy.

131096. Sir Harry Veitch.

131094. Hazel pear.

131097. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Appleton's Red. Roots received.

#### 131098 to 131136.

From France. Plants purchased from Baltet Frères, Troyes. Received December 22, 1938.

131098 to 131119. Malus sylvestris Mill. Malaceae.

Apple.

131098. Amer-doux.

131109. La Nationale.

131099. Azeroly anisé.

131110. Maman Lily.

131100. Canada Gris d'Auvergne.

131111. Pigeon de Jerusalem.

131101. Candile Sinape. 131102. Cravert. 131112. Rambour de Winnitza. 131113. Reine des Pommes.

131103. De Vendue-Levêque.

131114. Rambour d'Hiver.

131104. Double Bon Pommier.

131115. Reinette Descadre.

131105. Gros Frequin.

131116. Reinette du Canada.

131106. Gros Muscadet.

131117. Reinette La Clermontoise.

131107. Guelton.

131118. Reinette Grise de Saintonge.

131108. Jean Huré.

131119. Rouge Bruyère.

131120. PRUNUS AVIUM L. Amygdalaceae. Guigne Garcine.

Sweet cherry.

131121 to 131136. Pyrus communis L. Malaceae.

Common pear.

131121. Amélie Baltet.

131129. Francois Treyve.

131122, Calouet.

131130. Foukouba.

131123. Charles Escaig. 131124. De la Forestresie. 131131. Madame Baltet.

131124. De la Forestresie.

131132. Madame Du Puis.

131125. Delaville Ainé.

131133. Madame Hutin.

131126. Deyenne Martin Clavier. 131127. Duchesse d'Angoulême 131134. Marie Benoist.
131135. President Loutreul.

131127. Duchesse d'Angoulême Bronzée. 131135. President Loutreut.
131136. Saint Gilles.

131136. Saint Gu

131128. Eleonore Liefmans.

131137 to 131142. Іромоєд вататаs (L.) Lam. Convolvulaceae. Sweetpotato.

From Africa. Tubers presented by the Director of Agriculture, Morogoro, Tanganyika Territory. Received December 22, 1938.

131137. Bangi I. A white-skinned variety of very good flavor; a good yielder.

131138. Bwalabwala. A slightly yellow-fleshed variety; a fair yielder.

#### 131137 to 131142—Continued

131139. Calabash Leaf. A buff-skinned variety; a heavy yielder of both roots and top.

131140. Kazege.

131141. Kilanzilanzi. A white-skinned variety; a fair yielder.

131142. Kwata.

#### 131143 to 131173.

From Germany. Plants purchased from Herm. A Hesse, Weener, Ostfriesland Province, Hannover. Received December 23, 1938.

131143 to 131154. Malus sylvestris Mill. Malaceae.

131143. Boikenapfel.

131149. Ostfriesischer Kalvill.

131144. Fromm's Goldrenette.

131150. Pfirsichroter Sommerapfel.

131145. Groninger Krone.
131146. Moringer Rosenapfel.

131151. Rühm aus Winschoten.

131147. Odenwälder.

131152. Schieblers Taubenapfel. 131153. Süsse Winterkrone.

131148. Osnabrucker Renette.

131154. Weisser Astrachan.

131155 to 131168. Prunus spp. Amygdalaceae.

131155. PRUNUS ARMENIACA L.

Apricot.

Apple.

Loof's Riesen.

131156 to 131163. PRUNUS AVIUM L.

Sweet cherry.

131156. Badacsoner Riesenkirsche.

131157. Farnstädter Schwarze Knorpelkirsche.

131158. Gottorper Riesenkirsche.

131159. Holländische Maikirsche.

131160. Kronprinz von Hannover.

131161. Lamberts Beste.

131162. Neu Königliche.

131163. Zeisberger Riesenkirsche.

131164 to 131166. PRUNUS DOMESTICA L.

Common plum.

131164. Angelina Burdett.

131165. Boddaerts Rencklede.

131166. Esperens Goldflaume.

131167. PRUNUS INSITITIA L.

Plum.

Herrnhäuser Mirabelle.

131168. PRUNUS DOMESTICA L.

Common plum.

Lukas' Fruhzwetsche.

131169 to 131173. Pyrus communis L. Malaceae.

Common pear.

131169. Beuckes Butterbirne.

131170. Emder Kochbirne.

131171. Holländische Zuckerbirne.

131172. Pfirsichbirne.

131173. Stuttgarter Geisshirtle.

#### 131174 to 131176.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Botanical Garden of the Academy of Sciences, Kiev. Received December 16, 1938.

131174. Melilotus alba Desr. Fabaceae.

White sweetclover.

131175. Melilotus officinalis (L.) Lam. Fabaceae.

Sweetclover.

131176. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

- COOLE

For previous introduction see 90041.

#### 131177. Amygdalus persica L. Amygdalaceae.

Peach.

From Mexico. Seeds presented by E. O. Matthews, Parral, Chihuahua. Received December 17, 1938.

A yellow-fleshed peach.

#### 131178 to 131183.

From Germany. Plants purchased from Rudolf Schmidt, Rellingen, Holstein. Received December 23, 1938.

131178 to 131182. PRUNUS spp. Amygdalaceae.

131178 to 131180. PRUNUS DOMESTICA L.

Common plum.

131178. Ackermannpflaume.

131180. Kroosjespflaume.

131179. Fürsts Frühzwetsche.

131181. Prunus insititia L.

Plum.

St. Julien Damascen.

131182. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

131183. PYRUS COMMUNIS L. Malaceae.

Common pear.

Grosse Katzenkopf.

#### 131184 to 131197.

From France. Plants and cuttings purchased from the Museum of Natural History, Paris. Received December 27, 1938.

131184. BRYOPHYLLUM MINIATUM (Hilsenb. and Boj.) Berger. Crassulaceae.

Var. Subpeltatum. A form said to have smaller leaves and longer and more slender petioles, with the leaves in the center of the shoot always peltate.

131185. Bryophyllum turiflorum Harv.

An erect herb 1 foot high, with terete fleshy leaves 1 to 2 inches long tipped with 3 linear erect teeth and 2 broad reflexed teeth. The scarlet flowers are in terminal clusters. Native to Madagascar.

For previous introduction see 101361.

131186 to 131195. KALANCHOE Spp. Crassulaceae.

131186. KALANCHOE Sp.

Received under the name "cassiopeia," for which a place of publication has not been found.

131187. KALANCHOE GLAUCESCENS Britten.

A plant, native to tropical Africa, with a terete stem 2 feet or more high, narrowly oval, irregularly crenate fleshy leaves 5 inches long and red or dark-yellow flowers ½ inch long in a glaucous panicle.

For previous introduction see 79478.

131188. KALANCHOE HILDEBRANDTII Baill.

A woody succulent, native to Madagascar, with dense cymes of small yellow flowers.

For previous introduction see 79171.

#### 131184 to 131197—Continued

131189. KALANCHOE INTEGEBRIMA Lange.

A kalanchoe with erect stems 1 to 1½ feet high, woody at the base, entire broad obovate leaves up to 1½ inches long, and a lax cyme of many scarlet flowers. Said to be native to South Africa.

131190. KALANCHOE HILDEBRANDTII Baill.

For previous introduction and description see 131188.

131191. KALANCHOE PUBESCENS Baker.

A robust erect perennial with pubescent flowering stems 2 feet high, and orbicular crenate, fleshy leaves with a petiole as long as the blade which is 2 inches long and broad. The panicle, with erect spreading main branches, is about 6 inches broad. Native to Madagascar.

131192. KALANCHOE SCHIMPERIANA A. Rich.

A succulent of cespitose habit with obovate, spatulate, crenate leaves and pale-yellow flowers about 3 inches long in a dense branching cyme.

131193. KALANCHOL SEXANGULARIS N. E. Brown.

A kalanchoe with simple 6-angled stems about 3 feet high; petiolate, glossy green, elliptic or suborbicular, crenate leaves and cymes of small yellow flowers, green at the base. Allied to *Kalanchoe paniculata*. Probably native to South Africa.

13.194. KALANCHOE SOMALIENSIS Hook, f.

An erect, stout-branched shrub with sessile, obovate or oblong-obovate, crenate, serrulate, fleshy, greenish-white leaves, 4 to 6 inches long, and large open cymes of white flowers, faintly tinged with yellow. Native to eastern tropical Africa.

131195. KALANCHOE THYRSIFLORA Harv.

A suffrutescent succulent, 2 to 4 feet high, native to southern Africa. The oblong-spatulate, pale-green leaves are 4 to 6 inches long, and the coral-orange flowers are borne in an oblong, compact panicle.

For previous introduction see 99431.

131196. KITCHINGIA CAMPANULATA Baker. Crassulaceae.

A stout-stemmed, fleshy plant with sessile, linear-oblong, obtuse, conspicuously crenate leaves 2 to 3 inches long. The 12 to 20 bright-red flowers are in a lax globose compound terminal cyme. Native to Madagascar.

131197. KITCHINGIA PELTATA Baker.

A succulent herbaceous perennial with leaves petiolate, almost peltate, crenate, 2 to 3 inches long, green with red margins, and pink petioles and stems. Native to Madagascar.

For previous introduction see 101374.

#### 131198 to 131206.

From France. Plants and cuttings purchased from Bachelier Charvot, Chateauroux (Indre). Received December 28, 1938.

131198 and 131199. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131198. Noire de Montreuil.

131199. President Lebrun.

131200 and 131201. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131200. Doux blanc.

131201. Reine des Pommes.

131202 to 131205. Prunus spp. Amygdalaceae.

131202. PRUNUS ARMENIACA L.

Apricot.

De Hollande.

131198 to 131206—Continued

131203. PRUNUS AVIUM L.

Sweet cherry.

Precoce de Beaulieu.

131204. PRUNUS DOMESTICA L.

Common plum.

Quetsch d'Alsace.

131205. PRUNUS.

Surpasse Reine-Claude.

131206. Pyrus communis L. Malaceae.

Common pear.

Calebasse Mme. Bachelier.

131207 to 131233.

From England. Plants purchased from J. Cheal & Sons, Ltd., Lowfield Nurseries, Crowley, Sussex. Received December 29, 1938.

131207 and 131208. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131207. Noblesse.

131208. Princess of Wales.

131209. Amygdalus persica var. nectarina Ait.

Nectarine.

Pineapple.

131210 to 131217. Malus sylvestris Mill. Malaceae.

Apple.

131210. Cornish Aromatic.

131214. Mabbott's Pearmain.

131211. Forge.

131215. Nanny.

131212. Hormead Pearmain.

131216. Peasgood's Nonsuch.

131213. Keswick Codlin.

131217. Winter Queening.

131218 to 131228. PRUNUS spp. Amygdalaceae.

131218.  $\times$  Prunus effusa (Host) Schneid.

Duke cherry.

Archduke.

131219. PRUNUS AVIUM L.

Sweet cherry.

White Heart.

131220 to 131228. PRUNUS DOMESTICA L.

Common plum.

131220. Belgian Purple.

131225. Early Prolific.

131221. Belle de Louvain.

131226, Heron.

131222. Bryanston Gage.

131227. Lawrence Gage.

131223. Crimson Drop.

131228. Prince Englebert.

131224. Curlew.

131229 to 121232. PYRUS COMMUNIS L. Malaceae.

Common pear.

131229. Bellisime d'Hiver.

131231. *Magnate*.

131230. Jersey Gratieli.

131232. Uvedale's St. Germain.

131233. Ribes. Grossulariaceae.

Worcester berry.

131234. Jubaeopsis Caffra Beccari. Phoenicaceae.

Palm.

From the Union of South Africa. Seeds presented by H. C. Bellew, Superintendent, Mkambati Leper Institution, Lusikisiki, Pondoland, through R. A. Dye, Department of Agriculture and Forestry, Pretoria. Received December 29, 1938

A low pinnate-leaved palm 20 feet or less in height, with leaves 12 to 15 feet long and small edible nuts about the size of walnuts. Native to the coast of the Cape of Good Hope.

For previous introduction see 112372.

131235. PSEUDANANAS MACRODONTES (E. Morr.) Harms. Bromeliaceae.

From Argentina. Offshoots collected by J. L. Collins, Experiment Station of the Pineapple Cooperative Association, University of Hawaii. Received November 21, 1938.

A semi-wild form which produces the year round. The fruits are used for making wine and vinegar.

For previous introduction see 121492.

#### 131236 and 131237.

From Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received December 27, 1938.

131236. Prunus capuli Cav. Amygdalaceae.

Capulin.

For previous introduction see 126961.

131237. PSIDIUM GUAJAVA L. Myrtaceae.

Guava.

A variety about the size of an apple.

131238 to 131242. Solanum muricatum Ait. Solanaceae. Pepino.

From Peru. Seeds presented by the Chief, Estación Experimental Agrícola de la Molina, Lima. Received December 27, 1938.

Seeds from fruits obtained in the markets at Lima, Peru.

131238. Fruit creamy yellow, with light violet spots; globose, 10 cm. long and 9.5 cm. in diameter.

131239. Fruit grayish cream-colored with light-violet spots, somewhat heart-shaped,  $10~{\rm cm.}$  long and  $7.5~{\rm cm.}$  wide at the widest part.

131240. Fruit cream-colored with more or less raised light spots, ovoid, 10 cm. long and 7.5 cm wide.

131241. Fruit purplish, elongated, arched on one side toward the tip; terminating in a point; slightly compressed beneath; 11 cm. long and 6 cm. wide.

131242. Fruit dark purple, heart-shaped, elongated, terminating in a tip 10 cm. long and 6 cm, wide.

131243. Ulmus campestris L. Ulmaceae.

English elm.

From England. Plants presented by Dr. J. M. Walter, Hope Department, University Museum, Oxford. Received December 20, 1938.

Var. Christine Buisman.



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Pultenaea daphnoides, 130717.

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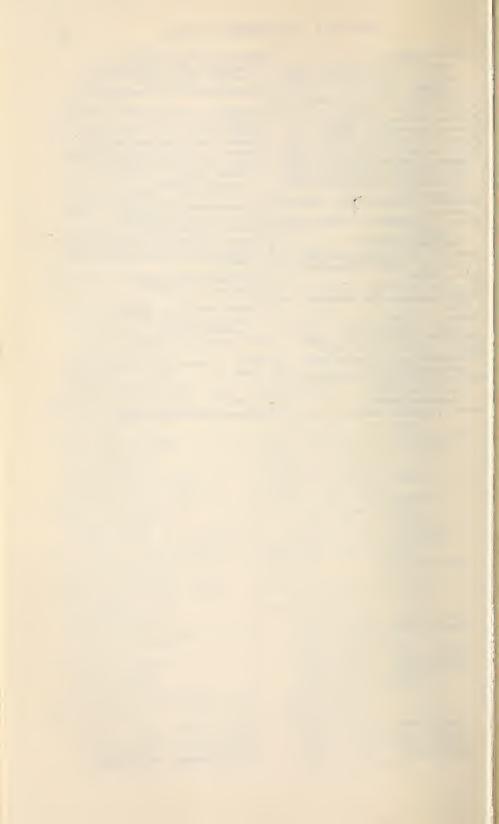
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# Plant Inventory No. 138

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., January 1950



## PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1939 (Nos. 131244 to 132270)

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#### INTRODUCTORY STATEMENT

This inventory, No. 138, is a record of the plant material (Nos. 131244 to 132270) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1939.

The manuscript was prepared under the supervision of Paul Russell, who has checked or identified the incoming seed materials and has verified the botanical nomenclature and descriptive notes.

C. O. ERLANSON,

Principal Horticulturist, in Charge.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### INVENTORY

Note.—This inventory is a historical record of plant material introduced for Department and other specialists. It is not to be considered as a list of plant material for distribution.

131244 to 131247. CARICA PAPAYA L. Papayaceae. Papaya.

From the Philippine Islands. Seeds presented by L. W. Bryan, Board of Agriculture and Forestry, Hilo, Hawaii. Received January 5, 1939.

131244. A variety with medium-sized fruits.

131245. Solo.

131246. Watermelon.

131247. A variety with large fruit.

131248. SWINGLEA GLUTINOSA (Blanco) Merrill (Chaetospermum glutinosum (Blanco) Swingle). Rutaceae.

From the Canal Zone. Seeds presented by the Superintendent, Canal Zone Experimental Gardens, Summit. Received January 9, 1939.

A small spiny tree, native to the Philippine Islands, with trifoliolate leaves, small clusters of rather large white flowers, and oblong, hard-shelled fruits. It is used as a stock for commercial citrus varieties.

For previous introduction see 109788.

131249. Brassica Hirta Moench. Brassicaceae. White mustard.

From the Netherlands. Seeds presented by N. V. Sluis en Groot's Kon, Zaadteelt en Zaadhandel, Enkhuisen. Received January 12, 1939.

131250 to 131279. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received January 4, 1939.

131250.  $DC \times Dundee \times Dundee$ , No. 52.

131251.  $DC \times Dundee \times Dundee$ , No. 49.

131252. Dundee  $\times$  Bunyip, No. 181.

131253. Dundee  $\times$  Bunyip, M 336. No. 182.

131254. Dundee  $\times$  Ford, No. 3.

131255. Dundee  $\times$  Ford, No. 702.

131256. Dundee  $\times$  Ford, No. 4.

131257. Dundee  $\times$  RL 5954  $\times$  Ford  $\times$  Dundee, No. 224.

131258. Dundee  $\times$  RL 595, No. 553.

131259. Dundee  $\times$  Federation  $\times$  Nabawa  $\times$  Federation, No. 15.

131260. Dundee  $\times$  Federation  $\times$  Nabawa  $\times$  Federation, No. 17.

131261. Dundee  $\times$  Federation  $\times$  Nabawa  $\times$  Federation, No. 22.

131262. Dundee × Morocco 422, C 11415, Early No. C 36.

131263. Federation  $\times$  Gälgalos, C 5699, No. 183.

131264. Federation  $\times$  Hope, C 9541, No. 226.

131265. Federation  $\times$  Nabawa  $\times$  Federation, M 371, No. 189.

131266. Federation × Khapli, C 4919, No. 188.

131267. Federation  $\times$  Nabawa, No. 231.

131268.  $Federation \times Nabawa$ , C 10909, No. 187.

131269. Hard Federation  $\times$  Nabawa, C 10910, No. 223.

131270. Hard Federation × Nabawa, C 10911, No. 224.

131271. Hard Federation × Nabawa, C 10912, No. 225.

131272. Hard Federation  $\times$  Nabawa, C 10445, No. 222.

131250 to 131279.—Continued.

131273. Hard Federation X Nabawa, C 10444, No. 221.

131274. Hard Federation × Nabawa, C 10917.

131275.  $Hussar \times Hard Federation$ , C 6292, No. 340.

131276. Nabawa × Dundee, C 10535, No. 361.

131277. Nabawa × Dundee, C 10541, No. 364.

131278. Waratah × Dundee, C 10454, No. 349.

131279. Waratah × Dundee, C 10455, No. 69.

131280 to 131287.

From England. Plants purchased from the Blackmoor estate, Blackmoor, Liss, Hants. Received January 5, 1939.

131280. CYDONIA OBLONGA Mill. Malaceae.

Quince.

131281 to 131283. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131281. Malling I.

131282. Malling type XVI.

131283. Dr. Clifford.

131284 and 131285. PRUNUS DOMESTICA L. Amygdalaceae. Common plum.

131284. Warwickshire Drooper.

131285. Common Mussel.

131286. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

Myrobalan B.

131287. PRUNUS DOMESTICA L.

Common plum.

Pershore.

131288 and 131289. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From Germany. Plants purchased from J. Schmitz, München. Received January 6, 1939.

131288. Frühaprikose.

131289. Luizet.

131290. PSIDIUM sp. Myrtaceae.

Guava.

From Mexico. Seeds presented by Dr. C. A. Purpus, Zacuapam, Huatusco, Veracruz. Received January 3, 1939.

131291 to 131294. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Europe. Scions presented by Ivo Volarić, Samobor, Croatia, Yugoslavia. Received January 9, 1939.

131291. Budimka.

131292. Kolacharka.

131293. Prespanka.

131294. Tetovka.

131295 to 131321. RHODODENDRON.

Ericaceae.

From Japan. Plants purchased from the Chugai Nursery Co., Yamamoto, Kawabegun, near Kobe. Received January 10, 1939.

Reported to be hybrids of R. simsii and R. indicum.

131295. Kikabu.

131309. Seigetsu.

131296. Kingetsu.

131310. Shi-how.

131297. Kongo.

131311. Sei-un.

#### 131295 to 131321.—Continued.

131298. Kow-how.

131299. Kow-koku.

131300. Kwahow.

131301. Mai-hime.

131302. Musashino.

131303. Myogi.

131304. Otome.

131305. Reihow.

131306. Rimpu.

131307. Row-getsu.

131308. Sakura-yama.

#### 131322 to 131326.

From Germany. Seeds purchased from J. Schmitz, München. Received January 6, 1939.

131322. BETULA PENDULA Roth. Betulaceae.

For previous introduction see 116193.

131323 and 131324. MALUS SYLVESTRIS Mill. Malaceae.

131323. From cultivated apples.

131324. From wild apples.

131325 and 131326. Pyrus communis L. Malaceae.

L. Malaceae. Common pear.

131312. Shinnyo-no-tsuki.

131313. Shin-sei.

131316. Sohow.131317. Shikun-ow.

131314. Shumpow. 131315. Shun-rei.

131318. Takara-bune.

131320. Tama-sugata.131321. Ten-meikai.

131319. Tama-giku.

131325. From cultivated pears.

131326. From wild pears.

131327. HIPPEASTRUM RUTILUM var. CROCATUM (Ker) Baker. Amaryllidaceae.

From California. Bulbs presented by Howard & Smith, Montebello. Received June 17, 1938. Numbered in January 1939.

A variety differing from the type in having bright-orange flowers, more undulate segments, larger leaves, and a taller stem.

For previous introduction see 118818.

131328 and 131329. Brassica spp. Brassicaceae.

From Hungary. Seeds presented by Edmund Mauthner, Budapest. Received January 7, 1939.

131328. Brassica Hirta Moench.

White mustard.

Birch.

Apple.

131329. Brassica Nigra (L.) Koch.

Black mustard.

131330 and 131331. CITRUS AURANTIFOLIA (Christm.) Swingle. Rutaceae. Lime.

From Cuba. Budsticks presented by Thomas R. Towns, Holguin. Received January 17, 1939.

131330. Originally from Brazil.

131331. A West Indian lime.

#### 131332 to 131351.

From France. Plants purchased from Pallez-Remy, Metz (Moselle). Received January 17, 1939.

131332 to 131337. AMYGDALUS PERSICA L. Amygdalaceae. Peach. 131332. Baron Dufour.

131332 to 131351.—Continued.

131333. Belle Imperiale.

131334. Gaillard Girerd IV.

131335. Madame Rogniat.

131336. Madeleine Hariot.

131337. Mignonne Hative.

131338 to 131342. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131338. Belle Dubois.

131339. Framboise d'Oberland.

131340. Fréquin de Chartres.

131341. Reinette d'Angleterre.

131342. Reinette des Vergers.

131343 and 131344. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

131343. De Saluces.

131344. Gros Precoce.

131345 to 134347. PRUNUS DOMESTICA L.

Common plum.

131345. Cochet Père.

131346. Grosse Marange.

131347. Quetsche Blanche de Letricourt.

131348 to 131351. Pyrus communis L. Malaceae. Common pear.

131348. Bergamotte Hertriche.

131349. D'Angers.

131350. Roi Sobiesky.

131351. Soquette.

131352. CAPSICUM FRUTESCENS L. Solanaceae.

Common redpepper.

From Hungary. Seeds purchased from Monori Magkereskedesenek, Budapest. Received January 16, 1939.

Jubilee of Honor.

131353. JUGLANS REGIA L. Juglandaceae. Persian walnut.

From Estonia. Seeds purchased from William von Breman, Keila-Joa. Received January 17, 1939.

131354 to 131401. Triticum Aestivum L. Poaceae.

Common wheat.

From Australia: Seeds presented by W. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received January 20, 1939.

131354. Dundee  $\times$  (H 44-24  $\times$  Marquis)  $\times$  Dundee (red).

131355. Dundee  $\times$  (H 44-24  $\times$  Marquis)  $\times$  Dundee (white grain).

131356. Dundee  $\times$  Gular.

131357. Dundee  $\times$  Gular.

131358. Dundee × Gular.

131359. Dundee × Gular.

131360. Dundee × Gular.

131361. Dundee × Gular.

131362. Dundee × Gular.

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131354 to 131401.—Continued.
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131363. Dundee  $\times R.L.$ 

131364. Dundee  $\times$  R.L.

131365. Dundee  $\times$  R.L. 595.

131366. Dundee  $\times$  R.L. 595.

131367. Dundee  $\times$  R.L. 595.

131368. Dundee × R.L. 595.

131369. Dundee × Ford.

131370. Dundee  $\times$  Ford.

131371. Dundee  $\times$  Ford.

131372. Dundee × Ford.

131373. Ford × Dundee.

131374. Ford × Dundee.

131375. Ford  $\times$  Dundee.

131376. Ford  $\times$  Dundee.

131377.  $Gular \times Pusa \times Dundee$ .

131378. Hard Federation × Nabawa, C 10441.

131379. Hard Federation  $\times$  Nabawa, C 10442.

131380. Hard Federation × Nabawa, C 10444.

131381. Hard Federation × Nabawa, C 10445.

131382. Hard Federation × Nabawa, C 10910.

131383. Nabawa × Dundee (Mitchell), C 10533.

131384. Nabawa × Dundee, C 10534.

131385. Nabawa × Dundee, C 10535.

131386. Nabawa  $\times$  Dundee, C 10536.

131387. Nabawa × Dundee, C 10537.

131388. Nabawa × Dundee, C 10538.

131389. Nabawa  $\times$  Dundee, C 10540.

131390. Tenmarq  $\times$  Dundee, W 0-7-2-0.

131391. Tenmarg  $\times$  Dundee, W 0-7-4-0.

131392. Tenmarq  $\times$  Dundee, W 0-19-2-0.

131393.  $Tenmarq \times Dundee, W 0-19-4-0.$ 

131394. Tenmarq  $\times$  Dundee, W 0-19-5-0.

131395.  $Tenmarg \times Dundee, W 0-19-6-0.$ 

131396. Tenmarq × Dundee, W 0-19-7-0.

131397.  $Tenmarq \times Dundee, W 0-19-8-0.$ 

131398. Tenmarq × Dundee, W 0-19-9-0.

131399. Tenmarg × Dundee, W 0-9-10-0.

131400. Tenmarq  $\times$  Dundee, W 0-27-4-0.

131401. Tenmarq × Dundee, W 0-27-5-0.

131402. DACTYLIS ASCHERSONIANA Graebn. Poaceae. Grass.

From Sweden, Seeds presented by Dr. A. Muntzing, University of Lund, Svalöf. Received January 12, 1939.

131403. PRUNUS SIBIRICA L. Amygdalaceae. Siberian apricot.

From Manchuria. Seeds presented by A. R. Munday, Oakville, Manitoba, Canada. Received January 16, 1939.

For previous introduction see 114670.

131404. CHOSENIA BRACTEOSA (Trautv. and Mey.) Nakai. (C. splendida Nakai). Salicaceae.

From Japan, Cuttings presented by Dr. T. Kaburaki, Director, Forest Experiment Station, Keijo, Chosen. Received January 20, 1939.

A handsome upright tree, closely related to the willows, up to 100 feet high. When young the bark is whitish, becoming brownish-gray with age. Native to northeastern Asia.

131405. DAVIDIA INVOLUCRATA VAR. VILMORINIANA (Dode) Hemsl. Cornaceae.

From France. Seeds presented by A. Gerard, La Fosse, par Montoire sur Loir, Loir-et-Cher. Received January 19, 1939.

A pyramidal tree, native to China, with cordate, yellow-green leaves and small flower heads each with 2 unequal creamy-white bracts, the longer one pendulous and 6 inches long.

For previous introduction see 113507.

#### 131406 to 131422.

From the Union of Soviet Socialist Republics. Seeds presented by S. N. Shundenko, Chief, Bureau of Plant Introduction, Lenin Academy of Agricultural Sciences, Leningrad. Received January 19, 1939.

131406 and 131407. Amygdalus Persica L. Amygdalaceae. Peach.

Var. Ferganensis. From Turkistan.

131406. Belomiasy Ranny.

131407. Zheltomiassy Ranny.

131408 and 131409. AMYGDALUS PERSICA PLATYCARPA (Decaisne) Ricker.

From Turkistan.

131408. Bliudchaty Posdony.

131409. Bliudchaty Ranny.

131410. MALUS BACCATA var. MANDSHURICA (Maxim.) C. Schneid. Malaceae. Crab apple.

A tree 12 to 15 feet high, with pure-white flowers which are produced in great profusion, are over 1 inch across, and very fragrant. The fruit is round, yellow or red, and not larger than a large pea. It is native to northeastern Asia.

For previous introduction see 68988.

131411 to 131422. PRUNUS spp. Amygdalaceae.

131411 to 131422. PRUNUS spp. Amygdalaceae.

131411. Krasnotchoky. From Krim, Nikitsky Sad.

131412. Davidiana No. 1773. From central Asia.

131413 to 131418, PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

131413. Kok Sultan, No. 523. From central Asia.

131414. Kok Sultan, No. 1281. From central Asia.

101111. How Datemen, 110. 1201. I form Contral Ass

131415. From Pskhu, near Sukhum, Caucasus.

131416. From Kabarda, North Caucasus.

131417. From North Caucasus.

131418. From Gokcha (Seran), Caucasus.

131406 to 131422.—Continued.

131419 to 131421. × PRUNUS DASYCARPA Ehrh.

Plum-apricot.

From central Asia.

For previous introduction see 128566.

131419. Flor-Tsiran. A mixed sample.

131420. Urinko Sliva.

131421. Sarolju.

131422. PRUNUS MAHALEB L.

Mahaleb cherry.

Worsob.

131423. FURCRAEA PUBESCENS Tod. Amaryllidaceae.

From Cuba, Bulbils presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos: Received January 23, 1939.

A nearly trunkless plant, believed to be native to Mexico. with spreading leaves up to 5 feet long by 3 inches wide and marginal teeth 1/3 inch long. The flowers are greenish-white, 2 1/4 inches across, and are borne on a scape 15 to 20 feet high. Like the agaves, which they resemble in appearance, the furcraeas often do not flower for several years.

131424. PELAGODOXA HENRYANA Beccari. Phoenicaceae. Palm.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered January 24, 1939.

P.I.G. 9574. An unarmed palm with a trunk 18 to 24 feet high and 5 to 7 inches in diameter, which grows on stilt roots like a pandanus; the oblong leaves have blades 6 to 9 feet long and petioles about 3 feet long. The large spherical fruits are in racemes of 12 to 16. The palm requires shade and is of very striking appearance. Native to the Marquesas Islands.

For previous introduction see 127319.

131425 to 131427.

From Germany. Seeds purchased from Wilhelm Pfitzer, Stuttgart. Received January 21, 1939.

131425. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

Perle von Schwaben, a heading type.

131426. Phaseolus vulgaris L. Fabaceae.

Common bean.

Granda ohne Fäden, a bush variety, No. 2756.
131427. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Schwabisches Vollblut.

131428. TUTCHERIA SPECTABILIS (Champ.) Dunn. Theaceae.

From China. Seeds presented through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received January 23, 1939.

Received from the Botanic Gardens, Hong Kong. A handsome evergreen shrub or small tree native to Hong Kong. The shining ovate lanceolate, leathery leaves are 5 to 6 inches long, and the white cup-shaped flowers are about 2 1/2 inches across.

For previous introduction see 46982.

131429. Brassica Hirta Moench. Brassicaceae. White mustard.

From England. Seeds purchased from Gartons, Ltd., Warrington. Received January 24, 1939.

131430 to 131461.

From England. Plants purchased from George Bunyard & Co., Ltd., Maidstone, Kent. Received January 27, 1939. 131430 to 131461.—Continued.

131430 and 131431. AMYGDALUS PERSICA var. NECTARINA Ait. Amygdalaceae. Nectarine.

131430. Darwin.

131431. Milton.

131432 to 131441. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131432. Adams' Pearmain.

131433. Ashmead's Kernel.

131434. Beauty of Stoke.

131435. Clark's Seedling.

131436. Cornish Gilliflower.

131437. Grange's Pearmain.

131438. Norman's Pippin.

131439. Pitmaston Pine.

131440. Wanstall Pippin.

131441. Yellow Ingestrie.

131442 to 131456. PRUNUS spp. Amygdalaceae.

1142 to 191490. I worker spp. 11mggdataceac.

131442 to 131445. PRUNUS ARMENIACA L. Apricot.

131442. Frogmore Early.

131443. Large Early.

131444. New Large Early.

131445. Veitch's Red.

131446. PRUNUS AVIUM L. Sweet cherry.

Black Eagle.

131447. PRUNUS CERASUS L. Sour cherry.

Coe's Carnation.

131448. PRUNUS AVIUM L. Sweet cherry.

Early Amber.

131449. PRUNUS CERASUS L. Sour cherry.

Flemish Red.

131450 and 131451. PRUNUS AVIUM L. Sweet cherry.

131450. Frogmore Bigarreau.

131451. Kentish Bigarreau.

131452. Prunus cerasus L. Sour cherry.

Kentish Red.

131453 to 131456. PRUNUS.

131453. Knight's Early Black.

131454. Nouvelle Royale.

131455. Ronalds' Late Duke.

131456. Waterloo.

131457 to 131461. Pyrus communis L. Malaceae. Common pear.

131457. Belle Julie.

131458. Directeur Hardy.

131459. Duchesse de Bordeaux.

131460. Emile d'Heyst.

131461. President Barabé.

#### 131462 to 131467.

From England. Plants purchased from Laxton Bros., Ltd., Bedford. Received January 28, 1939.

131462. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

James Walker.

131463. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Laxton's Herald.

131464 and 131465. PRUNUS DOMESTICA L. Amygdalaceae. Common plum. 131464. Laxton's Ideal.

131465. Laxton's Olympia.

131466. Rubus. Rosaceae.

John Innes. A blackberry said to be a hybrid between Rubus ulmifolius and R. thyrsiger.

131467. RUBUS sp.

Pyne's Royal Red raspberry.

#### 131468. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

From Yugoslavia. Scions presented by Ivo Volaric, Samobor, Croatia. Received January 30, 1939.

Red Prespanka.

A red-blushed sport of Prespanka (P.I. 131293).

## 131469. Bambusa polymorpha Munro. Poaceae. Bamboo.

From Rangoon, India. Seeds presented by the Bureau of Entomology and Plant Quarantine. Received February 2, 1939.

A tropical bamboo found in Bengal and Burma. The plants grow in tufts or clumps, often reaching a height of 60 or 70 feet. The leaves are small, 3 to 7 inches long, and from 1/4 to 1/2 inch wide. It sometimes flowers after 60 years.

For previous introduction see 61373.

## 131470. Beta vulgaris L. Chenopodiaceae. Common beet.

From Italy, Seeds presented by R. Stazione Sperimentale di Bieticultura, Rovigo. Received February 4, 1939.

Sugar-beet seed.

#### 131471 to 131492.

From France. Plants purchased from Pinguet-Guindon & Fils, St. Symphorion. Received February 9, 1939.

131471 to 131474. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131471. Brugnon Jaune de Padoue.

131472. Doctor Aribaud.

131473. Grosse Madeleine.

131474. Peatmaston Orange.

131475 to 131480. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131475. À Cidre Antoinette.

131476. Belle Flavoise.

131477. Calville Rouge du Mt-d'Or.

131478. Francatu.

131471 to 131492.—Continued.

131479. Lambron.

131480. Roi Durand.

131481 to 131483. PRUNUS spp. Amygdalaceae.

131481. PRUNUS ARMENIACA L.

Apricot.

Alberge de Tours.

131482. PRUNUS AVIUM L.

Sweet cherry.

Bigarreau Pelissier.

131483. PRUNUS CERASUS L.

Sour cherry.

Triaux de Fondettes.

131484 to 131492. Pyrus communis L. Malaceae.

Common pear.

131484. Beurre Papa Lafosse.

131485. Beurre Sichet.

131486. Doyenne George Boucher.

131487. Doyenne Mme. Cornuau.

131488. La Belgique.

131489. Mme. Henry Lamy.

131490. Mme. Nivet.

131491. Ouat.

131492. Vice President Aubert.

131493. MASCARENHASIA ELASTICA Schum. Apocynaceae.

From Africa. Seeds presented by F. M. Rogers, Superintendent of Plantations, East African Agricultural Research Station, Amani, Tanga, Tanganyika Territory. Received February 6, 1939.

A tree, native to tropical Africa. It is a source of rubber, and the timber also is said to be excellent.

For previous introduction see 77698.

131494. QUERCUS sp. Fagaceae.

Oak.

From France. Trees purchased from Leopold Laval, Loupchat, Par Martel. Received February 10, 1939.

Truffle oak.

131495. QUERCUS sp.

Oak.

From France. Trees purchased from N. Maurizot, Saint-Didier (Vaucluse). Received February 10, 1939.

Truffle oak.

131496 to 131500. Gossypium. Malvaceae.

Cotton.

From Bulgaria. Seeds presented by the Experiment Station, Sadovo. Received February 8, 1939.

131496. Populatcion I.

131497. No. 36 ch.

131498. No. 182.

131499. No. 385.

131500. No. 750 ch.

131501 to 131511. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Poland. Scions purchased from Dr. W. I. Filewicz, Sinoleka Experiment Station, Post Sosnowe, near Siedloe. Received February 13, 1939. 131501 to 131511.—Continued.

131501. Belle Fille.

131502. Bergamotte Reinette.

131503. Bohnapfel.

131504. Boskopskie.

131505. Coulon Reinette.

131506. Landsberska.

131507. Lithuanian Pippin.

131508. Malinowa Oberlandska.

131509. Szafran Pippin.

131510. Roter Eiserapfel (Zelenzniak).

131511. Zuccalmaglio Reinette.

131512. Brassica Nigra (L.) Koch. Brassicaceae. Black mustard.

From the Netherlands. Seeds purchased from N. V. Sluis Brothers, Ltd., Enkhuizen. Received February 10, 1939.

Dutch black or brown mustard.

131513 to 131530.

From France. Plants purchased from L. Levavasseur, Angers. Received February 16, 1939.

131513 to 131517. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131513. Belle de Douè.

131514. Belle Henri Pinaut.

131515. Besi Robin.

131516. Chevreuse Hâtive.

131517. Chevreuse Tardive.

131518. AMYGDALUS PERSICA var. NECTARINA Ait.

Nectarine.

Cuzin.

131519 to 131521. AMYGDALUS PERSICA L.

Peach.

131519. Marquise de Brissac.

131520. Sanguine de Palluau.

131521. Thèophile Sueur.

131522 to 131525. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131522. Benedictine.

131523. De La Bouairia.

131524. Gros Doux Sucre.

131525. Reinette du Portugal.

131526 to 131530. Pyrus communis L. Malaceae.

Common pear.

131526. Beurré Auguste.

131527. Doyenné Georges Boucher.

131528. Graslin.

131529. Royal Vendèe.

131530. Vauquelin.

131531. GLYCINE MAX (L.) Merrill. Fabaceae.

Soybean.

From Poland. Seeds presented by Prof. Jan. Muszinsky, University of Wilno, through Sven A. Holmberg, Algot Holmberg & Söner A.B., Norrköping, Sweden. Received February 14, 1939.

Var. Batorowka.

#### 131532 to 131546.

From Manchuria. Seeds presented by B. V. Skvortzov, Harbin. Received February 8, 1939.

A collection of grasses, native to northern Asia.

131532. AGROPYRON INTERMEDIUM (Host) Beauv. Poaceae.

A perennial grass native to the Amur district of eastern Asia.

131533. AGROSTIS TRINII Turcz. Poaceae.

A perennial grass native to eastern Asia.

131534. BECKMANNIA SYZIGACHNE (Steud.) Fern. Poaceae.

For previous introduction see 111520.

131535. Bromus inermis Leyss. Poaceae.

Common bromegrass.

131536. CALAMAGROSTIS ANGUSTIFOLIA Komer. Poaceae.

A perennial grass native to northeastern Asia.

131537. CALAMAGROSTIS LANGSDORFFII (Link.) Trin.

A native grass, said to make good hay.

For previous introduction see 68408.

131538. FESTUCA RUBRA L. Poaceae.

Red fescue.

For previous introduction see 115359.

131539. HORDEUM BREVISUBULATUM (Trin.) Link.

For previous introduction see 109821.

131540. Koeleria gracilis Pers. Poaceae.

For previous introduction see 113191.

Bluegrass.

131541 to 131545. PoA spp. Poaceae. 131541 and 131542. PoA PRATENSIS L.

Kentucky bluegrass.

131541. From the steppe district of northern Manchuria.

131542. From the mountain district of northern Manchuria.

131543. POA SUBFASTIGIATA Trin.

A creeping perennial grass with stems over 1 foot high. Native to Siberia and Mongolia.

For previous introduction see 113224.

131544. Poa sp.

131545. POA sp.

131546. Puccinellia tenuiflora (Griseb.) Scribn. and Merr. Poaceae. An erect perennial grass, native to northern Asia and Alaska.

131547. CAPSICUM FRUTESCENS L. Solanaceae.

Common redpepper.

From Hungary. Seeds presented by Edmund Mauthner, Ltd., Budapest. Received February 14, 1939.

Sxegedi Rozsa (Sxegeder Rosa).

#### 131548 to 131568.

From Belgium. Trees purchased from Louis Lens, Wavre-Notre-Dame (Lez Malines). Received February 18, 1939.

131548 to 131551. AMYGDALUS spp. Amygdalaceae.

131548 to 131550. AMYGDALUS PERSICA L.

131548. Double Montagne.

131548 to 131568.—Continued.

131549. Favorite.

131550. Matthew's Beauty.

131551. Amygdalus persica var. Nectarina Ait.

Nectarine.

Fernand Demeyer.

131552 to 131561. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131552. Bellefleur de Brabant.

131553. Bellefleur Larges Mouches.

131554. Bellefleur de France (Berglander).

131555. Marie Josephe d'Othée.

131556. Pomme Henri.

131557. Posson de France.

131558. Posson Rouge de Holland.

131559. Reinette d'Orleans.

131560. Reinette de France.

131561. Reinette Jaeghers.

131562 to 131564. PRUNUS spp. Amygdalaceae.

131562. Prunus Avium L.

Bigarreau Rose.

131563. PRUNUS CERASUS L.

Sour cherry.

Sweet cherry.

Abbesse de Moulan.

131564. PRUNUS.

Reine Claude Conducta, plum.

131565 to 131568. Pyrus communis L. Malaceae.

Common pear.

131565. Calebasse à la Reine.

131566. Saint-Rémy.

131567. Souvenir de la Reine des Belges.

131568. Tardive de Ninove.

131569 to 131571. PRUNUS SUBHIRTELLA Miquel. Amygdalaceae. Higan cherry.

From Canada. Plants presented by W. H. Warren, Superintendent of Parks, Victoria, British Columbia. Received February 20, 1939.

131569. Var. Ascendens Rosea.

131570. Var. Pendula Rubra Flore-plena.

131571. Var. Pendula Sendaica.

131572. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

From Yugoslavia. Scions purchased from Ivo Volaric, Samobor, Croatia. Received February 25, 1939.

Bojkova (Boiken).

131573. Pyrus sp. Malaceae.

Pear.

From China. Scions purchased from Rev. B. C. Patterson, N. C. Theological Seminary, Tenghsien, Shantung. Received February 20, 1939.

A green-skinned pear with sweet crisp flesh. It ripens early in September and will keep for nearly 2 months.

131574 to 131586.

From Manchuria. Seeds collected and presented by B. V. Skvortzov, Harbin. Received February 15, 1939.

131574 to 131586.—Continued.

131574. AGROPYRON sp. Poaceae.

Grass.

131575. CALAMAGROSTIS EPIGEIOS (L.) Roth. Poaceae.

Grass.

131576. CALAMAGROSTIS NEPALENSIS Nees.

Grass.

A perennial grass, native to the Himalayan region.

For previous introduction see 114227.

131577. DIARRHENA JAPONICA Franch. and Sav. Poaceae.

Grass.

A perennial grass, native to Japan.

131578. ELYMUS SIBIRICUS L. Poaceae.

Grass.

For previous introduction see 108495.

131579. GLYCERIA REMOTA VAR. JAPONICA Hack. Poaceae.

Grass.

For previous introduction see 101141.

131580. MANISURIS COMPRESSA (L.f.) Kuntze. Poaceae.

Grass.

A coarse leafy grass, 5 feet tall, which thrives in swamp lands and on the margins of rivers.

For previous introduction see 41745.

131581. PHALARIS ARUNDINACEA L. Poaceae.

Reed canary grass.

For previous introduction see 111700.

131582 to 131586. PoA spp. Poaceae.

Bluegrass.

131582. POA SPHONDYLODES Trin.

Found on dry grassy mountain slopes.

For previous introduction see 113223.

131583. Poa sp.

131585. POA sp.

131584. POA sp.

131586. POA Sp.

# 131587 and 131588. TRIFOLIUM SUBTERRANEUM L. Fabaceae. Subterranean clover.

From Australia. Seeds presented by the Department of Agriculture, Victoria. Received February 20, 1939.

131587. Bass.

131588. MacArthur.

#### 131589 to 131592.

From the Union of Soviet Socialist Republics. Seeds purchased from the Director, Hortus Botanicus Kujbyshevensis. Received February 20, 1939.

131589 to 131591. MELILOTUS spp. Fabaceae.

Sweetclover.

131589. MELILOTUS ALBA Desr.

White sweetclover.

131590. MELILOTUS OFFICINALIS (L.) Lam.

131591. MELILOTUS sp.

131592. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

For previous introduction see 131176.

#### 131593 to 131596.

From France. Seeds purchased from Vilmorin-Andrieux & Cie. Received February 20, 1939.

131593. Brassica Hirta Moench. Brassicaceae.

White mustard.

131594. Brassica Nigra (L.) Koch.

Black mustard.

131595 and 131596. CAPSICUM FRUTESCENS L. Solanaceae.

Common redpepper.

131593 to 131596.—Continued.

131595. Long red pepper.

131596. Chili red or Cayenne. A long narrow pepper.

#### 131597 to 131605.

From England. Trees and scions purchased from W. Hopwood & Sons, Cheltenham. Received February 25, 1939.

131597. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

Dymond.

131598 to 131603. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Received as scions.

131598. Foxwhelp.

131599. Kingston Black.

131600. Knotted Kernel.

131601. Reinette Obry.

131602. Strawberry Norman.

131603. Sweet Alford.

131604. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Large Early Montgamet.

Common plum.

131605. PRUNUS DOMESTICA L. Kirke's.

#### 131606 to 131611.

From Brazil. Offshoots collected by J. L. Collins, with the Collins-Baker Expedition. Received February 27, 1939.

131606 to 131609. Ananas spp. Bromeliaceae.

131606 and 131607. ANANAS COMOSUS (L.) Merr.

Pineapple.

131606. C.B. Acc. No. 32. From Coxipo.

131607. C.B. Acc. No. 36. From Dourados.

131608. ANANAS sp.

Amazonian. C.B. Acc. No. 62, From Campinas.

131609. Ananas ananassoides (Baker) L. B. Smith.

C.B. Acc. No. 31. From Livramento. A Brazilian plant very much like the pineapple, with rigid linear leaves over 2 feet long and less than 1 inch broad above the dilated base. The flower head is borne on a stem 1 to 2 feet high, but the individual flowers are surrounded by separate bracts instead of being united as in the pineapple.

For previous introduction see 130939.

131610 and 131611. PSEUDANANAS MACRODONTES (E. Morr.) Harms. Bromeliaceae.

A semiwild form which bears throughout the year. The fruits are used for making wine and vinegar. Native to Brazil.

131610. C.B. Acc. No. 26. From Lagoa Tecca.

131611. C.B. Acc. No. 28. From Sao Domingos.

131612 to 131642. AVENA spp. Poaceae.

Oats.

From Poland. Seeds presented by the Director, Institute of Plant Breeding, Krakow. Received February 27, 1939.

131612. AVENA BYZANTINA Koch.

Rubida No. 3223.

131613 to 131639. AVENA SATIVA L.

131612 to 131642.—Continued.

131613. Aldershafer Bialy Orzel-Szwecja.

131614. Antoninski Bialy.

131615. Antoninski Zolty.

131616. Bialy Mazur.

131617. Biały Orzeł Svalöf.

131618. Detenicky Schlanstedsky-Czechy.

131619. Dregeruvzluty.

131620. Düppawski.

131621. Goldkorn.

131622. Grcywacz wołynski.

131623. Hirschbacher.

131624. Lembkes Baldur.

131625. Lischower Frühhafer.

131626. Nolzowsky Selekeni.

131627. Rothenburger Schwarzhafer.

131628. Siegeshafer Zwyciezca.

131629. Sobieszynski.

131630. Sołacki.

131631. Strackenthiner W. H.

131632. Strubes Schlandstedter.

131633. Tatrzanski.

131634. Teodozja.

131635. Złoty Descez Svalöf.

131636. Genuina brunnea 2391.

131637. Grandiglumis cinerea 8993.

131638. Grandiglumis hirsuta 9093.

131639. Nodipilosa allo-aristata 5106. 131640 to 131642. AVENA STRIGOSA Schreb.

131640. Glabrescens albida 7513.

131641. Glabrescens cambrica 9411.

131642. Orcadensis nigra 9249.

131643. SOLANUM TRIFLORUM var. CALOPHYLLUM (Phil.) Bitter. Solanaceae.

From Sweden. Seeds presented by the Director of the Botanic Garden, Upsala. Received February 21, 1939.

A coarse annual nightshade, native to Argentina and Chile.

For previous introduction see 110633.

131644 to 131663.

From France. Plants purchased from Paul Lecolier, La Celle-Saint-Cloud. Received February 27, 1939.

131644 and 131645. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

131644. Précoce Michelin.

131645. Prof. Vidare.

131646. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

De Viard.

131644 to 131663.—Continued.

131647 and 131648. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131647. Doux D'argent.

131648. Reinette Grise de Vitry.

131649 to 131659. PRUNUS spp. Amygdalaceae.

Sweet cherry.

131649 to 131653. PRUNUS AVIUM L. 131649. Bigarreau Gustave Dupau.

131650. Bigarreau Noir de Kruger.

131651. Bigarreau President Viger.

131652. Guigne Noire Hative a Gros Fruits.

131653. Guigne Ohio Beauty.

131654. × PRUNUS EFFUSA (Host) Schneid.

Holman's Duke.

Sour cherry.

131655. PRUNUS CERASUS L.

Morello de Charmeux.

131656 and 131657. PRUNUS DOMESTICA L.

Common plum.

Duke cherry.

131656. Des Bejonnieres.

131657. Madeleine Nomblot.

131658 and 131659. PRUNUS INSITITIA L.

131658. Mirabelle Grosse.

131659. Mirabelle Tardive Lecolier.

131660 to 131663. Pyrus communis L. Malaceae.

Common pear.

131660. Andre Desportes.

131661. Beurré Bretonneau.

131662. Passe Crassane.

131663. Passe Crassane Rouge.

131664 and 131665.

From Czechoslovakia. Scions presented by A. Spaldak, Olomouc-Nova U1, 295. Received February 27, 1939.

131664. JUGLANS REGIA L. Juglandaceae.

Persian walnut.

A superior variety.

131665. PRUNUS sp. Amygdalaceae.

One of the Mitchurin cherries.

131666. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.

Sweetpotato.

From Africa. Tubers presented by the Department of Agriculture, Nairobi, Kenya. Received September 6, 1938. Numbered in February 1939.

Nyagikuyu.

131667 to 131695. AVENA spp. Poaceae.

Oats.

From Poland. Seeds presented by the Institute of Plant Breeding, University of Krakow, Krakow. Received February 28, 1939.

131667. AVENA BYZANTINA Koch.

Piloso-rubida.

131668. AVENA NUDA Hoejer.

Naked oats.

131669 to 131694. AVENA SATIVA L.

131669. Alaska No. 326.

## 131667 to 131695.—Continued.

131670. Bensings Findling.

131671. Beseler II.

131672. Dippes Weisshafer.

131673. Eckendorf Früh. "Berriesa."

131674. Fischers Wirchenblatter III.

131675. Fichtelgebirgshafer.

131676. Goldregenhafer (Zloty Deszcz).

131677. Kirsches Gelbhafer.

131678. Kolbens Vienauer.

131679. Koscielecki.

131680. Kraffts Gelbhafer.

131681. Marczak.

131682. Niemierczanski.

131683. Peragis.

131684. Podkowa.

131685. Puławski.

131686. Radosinsky zluty.

131687. Rychlik Oberek.

131688. Seledoni No. 2.

131689. Sternhafer.

131690. Udycz biały.

131691. Udycz zołty.

131692. Valecovsky.

131693. Zieleniak Zamlicki.

131694. Zolty Lochowa (Lochow Niemcy).

131695. AVENA STRIGOSA Schreb.

No. 5081.

# 131696 to 131701. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From the Netherlands. Tubers presented by Prof. Ir. C. Broekma, Director, Institute of Plant Breeding, Wageningen. Received February 28, 1939.

131696. Ideal.

131699. Record. 131700. Robun.

131697. Matador.

131698. Popular.

131701. Ultimus.

#### Malaceae. 131702 and 131703. PYRUS COMMUNIS L.

Common pear.

From Iowa. Trees purchased from the Mount Arbor Nurseries, Shenandoah. Received February 28, 1939.

131702. Beierschmidt.

131703. Lincoln.

131704. Musa sp. Musaceae.

Banana.

From Hawaii. Offshoots presented by L. W. Bryan, Associate Forester, Division of Forestry, Hilo. Received March 2, 1939.

Koae or Aeae. This is considered a native Hawaiian banana, although it was probably taken there several centuries ago by the natives when they migrated from the south. It has variegated leaves and is probably a variety of Musa sapientum.

131705. JUGLANS REGIA L. Juglandaceae. Persian walnut.

From Czechoslovakia. Seeds presented by A. Spaldak, Olomouc-Nova U1, 295. Received February 27, 1939.

Received without notes. For the introduction of scions see 131664.

131706. CALLITRIS QUADRIVALVIS Vent. Pinaceae. Arar-tree.

From Malta. Seeds presented by the Director of Agriculture, Valletta. Received February 27, 1939.

An evergreen shrub or small tree somewhat like Cupressus in habit, native to the mountains of northern Africa, with spreading, jointed branches, very small flattened leaves, and 4-sided cones. The wood is hard, durable, and fragrant.

For previous introduction see 78676.

## 131707 to 131718. PYRUS COMMUNIS L. Malaceae.

Common pear.

From Michigan. Scions presented by the Experiment Station, South Haven. Received August 29, 1938. Numbered in March 1939.

 131707. No. 564.
 131713. No. 431.

 131708. No. 562.
 131714. No. 665.

 131709. No. 504.
 131715. No. 437.

 131710. No. 550.
 131716. No. 544.

 131711. No. 649.
 131717. No. 566.

 131712. No. 592.
 131718. No. 642.

131719. TRIPHASIA BRASSII (C. T. White) Swingle. Rutaceae.

From New Guinea. Seeds collected by A. C. English, Rigo, Papua, and presented through the Botanic Gardens, Brisbane, Australia. Received March 3, 1939.

A slender shrub about 6 feet high with drooping branches, glossy, darkgreen, ovate-rhomboid leaves, and small fragrant flowers, followed by scarlet berries about 1 inch in diameter. Native to Papua.

#### 131720 to 131743.

From Italy. Scions purchased from Erneste Schwintzer, Bergamo. Received March 4, 1939.

131720. Amygdalus persica L. Amygdalaceae. Peach.

Morellone d'Entratico.

131721 to 131724. MALUS SYLVESTRIS Mill. Malaceae. Apple.

131721. Cardinale.

131722. Mela di Moio.

131723. Renetta Etscheid.

131724. Taffeta d'Inverno.

131725 to 131741. PRUNUS spp. Amygdalaceae.

131725. PRUNUS ARMENIACA L. Apricot.

Mognaga.

131726. PRUNUS CERASUS L.

Sour cherry.

Amarasca di Mondorf.

131727 to 131731. PRUNUS AVIUM L.

Sweet cherry.

131727. Calemer.

131728. Carnea.

131720 to 131743.—Continued.

131729. Comandante.

131730. Dell' Isola.

131731. 9 Maggio.

131732. PRUNUS CERASUS L.

Sour cherry.

Marenone di Verona.

131733 to 131737. PRUNUS AVIUM L.

Sweet cherry.

131733. Marosticana.

131734. Moretta di Cesena.

131735. Nera di Bolzano.

131736. Precoce di Boitzenburg.

131737. Precoce di Bolzano.

131738 to 131740. PRUNUS DOMESTICA L.

Common plum.

131738. Casalinga.

131739. Della Bosnia.

131740. Di Francoforte.

131741. PRUNUS SALICINA Lindl.

Japanese plum.

Florenzia.

131742 and 131743. Pyrus communis L. Malaceae.

Common pear.

131742. Armello.

131743. Professor Molon.

131744. ARACHIS HYPOGAEA L. Fabaceae.

Peanut.

From China. Seeds presented by K. S. Liu, Agricultural Experiment Station, Tingfan, Kweichow, at the request of Dr. G. K. Middleton, Raleigh, N. C. Received March 7, 1939.

131745 to 131748.

From Mexico. Seeds presented by Mrs. Natalie Balls, Oakfields, Knebworth, Herts, England. Received February 28, 1939.

131745. CALOCHORTUS BARBATUS (H. B. K.) Painter (C. flavus Schult. f.). Liliaceae.

B-5219. From Toluca at 8,000 feet altitude. A herbaceous perennial with gray foliage, simple or branching slender stems up to 2 feet high, narrow linear leaves, and nodding deep-yellow flowers. This differs from most of the species native to the United States in having fibrous-coated bulbs. Native to the plateau region of Mexico.

131746. CESTRUM sp. Solanaceae.

B. 4367. A stiff, upright branching shrub up to 2 1/2 feet high, collected on Mount Orizaba at 9,200 feet altitude, in the shade of hedgerows. The tubular scarlet flowers are 1 1/2 inches long and the berries are red.

131747. LUPINUS GEOPHILUS Rose. Fabaceae.

B. 5064. From Toluca at 9,700 feet altitude. A prostrate herbaceous perennial, often forming a dense mat, with dark-blue flowers in dense spikelike racemes about 4 inches long. Native to open places in central Mexico.

131748. OXYTROPIS sp. Fabaceae.

B. 4462. From Sierra Negra at 10,400 feet altitude, found growing on dry lands among rough grass and shrubs. A bushy tufted plant with both stems and leaves gray hairy. The brilliant-scarlet flowers, 2 1/2 inches long, are borne stiffly on upright stems 10 inches tall.

131749 to 131751. SOLANUM TUBEROSUM L. Solanaceae. Potato.

From Germany. Tubers presented by the Kaiser-Wilhelm Institute für Züchtungs Forschung, Müncheberg Mark. Received March 8, 1939.

131749. Frühgold.

131750. Ostbote.

131751. Voran.

131752 to 131778.

From Germany. Plants purchased from Herman A. Hesse, Weener, Province of Hannover. Received March 8, 1939.

131752. CEANOTHUS. Rhamnaceae.

Var. Azureus Grandiflorus.

131753 to 131760. DEUTZIA spp. Hydrangeaceae.

131753. DEUTZIA SETCHUENENSIS var. CORYMBIFLORA (Lemoine) Rehd.

A variety differing from the type in its broader and larger leaves and many-flowered loose corymbs, 2 to 4 inches in diameter. Native to central China.

131754. X DEUTZIA ELEGANTISSIMA (Lemoine) Rehd. (D. purpurascens X sieboldiana).

131755. X DEUTZIA CARNEA var. STELLATA (Lemoine) Rehd.

A variety differing from the type chiefly in its narrower petals.

131756. X DEUTZIA CANDELABRUM (Lemoine) Rehd.

A hybrid deutzia which resembles *D. gracilis*, one of its parents. It has ovate-lanceolate leaves and numerous white flowers in panicles 3 to 6 inches long.

131757. X DEUTZIA CANDELABRUM var. FASTUOSA (Lemoine) Rehd.

A hybrid,  $Deutzia\ gracilis \times sieboldiana$ , of erect habit, with numerous white flowers in upright panicles.

131758. DEUTZIA GRACILIS Sieb. and Zucc.

A free-flowering shrub, sometimes 6 feet high, with slender arching branches, green lanceolate leaves 1 1/2 to 3 inches long, and 9 to 15 white flowers in upright panicles or racemes. Native to Japan.

131759. DEUTZIA HYPOGLAUCA Rehder.

An upright shrub, up to 6 feet high, with ovate-oblong to oblong lanceolate leaves 1 1/2 to 3 inches long and many pure-white flowers in rounded corymbs 2 to 3 inches across. Native to central China.

131760. DEUTZIA SIEBOLDIANA var. DIPPELIANA C. K. Schneid.

A variety with broad-elliptic or broad-ovate leaves on the flowering branches.

131761 to 131775. PHILADELPHUS spp. Hydrangeaceae.

131761. PHILADELPHUS LEWISII var. PARVIFOLIUS Torr.

131762. PHILADELPHUS GRANDIFLORUS Willd.

A tall, strong-growing shrub up to 10 feet high, native from Virginia southward. When pruned, after blooming, it makes straight long shoots of 5 feet or more which are covered with lovely white flowers along their whole length during the early summer. This shrub is far superior in its display of flowers to any of the fragrant sorts.

For previous introduction see 52456.

131763. PHILADELPHUS HIRSUTUS Nut.

131764 to 131766. X PHILADELPHUS LEMOINEI Lemoine.

Lemoine mockorange.

131752 to 131778.—Continued.

131764. Var. Boule Rose.

131765. Var. Dresden.

131766. Var. Fimbriatus.

131767. PHILADELPHUS MICROPHYLLUS A. Gray.

131768 and 131769. X PHILADELPHUS NIVALIS Jacques.

A hybrid between *Philadelphus pubescens* and *P. coronarius*. The brown bark is usually exfoliating, the ovate leaves are usually rounded at the base, and the flowers, about 1 1/2 inches across, are in racemes.

131770. PHILADELPHUS PEKINENSIS Rupr.

Peking mockorange.

131771. PHILADELPHUS PEKINENSIS var. KANSUENSIS Rehder.

A shrub 4 to 9 feet high, with oblong-ovate to ovate-lanceolate leaves up to 3 inches long and racemes of 5 to 7 fragrant white flowers. Native to Kansu Province, China.

131772. PHILADELPHUS PUBESCENS Lois.

131773. PHILADELPHUS SERICANTHUS VAR. REHDERIANUS Koehne. Silk mockorange.

A variety with broadly ovate leaves up to 4 1/2 inches long and 2 inches wide.

For previous introduction see 78943.

131774. PHILADELPHUS TOMENTOSUS Wall.

A shrub up to 9 feet high, with elliptic-ovate or ovate leaves 2 to 4 inches long and racemes of 5 to 7 fragrant flowers. Native to the temperate Himalayas.

131775. PHILADELPHUS LAXUS Schrad.

131776. PHILLYREA LATIFOLIA L. Oleaceae.

Broadleaf phillyrea.

An evergreen shrub or small tree up to 30 feet high, native to the Mediterranean region. The shining dark-green leaves are 2 inches long, and the racemes of small flowers are followed by small black fruits 1/4 inch in diameter.

For previous introduction see 76927.

131777. PHILLYREA LATIFOLIA var. MEDIA (L.) C. Schneid. Oleaceae.

An evergreen shrub or small tree with small elliptic-ovate or ovatelanceolate, dark-green leaves. Native to the Mediterranean region.

131778. SKIMMIA JAPONICA var. VEITCHII (Carr.) Rehd. Rutaceae.

A Japanese shrub up to 5 feet or more, with yellowish-green leaves crowded at the ends of the branches and coral-red or bright-scarlet fruits about 1/3 inch in diameter. It is said to be one of the best smoke-enduring shrubs, but it is too tender to withstand the winters of the northern United States.

For previous introduction see 76116.

## 131779 to 131810.

From France. Trees purchased from Emile Rodolausse, Grandes Pépinières d'Albias, Maubert, près Albias, Tarn-et-Garonne. Received March 9, 1939.

131779 to 131800. Amygdalus persica L. Amygdalaceae.

Peach.

131779. Angevine Hative.

131780. Angevine Tardive.

131781. Bardou-Job.

131782. Belle Illoise.

131783. Biscoute.

131779 to 131810.—Continued.

131784. Chilon.

131785. Clemence Isaure.

131786. Fanny Pelissier.

131787. Galande Montreuil.

131788. Genard.

131789. Girerd No. 23.

131790. Girerd Jaune.

131791. Grosse d'Italie.

131792. Inspecteur Battanchon.

131793. Jaune de Paris.

131794. Juliette de Saumachez.

131795, Madame Lallot.

131796. Madeline Rouge.

131797. Monstrueuse Pelissier.

131798. Rouge d'Aout.

131799. Tardive d'Orléans.

131800. Wallas.

131801 and 131802. Amygdalus persica var. Nectarina Ait. Amygdalaceae. Nectarine.

131801. Jaune Magnifique.

131802. Port Sainte-Marie.

131803 to 131805. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131803. El-Giri.

131804. L'Ille.

131805. Reinette de Brive.

131806 to 131810. Pyrus communis L. Malaceae.

Common pear.

131806. Beurré Clergeaux.

131807. Henriette Sesquierre.

131808. Marie-Louise Marillat.

131809. Tarquin des Pyrenées.

131810. Winioska-Saska.

131811. Amygdalus persica L. Amygdalaceae.

From New Jersey. Plants presented by Dr. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received March 9, 1939.

Bound Brook.

131812. SACCHARUM. Poaceae.

Sugarcane.

Peach. 13

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From South America. Cuttings presented by the Estación Agrícola Experimental, Palmira, Colombia. Received March 10, 1939.

Comun  $\times$  S.C. 12 (4).

#### 131813 to 131842.

From France. Trees and scions purchased from Lepage & Cie., Angers (Maine-et-Loire). Received March 10, 1939.

131813 to 131818. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131813. Aribaud.

131814. Elegante (Guilloux 92).

## 131813 to 131842.—Continued.

131815. Galande.

131816. Mme. Bernold (Gaillard 5).

131817. Prof. Villair.

131818. Tournier.

131819 to 131830. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131819. Antoinette.

131820. Colapuy.

131821. Cusset.

131822. Directeur Lesage.

131823. Drap D'or Guemené.

131824. Franc Roseau.

131825. Frémy.

131826. Grand 'mére.

131827. Knysche.

131828. Reinette de Chenée.

131829. Reinette Descadre.

131830. Reinette Pepin de Bourgueil.

131831 to 131835. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

131831. Bigarreau Antoine Nomblot.

131832. Bigarreau Baumann.

131833. Bigarreau Coeur de Pigeon.

131834. Bigarreau Rosé Dur.

131835. Bigarreau Tigré.

131836 to 131842. Pyrus communis L. Malaceae. Common pear.

131836. Beurré Luizet.

131837. Beurré Royal.

131838. Octave Lachambre.

131839. Rémy Chatenay.

131840. Robitaille Père.

131841. Sandar.

131842. Beurre six.

## 131843. PROSOPIS GLANDULOSA Torr. Mimosaceae.

From Mexico Seeds presented by Ing. J. Manuel Corona, Mexico, D. F. Received March 4, 1939.

#### 131844 to 131861.

From France. Plants purchased from Croux Fils, Chatenay-Malabry, Seine. Received March 11, 1939.

131844 to 131850. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131844. Belle Henri Pinaut.

131845. Brugnon Galopin.

131846. Grosse Mignonne Hative.

131847. Lady Palmerston.

131848. Malte.

131849. Princesse de Galles.

131850. Vilmorin.

131844 to 131861.—Continued.

131851 to 131853. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131851. De Grignon.

131852. Reinette de Weidner.

131853. De Verité.

131854 to 131859. PRUNUS spp. Amygdalaceae.

131854 and 131855. PRUNUS ARMENIACA L.

Apricot.

131854. Commun.

131855. Royal.

131856. PRUNUS.

Belle de Montreuil, a cherry.

131857 to 131859. PRUNUS AVIUM L.

Sweet cherry.

131857. Guigne Noire des Vosges.

131858. Maria Gauchet.

131859. Reverchon.

131860 and 131861. Pyrus communis L. Malaceae.

Common pear.

131860. Boieldieu.

131861. Triomphe de Tournai.

131862 to 131874. RUBUS spp. Rosaceae.

From England. Cuttings presented by John Innes, Horticultural Institution, Merton Park, London. Received March 11, 1939.

131862. RUBUS AFFINIS Weihe and Nees.

For previous introduction see 30264.

131863. RUBUS BERTRAMII G. Braun.

Blackberry.

A European blackberry allied to Rubus fruticosus.

131864. RUBUS CISSBURIENSIS W. Barton and Riddelsdell.

A vigorous shrub with low arching, prostrate stems, rather thick leaves, and large, lilac or pink to nearly white flowers. Native to England.

131865. RUBUS HIRTUS Waldst. and Kit.

A prostrate, sometimes climbing, shrub with prickly stems and leaves made up of 3, sometimes 5, broadly oval, coarsely toothed, dark-green leaflets. The white flowers are produced in large panicles and the fruit is globular. Native to central Europe.

For previous introduction see 42753.

131866. RUBUS INFESTUS Weihe.

Blackberry.

A European blackberry related to Rubus fruticosus.

131867. RUBUS NITIDIOIDES W. Watson.

A rubus with suberect stems and rather large lilac flowers, followed by large fruits resembling those of *Rubus elmeri*. Native to England.

For previous introduction see 123763.

131868. RUBUS RHOMBIFOLIUS Weihe.

Blackberry.

A European blackberry, related to Rubus vulgaris, with ovoid, tasty fruits.

131869. RUBUS ROSACEUS Weihe and Nees.

Blackberry.

A European blackberry with well-developed fruit; related to Rubus koehleri.

131870. RUBUS ULMIFOLIUS Schott.

Var. Inermis.

131862 to 131874.—Continued.

131871. RUBUS SCHLECHTENDAHLII Weihe.

Blackberry.

A blackberry related to Rubus macrophyllus; native to Europe.

For previous introduction see 123766.

131872. RUBUS THYRSIFLORUS Weihe and Nees.

A European species with nearly prostrate, rarely climbing stems, leaves divided into 3 or 5 broad, irregularly toothed leaflets, rather small white flowers, and small fruits.

For previous introduction see 42788.

131873. X RUBUS THYRSIGER Banning and Focke.

A hybrid of Rubus scaber, differing from that species in having a narrow, often elongated inflorescence and broader leaflets, pilose beneath.

For previous introduction see 123767.

131874. RUBUS.

John Innes, a blackberry said to be a hybrid between Rubus ulmifolius inermis and R. thyrsiger.

For previous introduction see 131466.

131875. TABEBUIA PALLIDA (Lindl.) Miers. Bignoniaceae.

From Puerto Rico. Seeds presented by L. R. Holdridge, Associate Forester, Southern Forest Experiment Station, United States Department of Agriculture, Rio Piedras. Received March 6, 1939.

Roble. A vigorous deciduous tree 20 to 60 feet high, with flowers ranging in color on different trees from rose to very pale pink and appearing in masses before the leaves. The hard white wood is used for construction. In Puerto Rico this tree is called "roble" or "roble blanco," meaning oak or white oak. Native to the West Indies.

#### 131876 to 131884.

From Argentina. Seeds collected by Paul E. Yatman. and presented through Swift & Co., Buenos Aires. Received March 7, 1939.

131876. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

131877 to 131882. Lycopersicon esculentum Mill. Solanaceae. Tomato.

131877. Campana. From the District of Hudson, along the river 30 km. south of Buenos Aires.

131878. Los Talas. Collected along the Rio de la Plata near Rio Santiago, 30 km. south of Buenos Aires.

131879. Palo Blanco. Collected along the Rio de la Plata near Rio Santiago, 50 km. south of Buenos Aires.

131880. Rey Humberto. An Italian variety, imported from Italy, with elongated, pear-shaped fruits.

131881. San Marzano. An Italian variety.

131882. Varela. From the Florencio Varela District, 30 km. south of Buenos Aires.

131883 and 131884. PISUM SATIVUM L. Fabaceae.

Pea.

131883. Arroyo Seco. From the Arroyo Seco District, 300 km. north of Buenos Aires.

131884. Baradero. From the Baradero District, 150 km. north of Buenos Aires, along the river.

131885. LACTUCA ALTAICA Fisch. and Mey. Cichoriaceae.

From Egypt. Seeds presented by Alfred Bircher, The Middle Egypt Botanic Station, El Saff. Received March 8, 1939.

131886. ZEPHYRANTHES sp. Amaryllidaceae.

From England. Bulbs presented by Mrs. Natalie Balls, Oakfields, Knebworth, Herts. Received March 14, 1939.

131887. VITIS sp. Vitaceae.

Grape.

From France. Cuttings presented by J. Dufrenoy, Faculte des Sciences, University of Bordeaux, Bordeaux. Received March 13, 1939.

131888. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Norway. Seeds purchased from Grimstad Gartneri, Grimstad. Received March 10, 1939.

Dänsk Eskport. No. 890.

131889. CARISSA GRANDIFLORA (E. Mey.) DC. Apocynaceae.

Carissa.

From Florida, Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in March 1939.

P.I.G. No. 9481. *Gifford*. Received originally from Dr. J. C. Gifford, Miami, Fla. A variety which has larger fruits and is a more prolific bearer than the ordinary seedling forms of this species.

131890. ALSTROEMERIA HAEMANTHA Ruiz and Pav. Amaryllidaceae.

From England. Bulbs purchased from Bunyard's Nurseries, Maidstone. Received March 15, 1939.

A tuberous-rooted perennial with a flower stem 2 to 3 feet high, bearing thin lanceolate leaves 3 to 4 inches long and flowers in a compound umbel. The flowers, 2 inches long, are bright red tipped with green, the inner ones with red-purple spots on a red-yellow ground. It is native to Chile.

For previous introduction see 91802.

131891 to 131894.

From Scotland. Plants and roots purchased from Dobbie & Co., Edinburgh. Received March 16, 1939.

131891. Pyrus communis L. Malaceae.

Common pear.

131892 to 131894. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

131892. Early Albert.

131893. Greengage.

131894. Scott's Monarch.

131895 to 131899. ORYZA SATIVA L. Poaceae.

Rice.

From British Guiana. Seeds presented by J. Sydney Dash, Director, Department of Agriculture, Georgetown. Received March 17, 1939.

131895. Blue Stick.

131896. Demerara Creole.

131897. No. 79.

131898. No. D-110.

131899. No. D-114.

131900 to 131907.

From Japan. Plants and bulbs purchased from K. Wada, Hakoneya Nurseries, Numazu-shi. Received March 17, 1939.

131900. EPIGAEA ASIATICA Maxim. Ericaceae.

## 131900 to 131907.—Continued.

A trailing arbutus from Japan, very similar to the American species, differing chiefly in being stronger throughout. The racemes usually consist of from 6 to 12 flowers.

For previous introduction see 103875.

131901. OPHIOPOGON PLANISCAPUS var. LEUCANTHUS (Makino) Nakai. Liliaceae.

A variety with scape and bracts entirely green, and pure-white flowers.

131902 and 131903. RHODODENDRON CAMTSCHATICUM Pall. Ericaceae.

A dwarf, more or less deciduous shrub with small obovate leaves and solitary or paired, terminal, rose-purple flowers. Native to Kamchatka and the Aleutian Islands.

For previous introduction see 95433.

131904. SCILLA THUNBERGIA Miyabe and Kudo. Liliaceae.

Var. Albiflora. A white-flowered form.

131905. SHORTIA UNIFLORA Maxim. Diapensiaceae.

Var. Grandiflora. A large-flowered form of a perennial herb native to Japan, closely resembling the native American Shortia galacifolia. The cordate leaves are broader than long and deeply sinuate toothed, and the white, bell-shaped flowers, 1 inch across, are borne on slender peduncles 3 to 8 inches tall.

For previous introduction see 103891.

131906. THALICTRUM COREANUM Lev. Ranunculaceae.

A herbaceous perennial with slender triquetrous stems, biternate, radical leaves, crenate, peltate stem leaves, and paniculate inflorescence. Native to eastern Asia.

131907. TRICYRTIS YATABEANA Masamune. Melanthiaceae.

A herbaceous perennial with leafy stems about 1 foot high, oblong-lanceolate leaves, and showy, yellow, bell-shaped flowers with dark-purple spots. Native to Japan.

For previous introduction see 114199.

## 131908 to 131931.

From Scotland. Seeds presented by Sir William Wright Smith, Regius Keeper, Royal Botanic Garden, Edinburgh. Received March 11, 1939.

131908. ARTHROPODIUM CANDIDUM Raoul. Liliaceae.

A tufted herbaceous perennial 3 to 14 inches high, with very narrow linear, grasslike leaves 2 to 10 inches long, and few to many small white flowers, each 1/2 inch across, on a slender scape. Native to New Zealand from sea level to 3,500 feet altitude.

For previous introduction see 125134.

131909 to 131912. Fuchsia spp. Onagraceae.

131909. FUCHSIA BACILLARIS Lindl.

A compact plant with short-jointed branches and very small flaring-mouthed, rosy, drooping flowers. Native to Mexico.

For previous introduction see 101948.

131910. FUCHSIA MAGELLANICA Lam.

Magellan fuchsia.

Var. Alba.

131911. FUCHSIA PARVIFLORA Lindl.

A shrubby fuchsia, very similar to F. lycioides. It has oblong or ovate leaves, sometimes serrate, and purple flowers with pale-pink calyxes. Native to Mexico.

For previous introduction see 101952.

131908 to 131931.—Continued.

131912. FUCHSIA THYMIFOLIA H. B. K.

A shrub 3 to 6 feet high, with small, ovate, nearly opposite leaves, pubescent above, red flowers having obovate undulate petals, and red fruits. Native to Mexico.

For previous introduction see 97612.

131913. HYPOXIS VILLOSA L. f. Amaryllidaceae.

A stargrass with firm, lanceolate leaves 4 to 6 inches long and corymbs of small, yellow flowers. Native to South Africa.

131914. NEOMARICA VITTATA Sprague (Marica humilis Lodd.). Iridaceae.

A neomarica with narrow ensiform leaves 1 to 1 1/2 feet long, 1 or 2 large fugitive, yellowish-white flowers having several transverse, red-brown bars on the claws of the outer segments, and reflexed blue tips on the inner ones. Native to Brazil.

131915. NERINE sp. Amaryllidaceae.

Received as "Nerine candida," apparently a horticultural name of a plant related to Nerine flexuosa alba.

131916. Nomocharis saluenensis I. B. Balf. Liliaceae.

A tall herbaceous perennial up to 3 feet high, with lanceolate leaves about 3 inches long and racemose clusters of several large pale-rose flowers having purplish-rose spots within. Native to Yunnan Province, China.

For previous introduction see 126600.

131917 to 131921. PITCAIRNIA spp. Bromeliaceae.

131917. PITCAIRNIA ANDREANA Linden.

A pitcairnia less than 1 foot high, of the *P. australis* group, with lanceolate, drooping, chartaceous leaves, white beneath, and bright-red flowers over 2 inches long in a bright-red raceme which is erect, moderately dense, and 5 inches long. Native to Venezuela.

For previous introduction see 89493.

131918. PITCAIRNIA INTEGRIFOLIA Ker.

131919. PITCAIRNIA MAIDIFOLIA Decaisne.

131920. PITCAIRNIA PUNICEA Scheidw.

131921. PITCAIRNIA UNDULATA Scheidw.

131922 to 131924. RHEUM spp. Polygonaceae.

131922. RHEUM COLLINIANUM Baill.

131923. RHEUM PALMATUM L.

131924. RHEUM RHAPONTICUM L.

131925 to 131927. RHODODENDRON Spp. Ericaceae.

191095 Decomposition of the contract of the co

131925. RHODODENDRON CHARTOPHYLLUM Franch.

A distant species with the general characteristics of *Rhododendron* yunnanense, but the leaves are usually deciduous, more narrowly oblanceolate, and entirely wanting in bristles on the upper surface, which are typical of the true *R. yunnanense*.

For previous introduction see 101958.

131926. RHODODENDRON PENTAPHYLLUM Maxim.

Fiveleaf azalea.

Collin rhubarb.

Sorrel rhubarb.

Common rhubarb.

A deciduous shrub up to 25 feet high, with, usually, 5 elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves which turn orange or crimson in the autumn. Native to Japan.

For previous introduction see 127627.

131908 to 131931.—Continued.

131927. RHODODENDRON TSCHONOSKII Maxim.

A forest shrub, native to Japan, with flaky bark, elliptic leaves 1/3 inch long, and heads of 1 to 4 small white flowers.

For previous introduction see 127630.

131928. ROSCOEA ALPINA Royle. Zingiberaceae.

A herbaceous perennial up to 6 inches high, with oblong-lanceolate leaves 3 to 4 inches long and 1 or 2 terminal flowers with white corolla tube and dark-purple limb. Native to the Himalayan region up to about 11,000 feet altitude.

131929. ROSCOEA HUMEANA Balf. and Smith.

A stout gingerlike perennial about 6 inches high, with cigar-shaped rhizomes, 4 to 6 broadly lanceolate, sessile leaves 4 to 8 inches long, and 4 to 8 large violet-purple flowers in a terminal spike. Native to Yunnan Province, China.

For previous introduction see 91446.

131930. ROSCOEA PURPUREA J. E. Smith.

A perennial herb 1 foot high, with lanceolate leaves and purple, palelilac, or white flowers in a sessile spike. Native to the central and eastern Himalayas up to 10,000 feet altitude.

For previous introduction see 91447.

131931. WACHENDORFIA THYRSIFLORA L. Haemodoraceae.

A tuberous herb with firm, strap-shaped leaves 2 to 3 feet long and a dense cylindrical panicle, 1 foot or longer, of bright-yellow flowers, the perianth over 1/2 inch long. Native to South Africa.

131932 to 131942. LOLIUM spp. Poaceae.

From Wales. Seeds presented by Dr. T. J. Jenkin, Welsh Plant Breeding Station, Aberystwyth. Received March 10, 1939.

131932. LOLIUM MULTIFLORUM Lam.

Italian ryegrass.

Strain S. 22.

131933 to 131935. LOLIUM PERENNE L.

Perennial ryegrass.

131933. Strain S. 23.

131934. Strain S. 24.

131935. Strain S. 101.

131936. LOLIUM REMOTUM Schrank.

Ba 3075 (4).1.

131937. LOLIUM REMOTUM var. ARISTATUM (Doell) Aschers.

3397 (1) Ba (1).

131938. LOLIUM RIGIDUM Gaud.

Grass.

917 Be (1).

131939. LOLIUM LOLIACEUM (Bory and Chaub.) Hand.-Mazz.

Wimmera ryegrass.

An annual bunch grass with much-branched, prostrate or ascending stems 2 to 8 inches long. Native to dry sandy places along the coast of southwestern Europe.

131940 and 131941. LOLIUM TEMULENTUM L.

Darnel.

131940. 3176 (27) Ba (1). (M 92/73).

131941. 3398 (5) Ba (1).

131942. LOLIUM sp.

927 Be (1).

## 131943 to 131946. Gossypium. Malvaceae.

Cotton.

From Africa. Seeds presented by H. S. King, Plant Breeder, Agricultural Research Institute, Department of Agriculture and Forests, Wadi Medani, Anglo-Egyptian Sudan. Received March 20, 1939.

 $131943. \times 1530$  (S.R. (c) 1228).

131944. Domains Sakel (S.R. (c) 1286).

131945. Lecnem (S.R. (c) 1068).

131946. Gash Sakel (S.R. (c) 1177).

### 131947 to 131951.

From France. Plants purchased from V. Lemoine & Son, Nancy. Received March 21, 1939.

131947. DEUTZIA sp. Hydrangeaceae.

Farrar No. 109.

131948 and 131949. DEUTZIA.

131948. Var. Joconde.

131949. Var. Perle Rose.

131950 and 131951. PHILADELPHUS. Hydrangeaceae.

131950. Var. Amalthee.

131951. Var. Velleda.

131952 and 131953. MIMUSOPS KAUKI L. Sapotaceae.

From India. Plants presented by the Globe Nursery, Calcutta. Received March 23, 1939.

131954. CAPSICUM FRUTESCENS L. Solanaceae.

Common redpepper.

From France. Seeds purchased from Vilmorin-Andrieux & Cie., Paris. Received March 20, 1939.

Ruby King.

131955. VITIS AMURENSIS Rupr. Vitaceae.

Amur grape.

From Manchuria. Seeds collected by B. V. Skvortzov, Harbin. Received March 21, 1939.

131956 to 131963. CEANOTHUS. Rhamnaceae.

From France. Plants purchased from V. Lemoine & Son, Nancy. Received March 22, 1939.

131956. Var. Autumnal Blue.

131957. Var. Biela.

131958. Var. Croix du Sud.

131959. Var. Mélusine.

131960. Var. Topaze.

131961. Var. Vesta.

131962. Var. Victor Jouin.

131963. Var. Intermedius Nanus.

## 131964 to 131997.

From Belgium. Plants purchased from Armand Op de Beeck, Putte-les-Malines. Received March 22, 1939.

131964 to 131979. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

## 131964 to 131997.—Continued.

131964. Berglander.

131965. Bouton d'Or.

131966, Docteur Seelig.

131967. Glory of Holland.

131968. Lemoen.

131969, Leven Alma.

131970. Lewis Incomparable.

131971. Madame Macorps.

131972. Notaire.

131973. Orange Reinette.

131974. Pater van den Elzen.

131975. Pomme Framboise.

131976. Rambourg d'Automme.

131977. Reinette des Vingt Onces.

131978. Reinette Jaune de Butzel.

131979. Seedling of Windsor.

131980 to 131988. PRUNUS spp. Amygdalaceae.

131980 to 131982. PRUNUS ARMENIACA L.

Apricot.

131980. Châteaubriand.

131981. Du Chancelier.

131982. Royal de Hollande.

131983 to 131985. PRUNUS AVIUM L. Sweet cherry.

131983. Bigarreau Blanc.

131984. Bigarreau Noir.

131985. Bigarreau Tardif de Putte.

131986. PRUNUS CERASUS L.

Sour cherry.

Courte Queue de Malines.

131987 and 131988. PRUNUS DOMESTICA L. Common plum.

131987. Altesse Double.

131988. Altesse Simple.

131989 to 131997. Pyrus communis L. Malaceae.

Common pear.

131989. Beurré Chaboceau.

131990. Beurré Dilly.

131991. Bruine Kriekpeer.

131992. Citron d'été.

131993. Kaiserin.

131994. Lady Clappe.

131995. Souvenir de Leyde.

131996. Sainte Dorothy.

131997. Zépherin Grégoire.

#### 131998 to 132004.

From Germany. Scions and plants purchased from H. A. Schloesser, Neuss-Rhein. Received March 22, 1939.

131998 to 132000. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

131998 to 132004.—Continued.

131998. Freiherr von Solemacher.

131999. Riesenboikenapfel.

132000. Roter Bellefleur.

132001. PRUNUS. Amygdalaceae.

Andenken an Spaa cherry.

132002. PRUNUS DOMESTICA L.

Fürsts Frühswetsche.

132003. PYRUS COMMUNIS L. Malaceae.

Président Drouard.

132004. RHEUM RHAPONTICUM L. Polygonaceae.

Mondorfer Rotstieliger.

132005 to 132024.

From Germany. Trees, scions, and roots purchased from L. Späth, Berlin. Received March 23, 1939.

132005 to 132009. AMYGDALUS PERSICA L. Amygdalaceae.

132005. Eiserner Kanzler.

132006. Reichardt's Pirsich.

132007. Rheingold.

132008. Roter Magdalenpfirsich.

132009. Roter Valparaizopfirsich.

132010 to 132012. MALUS SYLVESTRIS Mill. Malaceae.

132010. Adamsapfel.

132011. Lunowerapfel.

132012. Uhlhorn's Augustkalvill.

132013. SORBUS sp. Malaceae.

Received without notes.

132014 to 132019. PRUNUS spp. Amygdalaceae.

132014 to 132016. PRUNUS AVIUM L.

132014. Beste Werdersche.

132015. Flamentiner.

132016. Liefelds Braune.

132017 to 132019. PRUNUS DOMESTICA L.

132017. Blaue Eierpflaume.

132018. Bonne de Bru.

132019. Kohlstock Zwetsche.

132020. PYRUS COMMUNIS L. Malaceae.

Lübecker Sommerbergamotte.

132021. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Holsteiner Blut.

132022 to 132024. SORBUS spp. Malaceae.

132022. SORBUS AUCUPARIA var. EDULIS Dieck.

132023. SORBUS AUCUPARIA var. ROSSICA Spaeth.

A variety similar to Sorbus aucuparia var. edulis, but with larger and more serrate leaflets.

Common plum.

Common pear.

Common rhubarb.

Peach.

Apple.

Sweet cherry.

Common plum.

Common pear.

132005 to 132024.—Continued.

132024. SORBUS AUCUPARIA ROSSICA Spaeth.

Var. Major.

132025. CHRYSALIDOCARPUS LUCUBENSIS Beccari. Phoenicaceae. Palm.

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received March 24, 1939.

A rather tall, handsome palm with a spineless, ringed trunk and elongated pinnate leaves composed of rigid swordlike segments up to 3 feet in length. The obovate purplish fruits are about 1/2 inch long. Native to Madagascar.

For previous introduction see 130882.

132026. EUCALYPTUS SALICIFOLIA (Sol.) Cav. (E. amygdalina Labill.). Myrtaceae. Messmate gum.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received March 20, 1939.

A tall tree up to 300 feet high, with lanceolate leaves 4 inches long, crowded umbels of small flowers, and hemispheric fruits 1/4 inch broad. The leaves have a strong odor of peppermint and are rich in oil. Native to Australia.

For previous introduction see 106332.

132027. POGONOPUS SPECIOSUS (Jacq.) Schum. Rubiaceae.

From Panama. Seeds presented by the Experiment Gardens, Summit, Canal Zone, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received March 20, 1939.

A tropical American shrub or small tree up to 20 feet high, with broadly lanceolate leaves and broad cymes of scarlet flowers with brilliant red bracts. For previous introduction see 76890.

132028 to 132031. PRUNUS spp. Amygdalaceae.

From Germany. Trees purchased from L. Späth, Berlin. Received March 23, 1939.

132028 and 132029. PRUNUS AVIUM L.

Sweet cherry.

132028. Limburger Vogelkirschen.

132029. Bulgarische Vogelkirschen.

132030 and 132031. PRUNUS DOMESTICA L.

Common plum.

132030. Ackermann.

132031. Kroosjes.

132032 to 132034.

From Iowa. Scions presented by Harlow Rockhill, Conrad. Received March 24, 1939.

132032. Amygdalus. Amygdalaceae.

A cross between the Bailey and Davidiana peach.

132033 and 132034. PRUNUS SALICINA X ARMENIACA. Amygdalaceae.

For previous introduction see 107187.

132033. Plumcot No. 6.

132034. Plumcot No. 12.

132035 to 132046.

From Germany. Plants purchased from L. Späth, Berlin. Received March 23, 1939.

132035 to 132046.—Continued.

132035. CEANOTHUS AMERICANUS L. Rhamnaceae.

New-Jersey-tea.

132036. CEANOTHUS DELILIANUS Spach.

Var. Grandiflorus.

132037. X DEUTZIA ROSEA (Lemoine) Rehd. Hydrangeaceae.

A hybrid (Deutzia gracilis × purpurascens) with ovate-oblong to ovate-lanceolate leaves and short panicles of flowers which are pinkish outside and 3/4 inch across.

132038. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Var. Insignis.

132039 to 132046. PHILADELPHUS spp. Hydrangeaceae.

132039. × PHILADELPHUS CONGESTUS Rehder.

A hybrid similar to *Philadelphus verrucosus*, but with smaller, narrower leaves and shorter, usually 5-flowered racemes.

132040. × PHILADELPHUS INSIGNIS Carr.

A tall shrub with ovate or broad-ovate leaves 2 to 4 inches long and large panicles of fragrant flowers.

132041. × PHILADELPHUS MAGNIFICUS Koehne.

A large spreading shrub with large leaves and flowers about 2 inches across, in 3- to 5-flowered racemes or cymes. Origin unknown.

132042. X PHILADELPHUS PENDULIFOLIUS Carr.

A low shrub with pendent ovate or elliptic leaves and racemes of 5 to 7 flowers. A hybrid of *Philadelphus pendulifolius*, the other parent being unknown.

132043. PHILADELPHUS VERRUCOSUS Schrad.

Var. Polyander. A shrub up to 9 feet high, with ovate or elliptic-ovate leaves and racemes of 5 to 7 flowers.

132044. PHILADELPHUS PURPURASCENS (Koehne) Rehd.

A shrub up to 12 feet high, with spreading and arching branches, elliptic-ovate or ovate to lanceovate leaves, and racemes of 5 to 9 pure white fragrant flowers. Native to western China.

132045. PHILADELPHUS SCHRENKII Rupr.

Schrenk mockorange.

For previous introduction see 131061.

132046. Philadelphus verrucosus Schrad.

132047 to 132050. CYRTANTHUS spp. Amaryllidaceae.

From Africa. Bulbs purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received March 24, 1939.

132047. CYRTANTHUS Sp.

A form with apricot-colored flowers.

132048. CYRTANTHUS OCHROLEUCUS (Herb.) Steud.

Flowers creamy white.

132049. CYRTANTHUS Sp.

A form with dark-coral flowers.

132050. CYRTANTHUS STENANTHUS var. MAJOR R. A. Dyer.

Flowers yellow.

132051 to 132062. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Puerto Rico. Tubers presented by W. K. Bailey, Agricultural Experiment Station, Mayaguez. Received March 25, 1939.

## 132051 to 132062.—Continued.

 132051. Capiteleña.
 132057. Red Velvet.

 132052. Don Juan.
 132058. Russia No. 2.

 132053. Key West.
 132059. Russia No. 5.

 132054. Nueva Orleans.
 132060. Totiempo.

 132055. Puerto Rico B.
 132061. Vicentita.

 132056. Puerto Rico Sears.
 132062. Yuguilla.

## 132063 and 132064.

From Georgia. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received March 27, 1939.

132063. CLIFTONIA MONOPHYLLA (Lam.) Britton. Cyrillaceae. Obtained at Irwinville, Irwin County, March 11, 1939.

132064. PINCKNEYA PUBENS Michx. Rubiaceae. Fever tree.
Obtained near Sylvester, Worth County, March 11, 1939.

## 132065 to 132084.

From England. Seeds presented by the Director, University Botanic Garden, Cambridge. Received March 20, 1939.

132065 to 132068. ALLIUM spp. Liliaceae.

132065. ALLIUM CAMPANULATUM S. Wats. (A. bidwelliae S. Wats.).

A pink-flowered onion, about 1 foot high, native to the Sierra Madre Mountains of California.

For previous introduction see 78976.

132066. ALLIUM CYANEUM Regel.

A rather dwarf plant, less than 1 foot high, with small heads of pendulous pale-blue flowers. Native to northern China.

For previous introduction see 104628.

132067. ALLIUM FARRERI W. T. Stearn.

An onion, native to Siku, China, with 4 to 6 linear leaves 10 to 15 inches long and lax umbels of 6 to 20 campanulate, red-purple flowers. For previous introduction see 92490.

132068. ALLIUM SICULUM Ucria.

A handsome biennial, native to Sicily, with broad flat leaves and scapes 3 feet or more in height. The dull-purplish flowers are borne in drooping umbels. The species is characterized by a very strong odor when bruised.

For previous introduction see 58883.

132069. ANIGOZANTHOS FLAVIDA Red. Amaryllidaceae.

A herbaceous perennial, native to Western Australia, with a thick underground stem, linear radical leaves 1 to 2 feet long, and a 4-foot stalk, bearing a much-branched panicle of tubular, dull-yellowish flowers. The flowers and stem of the panicle are covered with a greenish-red wool.

For previous introduction see 76931.

132070. BRODIAEA PEDUNCULARIS (Lindl.) S. Wats. Liliaceae.

A brodiaea with a stout scape 1 to 2 feet high and an umbel of many white flowers. Native to California.

132071. CENTAURIUM UMBELLATUM Gilib. Gentianaceae.

132072. COLCHICUM BORNMUELLERI Freyn. Melanthiaceae.

A colchicum with yellowish flowers, lilac or purplish veined. Resembles Colchicum byzantinum. Native to Asia Minor.

132065 to 132084.—Continued.

132073 to 132077. GENTIANA spp. Gentianaceae.

132073. GENTIANA ASCLEPIADEA L.

Milkweed gentian.

A comparatively robust subalpine species forming clumps of vigorous stems up to 3 feet high, with opposite oval-pointed leaves. In late summer it produces, from the upper axils, almost sessile, trumpet-shaped, sapphire-blue flowers which weigh down the arching stalks. There is some variation in color from seed which germinates freely and produces flowering plants in about 3 years. The plant seems to be indifferent as to whether the soil is alkaline or not.

For previous introduction see 80271.

132074. GENTIANA CRUCIATA L.

Cross gentian.

One of the less difficult alpine species, making foot-high clumps with handsome dark-green foliage and producing crowded heads of small 4-lobed blue flowers in the late summer and early autumn. Native to Europe and northern Asia.

For previous introduction see 79233.

132075. X GENTIANA HASCOMBENSIS Musgrave.

A hardy rock-garden hybrid, Gentiana lagodechiana  $\times$  G. septemfida cordifolia, larger in leaf and inflorescence than the latter parent. The flowers are uniform light blue.

132076. GENTIANA MACROPHYLLA Pall.

A herbaceous perennial, native to northern Europe and Asia, with an erect or ascending stem, narrow spreading leaves, and clustered heads of dark-blue flowers.

For previous introduction see 80278.

132077. GENTIANA SEPTEMFIDA Pall.

A gentian, native to Asia, which resembles Gentiana asclepiadea, requiring similar conditions. It makes spreading clumps up to 12 inches high, with opposite ovate leaves and heads of wide-mouthed, trumpet-shaped blue flowers in late summer. It varies considerably in habit and flower color, but all forms do well in peaty loam with ample water supply.

For previous introduction see 80284.

132078 to 132081. KALANCHOE spp. Crassulaceae.

132078. KALANCHOE ALEURODES W. T. Stearn.

A stately, robust, nearly white kalanchoe with erect stems up to 2 feet high, decusstate, entire, oblong to spatulate leaves up to 5 inches long. Related to *Kalanchoe orgyalis*, but the crowded urceolate flowers are greenish and larger. Native to Rhodesia.

132079. KALANCHOE LANCEOLATA (Forsk.) Pers.

132080. KALANCHOE VELUTINA Welw.

A stout, erect, pale-green succulent 1 foot high, native to Somaliland, Africa. The obovate entire or obscurely crenulate leaves are over 3 inches long, and the flowers are in a flat cyme 4 to 5 inches across. The corolla tube is pale yellow, and the petals are bright orange-red.

132081. KALANCHOE THYRSIFLORA Harv.

A suffrutescent succulent, 2 to 4 feet high, native to southern Africa. The oblong-spatulate, pale-green leaves are 4 to 6 inches long, and the coral-orange flowers are borne in an oblong, compact panicle.

For previous introduction see 131095.

132082. ORNITHOGALUM COMOSUM L. Liliaceae.

132083. VIOLA MUNBYANA Boiss. and Reut. Violaceae.

## 132065 to 132084.—Continued.

A hardy perennial violet with short stems, ovate, crenate leaves having long channeled petioles, and a single large pale-yellow flower on a stout scapelike peduncle. Native to the Altai region, Siberia.

For previous introduction see 123417.

132084. ZIGADENUS ELEGANS Pursh. Melanthiaceae.

#### 132085 and 132086.

From England. Plants purchased from George Pyne, Topsham, Devon. Received March 27, 1939.

132085. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Blenheim apricot.

132086. RUBUS sp. Rosaceae.

Pyne's Imperial raspberry.

132087 to 132104. PYRUS spp. Malaceae.

Pear.

From Massachusetts. Scions presented by Alfred Rehder, Arnold Arboretum, Jamaica Plain. Received March 27, 1939.

132087. PYRUS AMYGDALIFORMIS Vill. Malaceae.

Almond pear.

132088. PYRUS AMYGDALIFORMIS Vill.

Var. Cuneifolia. A form with small narrow leaves with a slender tapering base.

132089. PYRUS AMYGDALIFORMIS var. PERSICA (Pers.) Bornm.

A variety with oblong leaves up to 3 inches long and depressed globose fruits about 1 inch in diameter. Native to western Asia.

132090. PYRUS BALANSAE Decaisne.

For previous introduction see 29972.

132091. Pyrus calleryana var. faurieri (C. Schneid.) Rehder.

A variety smaller in all its parts than the type; the leaves are sometimes broadly cuneate at the base and rather thin. Native to Chosen.

132092. Pyrus communis var. cordata (Desv.) Hook. f.

A variety with suborbicular to ovate, subcordate leaves about 1 inch across.

132093. PYRUS COMMUNIS L.

Var. Cotinifolia.

132094. PYRUS COMMUNIS VAR. PYRASTER L.

A form of the common pear having fruits the size and shape of a cherry, originating in the northeastern part of Iran (Persia).

For previous introduction see 33172.

132095. PYRUS ELAEAGRIFOLIA Pall.

An ornamental wild pear native to Asia Minor, which becomes a large bush or small tree. The leaves are lanceolate, oblong-lanceolate, or linearlanceolate and covered with a whitish silky pubescence. The small white flowers appear in May, and the small globose fruits are crowned with a prominent calyx.

For previous introduction see 108769.

132096. X Pyrus Michauxii Bosc.

A natural hybrid between *Pyrus amygdaliformis* and *P. nivalis*, native to Asia Minor. The shining leaves are ovate-oblong, and the small clusters of white flowers are followed by turbinate, greenish-yellow fruits.

For previous introduction see 54099.

132087 to 132104.—Continued.

132097. PYRUS NIVALIS Jacq.

A tree, native to Asia Minor, with the young shoots thickly covered with white wool. The ovate, entire leaves are 3 inches long, and the conspicuous clusters of yellowish-white flowers, 1 to 2 inches across, produce yellowish-green fruits often 2 inches in diameter.

For previous introduction see 64227.

132098. PYRUS PHAEOCARPA f. GLOBOSA Rehder.

A medium-sized Chinese tree with lustrous deep-green-ovate leaves and unusually large white flowers. The fruits differ from those of the type in being globose instead of pear-shaped.

For previous introduction see 54101.

132099, PYRUS SALICIFOLIA Pall.

Var. Pendula. A form with slenderer and more pendulous branches.

132100. PYRUS SERRULATA Rehder.

A Chinese tree often 25 feet high, with ovate serrulate leaves, small white flowers, and brown ovoid fruits about 1/2 inch long.

For previous introduction see 54103.

132101. PYRUS SYRIACA Boiss.

A wild pear.

For previous introduction see 29994.

132102. Pyrus ussuriensis var. Hondoensis (Kik. and Nak.) Rehder.
Hondo pear.

For previous introduction see 55971.

132103. PYRUS USSURIENSIS Maxim.

Ussurian pear.

Shu-li.

132104. PYRUS sp.

Arboretum No. 17500.

132105 to 132126. Triticum Aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received March 28, 1939.

A collection of wheats resistant to leaf rust.

132105. Argentine C 8681. No. 10628.

132106. 38 N.A. Argentine C 9656. No. 10641.

132107. Egypt N.A. 95 C 12095. (Orig. Kenya.)

132108. Kenya C 6040.

132109. Kenya C 6041.

132110. Kenya C 6042.

132111. Kenya C 9968.

132112. Kenya C 10857.

132113. Kenya C 10860.

132114. Kenya C 10861.

132115. Kenya C 10865.

132116. Kenya  $\times$  Baringa G 138-1-E 1-L 1-Go-Do.

132117. K 33 Argentine C 9655. No. 10636.

132118. K 33 Argentine C 9607. No. 10633.

132105 to 132126.—Continued.

132119. K 40 Argentine C 9658. No. 10644.

132120. Klein 40 C 9606. No. 10637.

132121. Kleintron C 10817. No. 10643.

132122. Uruguay C 10834. No. 10717.

132123. Uruguay C 10835. No. 10710.

132124. Uruguay C 10836. No. 10716.

132125. Uruguay C 10837. No. 10704.

132126. Uruguay C 10838. No. 10707.

## 132127 to 132146.

From the Union of Soviet Socialist Republics. Scions presented by the Institute of Plant Industry, Leningrad. Received March 29, 1939.

132127 to 132132. Amygdalus persica L. Amygdalaceae. Peach.

132127. Bliudchaty Ranny No. 25.

132128. Bliudchaty Ranny No. 240.

132129. Shaftali.

132130. Var. Ferganensis, Ranny Bely.

132131. Var. Ferganensis "Zholty" (Zholto-Miassy.) (?)

132132. Var. Ferganensis No. 52.

132133 to 132146. PRUNUS spp. Amygdalaceae.

132133 to 132139. PRUNUS ARMENIACA L.

Apricot.

132133. Badami No. 8.

132134. Fadschi.

132135. Isfarak No. 789.

132136. Kalisarife.

132137. Khurmai.

132138. Spitak.

132139. Tabossa.

132140. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

Kok-Sultan.

132141 to 132144. X PRUNUS DASYCARPA Ehrh.

Plum-apricot.

For previous introduction see 131421.

132141. Krupnajal.

132142. Uriuko-Sliva, No. 1258.

132143. Uriuko-Sliva, No. 1276.

132144. Zaroliu.

132145 and 132146. PRUNUS MANDSHURICA (Maxim.) Koehne.

For previous introduction see 119858.

132145. No. 1884.

132146. No. 1888.

132147 and 132148. CITRUS spp. Rutaceae.

From Cuba. Budwood presented by Thomas R. Towns, Holguin. Received March 29, 1939.

132147. CITRUS SINENSIS (L.) Osbeck.

Orange.

Towns' Cuban Navel. A bud mutation of Washington Navel orange.

132147 and 132148.—Continued.

132148. CITRUS AURANTIUM L.

Seville orange.

Kotidiana. A sour-orange mutation with leaves of variegated color. It produces seedlings of exceptional vigor.

132149 to 132156.

From Germany. Plants and roots purchased from Christian Fey, Meckenheim, Köln. Received March 29, 1939.

132149 and 132150. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132149. Halberstädter Jungfernapfel.

132150. Uhlhorns August Calville.

132151 to 132154. PRUNUS spp. Amygdalaceae.

132151. PRUNUS AVIUM L.

Sweet cherry.

Späte Braune.

132152 and 132153. PRUNUS DOMESTICA L.

Common plum.

132152. Gute Aus Bry.

132153. Hauszwetsche.

132154. PRUNUS ARMENIACA L.

Apricot.

Aprikose Aus Wachendorf.

132155. Pyrus communis L. Malaceae.

Common pear.

Stuttgarter Geisshirtle.

132156. RHEUM RHAPONTICUM L. Polygonaceae. Holsteiner Blut.

Common rhubarb.

132157 to 132163. PRUNUS spp. Amygdalaceae.

From Manchuria. Seeds presented by A. Woeikoff, North Manchurian University, Harbin. Received March 24, 1939.

132157 to 132162. PRUNUS ARMENIACA L.

Apricot.

132157. Parent tree vigorous, withstands low temperatures; fruit, yellow with red blush, freestone, and of pleasant spicy flavor.

132158. A mixed sample of seeds from trees which withstand low temperatures. Fruits yellow-fleshed and of good quality.

132159. Parent tree bears apricots of the best size and quality in Harbin, but is not as cold-resistant as those of P.I. 132157 and 132158. A seedling of P.I. 132162.

132160. From a cold-resistant tree bearing red-blushed, oblong fruits of good quality.

132161. From a cold-resistant tree bearing medium-sized, sour fruits. Tree somewhat resembles  $Prunus\ mandchurica$ .

132162. From an annual-bearing, 30-year-old tree.

132163. PRUNUS sp.

From cold-resistant trees somewhat resembling *Prunus sibirica*. Fruit of good quality but small size.

#### 132164 to 132170.

From Tasmania. Seeds presented through the McFadden Seed Co., Winnipeg, Canada. Received March 23, 1939.

132164. DACTYLIS GLOMERATA L. Poaceae.

Orchard grass.

Cocksfoot grass (pedigreed).

132165. LOLIUM MULTIFLORUM Lam. Poaceae.

Italian ryegrass.

132164 to 132170.—Continued.

132166. LOLIUM sp.

Wimmera ryegrass (certified).

132167. PHALARIS TUBEROSA L. Poaceae.

For previous introduction see 130893.

132168 to 132170. TRIFOLIUM spp. Fabaceae.

Clover.

132168. TRIFOLIUM PRATENSE L.

Red clover.

Montgomery (certified).

132169. TRIFOLIUM REPENS L.

White clover.

Permanent Pasture (certified).

132170. TRIFOLIUM SUBTERRANEUM L.

Subterranean clover.

Midseason Strain (certified).

### 132171 to 132186.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Nikita, through the Institute of Plant Industry, Leningrad. Received March 25, 1939.

132171 to 132176. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

132171. Aidinovsky.

132172. Aidinovsky Karmir.

132173. Arabka.

132174. Geokchaisky.

132175. Geokchaisky Bely.

132176. Gudantsky.

132177. MALUS PUMILA Mill. Malaceae.

Paradise apple.

From the south slopes of the Gissar Mountains, along the River Varsob, central Asia, at 1,000 m. altitude.

For previous introduction see 115081.

132178 to 132186. PRUNUS spp. Amygdalaceae.

132178 to 132185. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

132178. From District Gerusy, Transcaucasus.

132179. From District Sochi, Caucasus.

132180. From District Kamani, Caucasus.

132181. From Osetia, North Caucasus.

132182. From District Maikop, North Caucasus.

132183. From District Orgeonikidze, North Caucasus.

132184. From District Tuapse, North Caucasus.

132185. Along the River Varsob, on the south slopes of the Gissar Mountains, central Asia.

132186. PRUNUS MAHALEB L.

Mahaleb cherry.

From along the River Varsob, on the south slopes of the Gissar Mountains, central Asia.

### 132187 to 132192.

From Germany. Plants purchased from Herm. P. Mauk, Wurtt. Received March 30, 1939.

132187 to 132189, MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132187 to 132192.—Continued.

132187. Coulon Reinette.

132188. Heilbronner Samling.

132189. Kirchwärder.

132190 and 132191. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

132190. Ambrosia.

132191. Mombacher Eieraprikose.

132192. Rubus sp. Rosaceae.

Schwabenstolz raspberry.

#### 132193 to 132200.

From South America. Seeds collected by the Baker and Collins Expedition, Experiment Station of the Pineapple Producers' Cooperative Association, Ltd., University of Hawaii, Honolulu, Hawaii. Received March 22, 1939.

132193 and 132194. ARISTOLOCHIA spp. Aristolochiaceae.

132193. February 17, 1939. From Moura, Distrito Federal, Brazil.

132194. December 8, 1938. From Puerto Bertoni, Paraguay.

132195 and 132196. BEGONIA spp. Begoniaceae.

132195. December 7, 1938. From Iguazu Falls, Misiones, Argentina.

132196. December 8, 1938. From Serra Brata, near Realengo, Distrito Federal, Brazil.

132197. Jacaratia hassleriana Chodat. Papayaceae.

January 1939. From the Jardín Botánico, Asunción, Paraguay. An unarmed shrub 3 to 8 feet high, with small palmate 3- to 5-foliolate leaves and oblong fruits about 2 inches long and 1 inch thick, green with longitudinal cinnabar stripes.

132198. Passiflora sp. Passifloraceae.

From the Jardim de Padres, Bella Vista, Matto Grosso, Brazil, January 25, 1939. Fruit is green when ripe.

132199. TABEBUIA IPE (Mart.) Standl. Bignoniaceae.

Lapache (Spanish name), Toyi (Guaranian name). From San Bernardino, Paraguay, December 16, 1938. A handsome tree, native to Brazil, with digitate leaves and showy red flowers in terminal clusters.

For previous introduction see 118401.

132200. VERBENA MEGAPOTAMICA Spreng. Verbenaceae.

From Antequera, Paraguay, January 3, 1939. A red-flowered verbena which thrives in dry areas.

132201 to 132218. GLYCINE MAX (L.) Merrill. Fabaceae.

Soybean.

From the Netherlands. Seeds presented by Dr. L. Koch, Zeist. Received March 30, 1939.

132201. No. D. 1. 132210. No. E. 1. 132202. No. D. 3. 132211. No. E. 34. 132203. No. D. 4. 132212. No. E. 39. 132204. No. D. 5. 132213. No. E. 44. 132205. No. D. 6. 132214. No. D. 47. 132206. No. D. 7. 132215. No. E. 50. 132207. No. D. 14. 132216. No. E. 52. 132217. No. E. 59. 132208. No. D. 15.

132209. No. D. 16. 132218. No. E. 60.

132219. HEDYCHIUM CORONARIUM Koen. Zingiberaceae Common gingerlily.

From Bolivia. Bulbs collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah, in cooperation with the Division of Fruit and Vegetable Crops and Diseases. Bureau of Plant Industry. United States Department of Agriculture. Received February 18, 1938. Numbered in March 1939.

No. 230. Collected in a wet ravine near Chulumani at about 6,000 feet altitude.

132220 to 132222. TRIFOLIUM SUBTERRANEUM L. Fabaceae.

Subterranean clover.

From Australia. Seeds presented by the Department of Agriculture, Adelaide, South Australia. Received March 28, 1939.

132220. Dwalganup.

132221. Mt. Barker.

132222. Tallarook.

132223 to 132232.

From Germany. Plants purchased from Wilhelm Pitzer, Stuttgart. Received March 31, 1939.

132223 and 132224. Amygdalus Persica L. Amygdalaceae. Peach.

132223. Perle von Cannstatt.

132224. Rheingold.

132225 and 132226. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132225. Gewürzluiken.

132226. Thuringer Winter-Rambour.

132227. PRUNUS sp. Amygdalaceae.

Strehlskirsche cherry.

132228 to 132230. PYRUS COMMUNIS L. Malaceae.

Common pear.

132228. Grüne Jagdbirne.

132229. Luxemburger Mostbirne.

132230. Schweizer Wasserbirne.

132231. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Schwäbisches Vollblut.

132232. RIBES sp. Grossulariaceae.

Michaelberg gooseberry.

132233. Styrax officinalis L. Styracaceae.

Snowbell.

From Turkey. Seeds collected by H. L. Westover and F. L. Wellman, Bureau of Plant Industry, United States Department of Agriculture. Received November 13, 1936. Numbered in March 1939.

No. 1024. An ornamental shrub or small tree, collected 6 km. southeast of Kemal Pasha, September 23, 1936.

For previous introduction see 112859.

132234 to 132247.

From Denmark. Seeds presented by the Danske Landboforeningers Froforsyning, Roskilde. Received March 27, 1939.

132234. BETA VULGARIS L. Chenopodiaceae.

Beet.

Spangsbjerg Toftoe P. 38. A red beet.

132234 to 132247.—Continued.

132235 to 132238. Brassica oleracea var. capitata L. Brassicaceae. Cabbage.

132235. White cabbage, Amager Tall, Toftoe P. 37.

132236. White cabbage, Amager Semi-tall Toftoe P. 37.

132237. Marrow cabbage, Erstling Octofte, P. 36.

132238. White cabbage, Ruhm van Enkhuizen (Glory of Enkhuizen).

Roskilde P. 27.

132239 to 132241. DAUCUS CAROTA L. Apiaceae.

Carrot.

132239. Amager Winter.

132240. Improved Nantes.

132241. London Market.

132242 and 132243. Petroselinum crispum (Mill.) Nym. Apiaceae.

Parsley.

132242. Extra Moss-curled, Octofte P. 34.

132243. Large, heavy sugar, Octofte P. 36.

132244 to 132247. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

132244. Copenhagen market, Oetofte P. 30.

132245. Icicle Roskilde P. 30.

132246. Oval forcing Toftoe P. 37.

132247. Saxa.

132248 to 132267. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

From Manchuria. Seeds presented by A. Woeikoff, manager, Garden of Manchurian Flora, Harbin. Received March 28, 1939.

132248. No. 1. Skin white with green stripe, flesh white, sweet, but not very fragrant. The most common form sold in the Harbin market.

132249. No. 2. Fruit oblong; skin white with green stripe; flesh white, sweet, not very fragrant.

132250. No. 3. Tiger's skin. Fruit large with vivid black-green stripes on a yellow or yellow-green ground; flesh dark green shading to orange-yellow near the seed cavity; sweet and aromatic.

132251. No. 4. Ching Pi Gua. Fruit yellow; flesh white; similar to P.I. 132248.

132252. No. 5. Tzin Pi. Fruit yellow with narrow stripes; flesh green and very sweet.

132253. No. 6. Fruit white, very large, egg-shaped; flesh sweet and very aromatic.

132254. No. 7. Fruit white, oblong; flesh not sweet. Possibly a hybrid.

132255. No. 8. Fruit small, skin green, covered with small mesh.

132256. No. 9. Ya Gua. Fruit small, round, egg-shaped, white with broken green stripes; flesh white, sweet, crisp, and fairly aromatic. The vine sometimes bears 12 fruits.

132257. No. 10. Tsin Toutsi. Fruit muddy green with narrow dark-green stripes; flesh green, aromatic, and, when overripe, sometimes mealy.

132258. No. 11. Hsiao Shui. Fruit yellow with broken green stripes; flesh white without liquid in the seed cavity; similar to No. 1 (P.I. 132248).

132259. No. 12. Fruit yellow-white with vivid green stripes; flesh white, aromatic.

132260. No. 14. Fruit long, club-shaped; similar to No. 1 (P.I. 132248).

132248 to 132267.—Continued.

132261. No. 15. Similar to No. 1 (P.I. 132248), but the skin has lighter stripes.

132262. No. 16. *Tji Doza*. Fruit light green or yellow with very dark green stripes; flesh green, becoming orange near the center.

132263. No. 17. Fruit with broad undefined stripes; flesh orange.

132264. No. 18. Fruit light green with dark-green stripes, flesh green and solid.

132265. No. 19. Fruit light green with distinct narrow stripes, flesh orange.

132266. No. 20. Fruit similar to No. 3 (P.I. 132250), with green flesh.

132267. No. 21. The earliest melon on the market at Harbin; very similar to No. 1 (P.I. 132248).

132268 to 132270. MELILOTUS spp. Fabaceae. Sweetclover.

From Rumania. Seeds presented by the Director, Botanic Garden, University of Bucharest. Received March 28, 1939.

132268. MELILOTUS ALBA Desr.

White sweetclover.

132269. MELILOTUS DENTATA (Waldst. and Kit.) Pers:

132270. MELILOTUS OFFICINALIS (L.) Lam.

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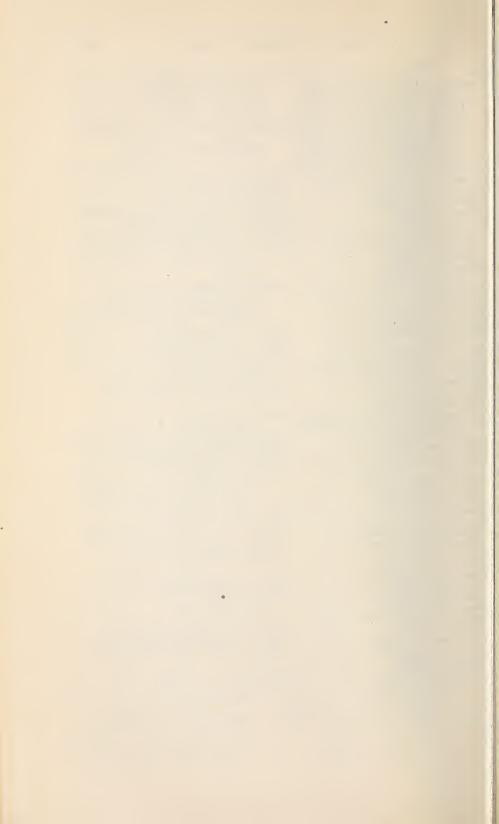
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# Plant Inventory No. 139

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., March 1950



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1939 (Nos. 132271 to 133381)

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# INTRODUCTORY STATEMENT

This inventory, No. 139, lists the plant material (Nos. 132271 to 133381) received by the Division of Plant Exploration and Introduction during the period from April 1 to June 30, 1939. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

Paul G. Russell,

Boťanist

Plant Industry Station, Beltsville, Md.

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<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

# INVENTORY

# 132271 to 132286.

From France. Plants and scions purchased from A. Kaskoreff & Cie., Pépinières de la Maladrerie, Caen. Received April 5, 1939.

132271 to 132276. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132271. Gros Fenouillet.

132274. Pomme de Fer.

132272. Pigeonnet Blanc. 132273. Pigeonnet Rouge. 132275. Reinette Chataignier. 132276. Rambourg d' Automme.

132277 to 132279. PRUNUS spp. Amygdalaceae.

132277. PRUNUS Sp.

Griotte du Portugal, a cherry.

132278. PRUNUS Sp.

Abricotée Jaune, a plum.

132279. PRUNUS Sp.

Monsieur à Fruits Rouges, a plum.

132280 to 132285. Pyrus communis L. Malaceae. Common pear.

132280. Beurrè Blanc d'Eté.

132283. Madame Favre.

132281. Bergamotte Crassane.

132284. Petit Rousselet.

132282. Citron des Carmes.

132285. Windsor.

132286. Malus sylvestris Mill. Malaceae.

Apple.

Omont (Faux-Caillouel).

# 132287 to 132291.

From Germany. Plants purchased from Baumschulen Emil Kuntsmann, Thesdorf-Rellingen, Holstein. Received April 4, 1939.

132287. CYDONIA sp. Malaceae.

Quince.

Béreczki.

132288. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Pommersche Krummstiel.

132289. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Ungarische Beste.

132290. PRUNUS AVIUM L.

Sweet cherry.

Büttners Späte Rote Knorpelkirsche.

132291. PYRUS COMMUNIS L. Malaceae.

Common pear.

Graf Moltke.

132292. (Undetermined.)

From Indo-China. Seeds presented by M. Poilan, Annam. Received March 26, 1930. Numbered in April 1939.

# 132293. (Undetermined.)

From China. Seeds presented by A. N. Steward, College of Agriculture and Forestry, Nanking University, Nanking. Received April 30, 1934. Numbered in April 1939.

No. 75. Collected on a rocky slope at 600 feet altitude in Chang An, Yung Hsien. A tree with green fruits.

# 132294. Coccocypselum gardneri Standley. Rubiaceae.

From Brazil. Seeds collected by Dr. Doris Cochran, United States National Museum, Washington, D. C. Received November 7, 1935. Numbered in April 1939.

No. 16. Collected at Ouro Preto, Minas Geraes.

# **132295.** (Undetermined.)

From Ceylon. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 21, 1936. Numbered in April 1939.

No. 172-C. From Kandy. A plant with clusters of pure-white flowers.

### 132296 to 132298.

From Brazil. Seeds collected by W. A. Archer, Bureau of Plant Industry, United States Department of Agriculture. Received in October 1936. Numbered in April 1939.

132296. Cocos sp. Phoenicaceae.

Palm.

No. 4048. From Fazenda Morro Redondo, near Lavras, eastern Minas Geraes, September 20, 1936. A dwarf palm.

132297. Arecastrum romanzoffianum (Cham.) Beccari. Phoenicaceae.

Palm.

No. 4044. From Lavras, Minas Geraes, September 19, 1936. A palm, native to Brazil, with an unarmed trunk about 20 feet high and 1 foot in diameter, bearing a crown of plumelike leaves 12 to 15 feet long. The fruit is a pale-orange drupe about the size of a large acorn.

For previous introduction see 119097.

132298. Cocos sp. Phoenicaceae.

Palm.

No. 4078. From Mendanhya, September 24, 1936. A palm with nuts 1 inch long and about  $\frac{1}{2}$  inch in diameter.

# 132299. Ptychosperma sp. Phoenicaceae.

Palm.

From Washington, D. C. Seeds collected by O. F. Cook, Bureau of Plant Industry, United States Department of Agriculture. Received June 11, 1937. Numbered in April 1939.

Plants growing in the United States Botanic Garden; origin not known, but native to the Malay region. A slender pinnate-leaved palm with long narrow pinnae, producing offshoots. The inflorescence has rather thick fleshy branches, clothed at first with brownish scalelike material. The fruits, ¾ inch long with a narrow conic beak, are first pale green and turn scarlet when ripe.

# 132300 to 132350.

From France. Plants purchased from E. Turbat & Cie., Orleans. Received, April 3, 1939.

132300 to 132312. Ceanothus spp. Rhamnaceae.

132300. CEANOTHUS.

Var. Albus Plenus.

132301. CEANOTHUS DELILIANUS Spach.

132302 and 132303. CEANOTHUS CAERULEUS Lag. 132302. Var. Grandiflorus.

132303. Var. Intermedius.

132304 to 132312. CEANOTHUS.

132304. Var. Bijou.

132305. Var. Ceres.

132306. Var. Georges Simon.

132307. Var. Gloire de Plantières.

132308. Var. Gloire de Versailles.

132309. Var. Lucie Simon.

132310. Var. Marie Simon.

132311. Var. Perle Rose.

132312. Var. Pinguet Guindon.

132313 to 132331. DEUTZIA spp. Hydrangeaceae.

132313. DEUTZIA SCABRA VAR. CANDIDISSIMA Rehder.

132314. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Var. Flore Rose Pleno.

132315. X DEUTZIA MAGNIFICA VAR. SUPERBA (Lemoine) Rehder.

132316. X DEUTZIA MAGNIFICA (Lemoine) Rehder.

Var. Suspensa.

132317. X DEUTZIA ELEGANTISSIMA (Lemoine) Rehder.

For previous introduction see 131754.

131318. X DEUTZIA ROSEA VAR. FLORIBUNDA (Lemoine) Rehder.

A variety with flowers slightly pink outside, in rather dense upright panicles.

132319. X DEUTZIA ROSEA VAR. GRANDIFLORA (Lemoine) Rehder.

A variety similar to floribunda, but the panicles are less dense.

132320. DEUTZIA DISCOLOR Hemsl.

Var. Major. A form with large flowers.

For previous introduction see 52678.

132321. DEUTZIA GRACILIS Sieb. and Zucc.

A free-flowering shrub sometimes 6 feet high, with slender arching branches, green lanceolate leaves  $1\frac{1}{2}$  to 3 inches long, and 9 to 15 white flowers in upright panicles or racemes. Native to Japan.

For previous introduction see 131758.

132322. X DEUTZIA ROSEA VAR. CARMINEA (Lemoine) Rehder.

A variety with flowers purplish outside and the buds rich carmine.

132323. X DEUTZIA ROSEA VAR. EXIMIA (Lemoine) Rehder.

A variety with the flowers slightly pinkish outside.

132324. X DEUTZIA ROSEA Rehder.

A hybrid (Deutzia gracilis × purpurascens) with ovate-oblong to ovatelanceolate leaves and short panicles of flowers which are pinkish outside and ¾ inch across.

For previous introduction see 132037.

132325. X DEUTZIA ROSEA VAR. VENUSTA (Lemoine) Rehder.

A variety with large white flowers and petals frilled at the edges.

132326. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

132327. X DEUTZIA MALIFLORA Rehder (D. lemoinei X purpurascens).

Avalanche. A hybrid with large white flowers and leaves usually broadcuneate at the base. 132328. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

132329. DEUTZIA TAIWANENSIS (Maxim.) C. Schneid.

An attractive deciduous shrub with slender branches, native to the mountains of Taiwan. The white or pinkish-white flowers with conspicuous golden-yellow stamens are in graceful racemes.

For previous introduction see 78122.

132330. DEUTZIA SCABRA VAR. WATERERI (Lemoine) Rehder.

A variety with white flowers, tinted carmine on the outside.

132331. DEUTZIA SCABRA VAR. CANDIDISSIMA Rehder.

Var. Wellsii.

132332 to 132350. PHILADELPHUS spp. Hydrangeaceae.

Mockorange.

132332. PHILADELPHUS CORONARIUS L.

Sweet mockorange.

For previous introduction see 28494.

132333. Philadelphus coronarius L.

Var. Aureus. A variety with the young leaves bright yellow, later turning greenish yellow.

132334 to 132348. X PHILADELPHUS LEMOINEI Lemoine. Lemoine mockorange.

132334. Var. Albâtre.

132342. Var. Manteau d'Hermine.

132335. Var. Avalanche.

132343. Var. Nuée Blanche.

132336. Var. Buoquet Blanc.

132344. Var. Norma.

132337. Var. Conquête.

132345. Var. Pyramidale.

132338. Var. Fantaisie.

132346. Var. Rosace.

132339. Var. Gerbe de Neige.

132347. Var. Virginal.

132340. Var. Girandole.

132348. Var. Voie Lactée.

132341. Var. Glacier.

132349. PHILADELPHUS CORONARIUS L.

Var. Primulaeflorus. A double form with broad petals.

132350. PHILADELPHUS.

Var. Souvenir de Billard.

# 132351. RHEUM RHAPONTICUM L. Polygonaceae.

Rhubarb.

From Australia. Roots presented by the Department of Agriculture, New South Wales. Received April 7, 1939.

Grown at the Hawksbury Agricultural College, Richmond, New South Wales.

# 132352. MICHELIA CHAMPACA L. Magnoliaceae.

Champac.

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 16, 1937. Numbered in April 1939.

No. 2049. From Darjeeling, December 29, 1936. A tall evergreen tree, native to the Himalayas, with ovate-lanceolate leaves 8 to 10 inches long and axillary, usually solitary, pale-yellow, fragrant flowers, 2 inches across. The tree grows up to 2,000 feet altitude. In Rio de Janeiro this is used as an avenue tree.

For previous introduction see 99189.

### 132353 to 132358.

From France. Plants purchased from G. Benard & Cie., Olivet-Orleans. Received April 3, 1939.

132353. X DEUTZIA ROSEA VAR. CAMPANULATA (Lemoine) Rehder. Hydrangeaceae.

A variety with white flowers about 1 inch across.

132354. X DEUTSIA ROSEA VAR. MULTIFLORA (Lemoine) Rehd.

132355 to 132358. PHILADELPHUS spp. Hydrangeaceae.

132355. PHILADELPHUS GORDONIANUS var. COLUMBIANUS (Koehne) Rehd.

A rather tall shrub with elliptic-ovate leaves about 2 inches long and numerous large flowers. Native to British Columbia.

132356. PHILADELPHUS.

Var. Enchantment.

132357. Philadelphus satsumanus Siebold. Satsu

Satsuma mockorange.

A shrub up to 10 feet high, native to Yunnan Province, China, and to Japan, with slightly fragrant flowers about 1 inch across. The leaves have conspicuous hard-tipped teeth. The plant closely resembles *Philadelphus coronarius*, of which it is often considered a variety.

132358. PHILADELPHUS.

Var. Speciosissimus.

# 132359 to 132361.

From France. Plants purchased from E. Turbat & Cie., Orleans. Received April 3, 1939.

132359. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Royal.

132360. PYRUS COMMUNIS L. Malaceae.

Common pear.

Président Drouard.

132361. Rubus sp. Rosaceae.

La France raspberry.

# 132362 to 132371.

From England. Plants purchased from W. J. Marchant, Keeper's Hill Nursery, Stapehill, near Wimborne, Dorset. Received April 4, 1939.

132362 to 132368. Deutzia spp. Hydrangeaceae.

132362. DEUTZIA CORYMBOSA R. Br.

A deutzia with pure-white flowers.

For previous introduction see 122087.

132363. DEUTZIA GRANDIFLORA Bunge.

An early-flowering deutzia up to 6 feet high, with ovate leaves 1 to 2 inches long and white flowers 1 to  $1\frac{1}{4}$  inches across, 1 to 3 on short lateral branches. Native to northern China.

132364. DEUTZIA MONBEIGII W. W. Smith.

A small shrub between 2 and 4 feet high, with narrowly oval or oval leaves less than ½ inch long and small cymes of white flowers. Native to southeastern China.

For previous introduction see 73432.

132365. DEUTZIA PULCHRA Vidal.

A shrub 8 feet or higher, with lanceolate to narrow-ovate leaves 1½ to 4 inches long and pendulous white flowers, tinged with pink, in slender panicles, often compound and a foot long. Native to the Philippines and Taiwan.

132366. Deutzia purpurascens (Franch.) Rehder.

A shrub up to 7 feet high, with oblong-ovate to oblong-lanceolate leaves 2 to 4 inches long and white flowers, tinged with purple outside, about ¾ inch across in 4- to 10-flowered corymbs. Native to western China.

132367. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Var. Staphyleoides.

132368. DEUTZIA SETCHUENENSIS Franch.

Szechwan deutzia.

A shrub up to 6 feet high, with lanceolate leaves about 3 inches long and white flowers about ½ inch across in loose few-to-many-flowered corymbs. Native to central and western China.

132369 to 132371. PHILADELPHUS Spp. Hydrangeaceae.

Mockorange

132369. PHILADELPHUS COULTERI S. Wats.

A shrub 6 to 8 feet high, with slender pendent branches, ovate to ovateoblong leaves 1 to 2 inches long, and fragrant, mostly solitary, white flowers with red spots at the base of the petals. Native to Mexico.

132370. PHILADELPHUS MEXICANUS Schlecht.

A shrub with spreading or drooping branches, ovate leaves 1 to 2½ inches long and bright green above. The solitary sweet-scented flowers are white, suffused with yellow, and nearly 2 inches across. Native to Mexico.

132371. PHILADELPHUS SATSUMANUS Siebold.

For previous introduction and description see 132357.

132372. Citrus sp. Rutaceae.

From Jamaica, British West Indies. Scions presented by G. G. R. Sharp, Trout Hall. Received April 11, 1939.

Ugli orange.

132373. Gossypium. Malvaceae.

Cotton.

From Africa. Seeds presented by Kenneth H. Prior, C. M. S. Training College, Awka, Southern Nigeria. Received April 14, 1939.

A locally grown cotton 10 to 12 feet high, growing at about sea level in a humid climate with an average temperature of 84° and an average rainfall of 80 inches.

# 132374 to 132447.

From South-West Africa. Plants purchased from Wilhelm Triebner, S. W. A. Succulents Nurseries, Windhoek. Received April 3, 1939.

132374. Gasteria bijliae v. Poelln. Liliaceae.

132375 to 132447. Haworthia spp. Liliaceae.

132375. HAWORTHIA ALBICANS Haw.

132376. HAWORTHIA ALBICANS Var. VIRESCENS (Haw.) Baker.

A stemless haworthia with a dense rosette of many whitish, ovate-deltoid leaves with green margins. Native to South Africa.

132377. HAWORTHIA ALTILINEA Haw.

A stemless haworthia with a rosette of 30 to 40 oboyate or lanceolate leaves with terminal bristles about  $\frac{1}{2}$  inch long. Native to South Africa.

132378. HAWORTHIA ALTILINEA VAR. BREVISETATA V. Poelln.

A variety with very short terminal bristles and leaves paler towards the tip.

132379. HAWORTHIA ALTILINEA VAR. INERMIS V. Poelln.

A variety with leaf margins usually smooth and a short terminal bristle. 132380. Haworthia altilinea var. morrisiae v. Poelln.

A variety with oblanceolate, yellow-green leaves having short, or scarcely any, bristles.

132381. HAWORTHIA ANGUSTIFOLIA Haw.

132382. HAWORTHIA ANGUSTIFOLIA VAR. ALBANENSIS (Schönl.) v. Poelln.

132383. HAWORTHIA ANGUSTIFOLIA VAR. DENTICULIFERA V. Poelln.

A variety with larger teeth on the leaf margins and the leaf surface often with scattered tubercles.

# 132384. HAWORTHIA ARMSTRONGII v. Poelln.

A haworthia with a stem about 4 inches high; leaves dense, spirally arranged, lanceolate, dark green,  $1\frac{1}{2}$  inches long, and light-green tubercles. Related to  $Haworthia\ coarctata$ .

# 132385. HAWORTHIA ASPERIUSCULA Haw.

Stem leafy, 4 to 6 inches high, with trifarious ovate-deltoid fleshy leaves. almost 1 inch long and a slender raceme of few greenish flowers. Native to South Africa.

### 132386. HAWORTHIA ASPERULA Haw.

A stemless species with a rosette about  $2\frac{1}{2}$  inches across of 10 to 15 short, thick, recurving leaves. The grayish-green leaves are erect with the recurved part pellucid and scabrous, due to the small papillae that cover the surface. Native to South Africa.

# 132387. HAWORTHIA ATROVIRENS (DC.) Haw.

Stoloniferous, with numerous long-lanceolate leaves  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long, dull green turning reddish brown, pellucid at the tip, with several vertical, anastomosing green lines, rounded on back and scabrous with tubercles.

### 132388. HAWORTHIA ATTENUATA Haw.

A cespitose succulent plant with the leaves in a spiral rosette and a flower stalk about 2 feet high, bearing tubular rosy flowers. The thick, sword-shaped leaves, ½ inch wide by 3 inches long, are green with the upper face roughened by minute green points and the lower surface with large white tubercles in bands or ridges. Native to South Africa.

For previous introduction see 81168.

# 132389. HAWORTHIA ATTENUATA VAR. ARGYROSTIGMA (Baker) Berger.

A variety with tubercles smaller, fewer, and less regularly banded than the type.

### 132390. HAWORTHIA ATTENUATA VAR. BRITTENIANA V. Poelln.

A variety differing from the type in form and arrangement of the tubercles. 132391. Haworthia attenuata var. clariperla (Haw.) Baker.

A variety with leaves more erect, less cuspidate, and with larger tubercles. 132392. Haworthia setata var. Bijliana v. Poelln. (Haworthia bijliana v. Poelln.).

A variety distinguished from the type by leaves with numerous curved, very heavy teeth.

# 132393. HAWORTHIA BLACKBEARDIANA V. Poelln.

Stemless with a rosette about 2 inches across of many pale-green leaves, the tips transparent and bristled. Allied to *Haworthia cooperi*. Native to South Africa.

# 132394. HAWORTHIA BLACKBEARDIANA V. Poelln.

Var. Major.

### 132395. HAWORTHIA BOLUSII Baker.

A stemless species with a dense rosette, 2½ to 3 inches across, of 30 to 40 oblong-lanceolate leaves about 1 inch long. The pale-green leaves are transparent at the tip and have many bristles. Native to South Africa.

# 132396. HAWORTHIA BOLUSII VAR. ARANEA Berger.

A variety with leaves about half as wide as those of the species, less transparent at the tips and with more numerous bristles.

# 132397. HAWORTHIA CAESPITOSA v. Poelln.

Stemless, very proliferous, with many light-bright-green, narrow-lanceolate leaves about 1 inch long. The leaves have 3 or 4 darker, somewhat anastomosing longitudinal lines and often a few minute tubercles. 132398. HAWORTHIA CHALWINI Marl. and Berg.

A haworthia with densely imbricated, thick, ovate-deltoid tuberculate leaves about 1 inch long. Allied to *Haworthia reinwardti*. Native to South Africa.

132399. HAWORTHIA CHLOROCANTHA Haw.

132400. HAWORTHIA CONFUSA V. Poelln.

A stemless haworthia with a rosette about 2 inches across, of many lanceolate, erect or suberect leaves edged with toothlike bristles, and the tips with bright spots. Native to South Africa.

132401. HAWORTHIA CUSPIDATA Haw.

Stemless, with a rosette about 2 inches across of 20 to 30 obovate, lanceolate leaves about 1 inch long, the transparent tips having 3 to 5 long darkgreen lines. Native to South Africa.

132402. HAWORTHIA CYMBIFORMIS Var. OBTUSA (Haw.) Baker.

A smaller variety with darker leaves not more than 1 inch long.

132403. HAWORTHIA DENTICULATA Haw.

Stemless, with a rosette 3 to 4 inches across, of 20 to 30 dense, oblonglanceolate leaves which are pale green, colorless at the tip and denticulate at the margins.

132404. HAWORTHIA EILYAE v. Poelln.

Proliferous, with an erect stem about 8 inches high, numerous green lanceolate leaves 2 inches long, and whitish tubercles.

132405. HAWORTHIA FASCIATA (Willd.) Haw.

A succulent, native to South Africa, with a short leafy stem forming a spiral rosette of ascending deltoid-lanceolate leaves having transverse bands of white tubercles. The rosy-lined flowers are in a terminal raceme less than 1 foot high.

For previous introduction see 78212.

132406. HAWORTHIA FASCIATA VAR. CAESPITOSA Berger.

A tufted variety with leaves about  $2\frac{1}{2}$  inches along; said to be a natural hybrid,  $Haworthia\ fasciata \times attenuata$ .

132407. HAWORTHIA FASCIATA f. SPARSA V. Poelln.

A form distinguished by its conspicuous and solitary tubercles arranged in more or less prominent vertical rows.

132408. HAWORTHIA FASCIATA f. MAJOR (Salm-Dyck) v. Poelln.

A form with leaves 2 to 3 inches long.

132409. HAWORTHIA FASCIATA f. OVATO-LANCEOLATA v. Poelln.

A form with ovate-lanceolate leaves.

132410. HAWORTHIA FASCIATA f. SUBCONFLUENS V. Poelln.

A form with the upper leaf surface rather smooth and tubercles somewhat confluent on the lower surface.

132411. HAWORTHIA FASCIATA f. VANSTAADENSIS V. Poelln.

A form with leaves sometimes smooth or with few tubercles on the lower surface.

132412. HAWORTHIA FASCIATA f. VARIABILIS V. Poelln.

132413. HAWORTHIA GIGAS v. Poelln.

Stemless, with a rosette of about 4 inches across of many self-colored, lanceolate leaves, 2 inches or more long, having very long end bristles and marginal teeth. Native to South Africa.

# 132414. HAWORTHIA GLAUCA Baker.

Elongate-stemmed, with oblong-lanceolate leaves about 1 inch long. The self-colored light or gray-green leaves have 5 to 7 lines on the back. Allied to *Haworthia coarctata*. Native to South Africa.

### 132415. HAWORTHIA GRACILIS V. Poelln.

Stemless, with a rosette about  $2\frac{1}{2}$  inches across, of many somewhat shining, narrow-oblong to narrow-obovate-oblong leaves about  $1\frac{1}{2}$  inches long. The leaves have 3 to 5 green lines on the upper side and bristles on the margin.

# 132416. HAWORTHIA HAAGEANA V. Poelln.

A haworthia with numerous bright-green, ovate-lanceolate leaves about 1½ inches long and half as broad. Related to *Haworthia reticulata*.

# 132417. HAWORTHIA HAAGEANA VAR. SUBRETICULATA V. Poelln.

A variety with the lines on the upper leaf surface slightly anastomosing. 132418. Haworthia helmae v. Poelln.

Proliferous, with numerous, ovate-oblong or oblanceolate acuminate leaves less than ½ inch long. The leaf margin and tip have transparent bristles.

### 132419. HAWORTHIA HERREI V. Poelln.

A haworthia branching from the base and with a stem up to 4 inches long. The lanceolate, triangular, gray-green leaves, up to 2 inches long, are acuminate with a short mucro and have greenish tubercles. Native to South Africa.

### 132420. Haworthia herrei var. depauperata v. Poelln.

A variety with 1 to 5 longitudinal lines and few tubercles on the lower leaf surface.

### 132421. HAWORTHIA JONESIAE V. Poelln.

A species with a stem becoming 8 inches or taller and numerous crowded, dark-green, lanceolate, erect, incurved leaves up to 1 inch long. Related to *Haworthia glauca*.

# 132422. HAWORTHIA LAETEVIRENS Haw.

A haworthia with a rosette of numerous oblanceolate-oblong, pale-green leaves up to 1½ inches long, tipped with a pellucid awn, and denticulate on the margins and keel.

# 132423. HAWORTHIA LATEGANAE V. Poelln.

Stem about 2 inches high, leaves numerous, spirally arranged, ovate-lanceolate, 2 to  $2\frac{1}{2}$  inches long, having a very sharp mucro. Native to Cape Province, South Africa.

# 132424. HAWORTHIA LIMIFOLIA Marl.

Stemless, with a dense rosette of ovate-lanceolate leaves having 15 to 20 filelike ridges on the leaf surface and a raceme of greenish flowers. Native to South Africa.

# 132425. HAWORTHIA LONGIANA V. Poelln.

Stemless and proliferous, with 10 to 15 ovoid-deltoid green leaves 5 to 10 inches long. The leaf surface is concave to flat convex, with minute, concolorous tubercles on the raised middle line; the convex back is covered with rather small, greenish-white tubercles.

# 132426. HAWORTHIA SETATA Var. XIPHIOPHYLLA (Baker) v. Poelln.

A variety with leaves about 2 inches long not including the pellucid awn. Received as *Haworthia longiaristata*, now referred to the above.

# 132427. HAWORTHIA MARAISII v. Poelln.

Stemless, with a dense rosette of few (many in cultivation), brownishgreen leaves with a triangular, pellucid face, often grooved in the middle, and with numerous obtuse tubercles. 132428. HAWORTHIA MAUGHANI V. Poelln.

Stemless, with about 10 spirally arranged, erect, ovate-oblong leaves about 1 inch long. In nature, only a short part of the truncate, windowed leaf tips show above the ground; under cultivation, the leaves tend to be thicker, dark green, and the tips lack the conspicuous white markings.

132429. HAWORTHIA PAPILLOSA (Salm-Dyck) Haw.

A haworthia with an ascending stem ½ to 1 foot high, ovate-lanceolate, acuminate, glaucous green leaves 3 to 4 inches long and raised, scattered white tubercles.

132430. Haworthia papillosa var. semipapillosa Haw.

A variety smaller than the type and with scarcely any tubercles on the leaf face.

132431. HAWORTHIA RADULA (Jacq.) Haw.

Stem short, leaves numerous, crowded, lanceolate-deltoid, acuminate, in a dense rosette about 6 inches across. The flat leaf face and rounded back are scabrous with minute white tubercles.

132432. HAWORTHIA REINWARDTI VAR. ADELAIDENSIS V. Poelln.

A variety with the tubercles on the lower leaf surface longitudinally subconfluent.

132433. HAWORTHIA REINWARDTI VAR. ARCHIBALDIAE V. Poelln.

A variety with distinctly separate tubercles on the lower leaf surface.

132434. HAWORTHIA REINWARDTI (Salm-Dyck) Haw.

A stoloniferous succulent native to South Africa, with a leafy stem 6 inches high and 2 inches in diameter, including the leaves; these are ascending, ovate-lanceolate, pale green when young but turning reddish brown with age, and having 9 to 11 vertical rows of raised white tubercles.

132435. HAWORTHIA REINWARDTI VAR. CONSPICUA V. Poelln.

A variety with rather small tubercles, sometimes confluent on the lower leaf surface.

132436. HAWORTHIA REINWARDTI Var. FALLAX V. Poelln.

A variety with the tubercles on the lower leaf surface often confluent.

132437. HAWORTHIA REINWARDTI VAR. MAJOR Baker.

A variety taller than the type with leaves ¾ to 1 inch long.

132438. HAWORTHIA REINWARDTI VAR. MINOR Baker.

A variety with tufts smaller than the type.

132439. HAWORTHIA REINWARDTI Var. PULCHRA V. Poelln.

A variety with tubercles larger than those of the type.

132440. HAWORTHIA SETATA Haw.

A dense rosette  $2\frac{1}{2}$  to 3 inches across of 30 to 40 ascending, oblong-lanceolate, pale glaucous green leaves 1 inch or longer and tipped with a long pellucid awn. The margin is ciliated with spreading lanceolate-cuspidate teeth.

132441. HAWORTHIA SETATA VAR. MAJOR Haw.

A variety with fewer and larger marginal teeth.

132442. HAWORTHIA SETATA VAR. MEDIA Haw.

A variety with pale-green leaves having larger and fewer marginal teeth.

132443. HAWORTHIA ARISTATA Haw.

A dense rosette of numerous ovate-lanceolate leaves up to 2½ inches long, dark green to bright green, often becoming reddish in sunny situations. Received as *Haworthia setata* var. *subinermis* v. Poelln., now referred to the above species.

132444. HAWORTHIA SUBULATA (Salm-Dyck) Baker.

A rosette 6 to 8 inches across, of 30 to 40 lanceolate-deltoid leaves about 4 inches long. The lower leaf surface is covered with small white tubercles and the upper with greenish.

132445 and 132446. HAWORTHIA TRUNCATA Schönl.

A stemless haworthia with 2 to 5 distichous, fleshy, ovate-deltoid leaves of which the upper rugose parts are above ground. Native to South Africa.

132445. Received as "forma normalis," a form in which the truncate apex of the leaves is about  $\frac{1}{3}$  inch thick.

132446. Received as "forma tenus," a form in which the truncate apex of the leaves is about 1% inch thick.

132447. HAWORTHIA SETATA VAR. XIPHIOPHYLLA (Baker) V. Poelln. (H. xiphiophylla Baker).

A variety with leaves about 2 inches long, not including the pellucid awn.

# 132448 and 132449. Sorghum vulgare Pers. Poaceae. Sorghum.

From India. Seeds presented by U. Ba Thein, Economic Botanist, Burma, Mandalay. Received April 7, 1939.

Yellow-seeded sorghum from Mahlaing, Meiktila District.

132448. Kala Pyang-wa.

132449. Pyaung-shwe-wa.

# 132450 and 132451.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received April 7, 1939.

132450. Camoensia maxima Welw. Fabaceae.

A strong-growing vine with delicately fragrant white flowers, fringed with gold. Native to western tropical Africa.

132451. Tabebuia serratifolia (Vahl) Nicholson. Bignoniaceae.

An evergreen tree, native to the West Indies, with digitately compound leaves made up of 4 or 5 oblong-ovate leaflets, 3 to 5 inches long, and terminal panicles of yellow funnel-formed flowers.

For previous introduction see 105310.

### 132452 to 132464.

From France. Plants purchased from Henri Détriché, Pépinières Charles Détriché, Angers. Received April 3, 1939.

132452 and 132453. CEANOTHUS. Rhamnaceae.

132452. Var. Coquetterie.

132453. Var. Fantaisie.

132454 to 132456. Deutzia spp. Hydrangeaceae.

132454. X DEUTZIA LEMOINEI VAR. COMPACTA Lemoine.

Var. Boule de Neige. A variety more dwarf and compact than the type and with smaller flowers in numerous panicles.

132455. DEUTZIA.

Var. Pourpre.

132456. Deutzia gracilis Sieb. and Zucc.

Var. Aureus. A form with yellow leaves.

132457 to 132464. Philadelphus spp. Hydrangeaceae. Mockorange.

132457. × PHILADELPHUS CYMOSUS Rehd.

Var. Bannière. A hybrid with large single or double flowers, in 3- to 4-flowered racemes or cymes.

132458. PHILADELPHUS CORONARIUS L.

Sweet mockorange.

Var. Dianthe Florus Plenus.

132459. PHILADELPHUS.

Var. Gracilis.

132460. PHILADELPHUS INODORUS L.

For previous introduction see 53721.

132461. X PHILADELPHUS MONSTROSUS Rehder.

A tall shrub with leaves usually ovate, 1 to 4 inches long and racemes of 5 to 13 flowers. A hybrid (*Philadelphus gordonianus*? × *pubescens*).

132462. × Philadelphus Lemoinei Lemoine.

Var. Mont-Blanc.

132463. X PHILADELPHUS NIVALIS Jacques.

A hybrid between *Philadelphus pubescens* and *P. coronarius*. The brown bark is usually exfoliating, the ovate leaves are usually rounded at the base, and the flowers, about 1½ inches across, are in racemes.

For previous introduction see 131769.

132464. X PHILADELPHUS PURPUREO-MACULATUS Lemoine.

Var. Oeil de Pourpre. A free-flowering shrub 3 to 6 feet high, with ovate leaves and solitary, white flowers with a bright purple-red base. A hybrid,  $Philadelphus\ lemoinei \times P.\ coulteri.$ 

# 132465 to 132497.

From France. Plants purchased from Pépinières F. Delaunay, Angers. Received April 4, 1939.

132465 and 132466. Amygdalus persica L. Amygdalaceae.

Peach.

132465. Chancelière.

132466. Meige.

132467 to 132473. Malus sylvestris Mill. Malaceae.

Apple.

132467. Calville de Malingre.

132471. Merveille de Vitry.

132468. Calville St. Sauveur.

132472. Reinette de Madère.

132469. Egrain Cabanié.

132473. Reinette Pépin.

132470, Grosse de Saint-Clement.

132474 to 132477. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

132474. Bigarreau Courte.

132475. Bigarreau de Montauban.

132476. Bigarreau Gros Blanc.

132477. Bigarreau Tardif de Collonge.

132478 and 132479. PRUNUS CERASUS L.

Sour cherry.

132478. C. Hative de Louvain.

132479. C. Précoce Brunet.

132480. PRUNUS AVIUM L.

Sweet cherry.

Guigne sucrée de L. LeClerc.

132481 to 132497. Pyrus communis L. Malaceae.

Common pear.

132481. Bergamot Esperén.

132482. Begi d'Hery.

132486. Doyenné Gris.

132483. Beurré de Naghin.

132487. Doyenné Sterckmans.

132484. Beurré Dumont.

132488. Duc de Nemour.

132485. Beurré Gris d'Hiver.

132489. Duchesse de Berry d'Été.

132490. Duchesse d'Hiver.132494. Olivier de Serres.132491. Ferdinand Gaillard.132495. Saint-Michel Archange.132492. Gilles o Gilles.132496. Verte Longue d'Autonne.

132493. Leon Leclerc de Laval. 132497. Verte Longue Panachée.

# **132498 to 132511.** Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds collected by J. B. Griffing at the Escola Superior de Agricultura do Estado de Minas Geraes, Viçosa. Received April 7, 1939.

 132498. Y 38, 21°.
 132505. Y<sub>2</sub> 278, 23°.

 132499. Y 38, 23°.
 132506. Y<sub>2</sub> 278, 7°.

 132500. Y<sub>3</sub> 38, 22°.
 132507. Gr<sub>2</sub> 258, 16°.

 132501. Y 188, 17°.
 132508. Gr<sub>2</sub> 258, 19°.

 132502. Y 528, 24°.
 132509. Gr<sub>3</sub> 258, 4°.

 132503. Y 528, 5°.
 132510. F<sub>4</sub> 1828, 1°.

132503. Y 528, 5°. 132510. F<sub>4</sub> 1828, 1°. 132504. Y 278, 24°. 132511. F<sub>4</sub> 1828, 11°.

# 132512 to 132517. Gossypium spp. Malvaceae.

Cotton.

From Peru. Seeds presented by Prof. Teodoró Boza B., at the request of Dr. Don Victor Marie, Superintendent, Estación Experimental Agrícola de La Molina, Lima. Received April 10, 1939, through the American Embassy at Lima.

132512. Gossypium raimondii Ulbrich.

A shrub or small tree, native to Peru.

For previous introduction see 128383.

132513 to 132517. Gossypium.

132513. Tanguis-"Cleistogoma" (Str. CB 8-38, pubescent).

132514. Tanguis-"Cleistogoma" (Str. CLM, 38-38).

132515. Tanguis (Str. Cn. 1-38). Good fiber.

132516. Tanquis (Str. Cn.). From Canete Valley.

132517. Tanguis (Str. Cn. 187-38).

# 132518 to 132534.

From England. Plants purchased from the Collyers Nurseries, Morsell Common, Woking. Received April 10, 1939.

132518 to 132521. CEANOTHUS spp. Rhamnaceae.

132518. Ceanothus coeruleus Lag. (Ceanothus azureus Desf.).

A large shrub 10 to 12 feet high, which produces panicles up to 4 inches long of fragrant lilac-blue flowers; the shrub is very similar to the mountain-lilac of southern California.

For previous introduction see 49753.

132519, CEANOTHUS DENTATUS Torr. and Gray.

132520. CEANOTHUS.

Var. Floribundus.

132521. CEANOTHUS.

Var. Russellianus.

132522. Deutzia discolor Hemsl. Hydrangeaceae.

A luxuriantly spreading shrub with branches so heavily laden with flowers that they bend over and trail the ground. The white flowers are sometimes slightly suffused with rose.

For previous introduction see 52678.

132523. X DEUTZIA KALMIAEFLORA Lemoine. Hydrangeaceae.

A handsome, graceful hybrid, *Deutzia purpurascens* × *parviflora*, with ovate-oblong to ovate-lanceolate leaves up to  $2\frac{1}{2}$  inches long, and cup-shaped flowers, white within and carmine outside, about 1 inch across, in loose 5- to 12-flowered corymbs.

132524. SKIMMIA JAPONICA Thunb. Rutaceae.

Japanese skimmia.

A dense evergreen Japanese shrub, 3 to 5 feet high, with yellowish-green leaves 6 inches long, crowded at the ends of the branchlets, panicles of small yellowish-white flowers, and bright-red berries ¼ inch in diameter.

For previous introduction see 81954.

132525. CEANOTHUS. Rhamnaceae.

Var. A. T. Johnson.

132526. PHILADELPHUS SUBCANUS VAR. WILSONII Rehder. Hydrangeaceae.

A shrub 7 feet high, native to western Szechwan and western Hupeh, China, with lax racemes 7 inches long. The white flowers are more than 1½ inches across.

132527. SKIMMIA REEVESIANA Fortune. Rutaceae.

A very pretty, winter-flowering shrub from China, with persistent foliage. The very fragrant white flowers are borne in panicles; these are followed by deep-red oval fruits.

132528 and 132529. SKIMMIA JAPONICA Thunb.

For previous introduction and description see 132524.

132530. Amygdalus persica L. Amygdalaceae.

Peach.

Royal George.

132531. Malus sylvestris Mill. Malaceae.

Apple.

Royal Russet.

132532. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

 $Bradboume\ Black.$ 

132533 and 132534. PRUNUS DOMESTICA L.

Plum.

132533. Dennison's Superb.

132534. Gisborne's Yellow.

# 132535 to 132540.

From England. Plants purchased from John Waterer Sons & Crisp, Ltd., Twyford, Berks. Received April 10, 1939.

132535. Amygdalus persica L. Amygdalaceae.

Peach.

Late Admirable.

132536. Malus sylvestris Mill. Malaceae.

Apple.

Emmeth Early.

132537 to 132540. PRUNUS Spp. Amygdalaceae.

132537 and 132538. PRUNUS AVIUM L.

Sweet cherry.

132537. Early Rivers.

132538. Bigarreau Napoleon.

132539. PRUNUS INSITITIA L.

Plum.

Farleigh Damson.

132540. PRUNUS DOMESTICA L.

Plum.

Oullin's Golden Gage.

# 132541 to 132545.

From France. Plants purchased from G. Bénard & Cie., Olivet-Orléans. Received April 11, 1939.

132541 and 132542. Amygdalus persica L. Amygdalaceae.

Peach.

132541. Benoni.

132542, Reine des Tardives.

132543 to 132545. Prunus spp. Amygdalaceae.

132543. PRUNUS AVIUM L.

Sweet cherry.

Belle d'Annonay.

132544. × Prunus effusa (Host) Schneider.

Duke cherry.

Royal.

132545. PRUNUS Sp.

Reine des Mirabelles, a plum.

# 132546 to 132549.

From England. Plants purchased from Hillier & Sons, Winchester. Received April 11, 1939.

132546. X CEANOTHUS PALLIDUS Lindl. Rhamnaceae.

A plant with clear lilac-pink flowers.

132547. DEUTZIA SETCHUENENSIS VAR. CORYMBIFLORA (Lemoine) Rehd. Hydrangeaceae.

A variety differing from the type in its broader and larger leaves and many-flowered loose corymbs, 2 to 4 inches in diameter. Native to central China.

For previous introduction see 131753.

132548. PHILADELPHUS ARGYROCALYX Wooton. Hydrangeaceae.

A branching shrub 3 to-5 feet high, with elliptic-ovate leaves about 1 inch long and solitary white flowers. It is allied to *Philadelphus microphyllus*. Native to New Mexico.

132549. PHILADELPHUS SUBCANUS Koehne.

A mockorange up to 10 feet high, with oblong-ovate or ovate leaves up to 5 inches long and 5 to 9 flowers about 1 inch across in secund racemes. Native to central and western China.

# 132550. Capsicum frutescens L. Solanaceae.

Redpepper.

From Hungary. Seeds purchased from Edmund Mauthner Ltd., Budapest. Received April 11, 1939.

Szegedi Rozsa, paprika.

# 132551 to 132566.

From Germany. Plants and scions purchased from A. Severn, Blankenburg. Received April 13, 1939.

132551. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

Sämling No. 30.

132552. Amygdalus persica var. nectarina Ait.

Nectarine.

Blutnektarine.

132553 to 132555. Malus sylvestris Mill. Malaceae.

Apple.

132553. Herrenapfel.

132554. Stauffenburger Goldreinette.

132555. Winterbananen.

132556 to 132566. Prunus spp. Amygdalaceae.

132556 to 132559. PRUNUS AVIUM L.

132556. Dicke Braune Blankenburger.

132557. Königskirsche.

132558. Liefeld's Braune.

132559. Ochsenherzkirsche.

132560. PRUNUS CERASUS L.

Querfurter Passauerkirsche.

132561 to 132563. PRUNUS AVIUM L.

132561. Severins H. Hellr. Vogelkirsche.

132562. Turkime.

132563. Winklers Weisse Herzkirsche.

132564. PRUNUS DOMESTICA L.

Kohlstockzwetsche.

132565. PRUNUS INSITITIA L.

Mirabelle von Nancy.

132566. PRUNUS DOMESTICA L.

Wiener Frühzwetsche.

132567 to 132572. MALUS SYLVESTRIS Mill. Malaceae.

From France. Scions purchased from A. Michel, Le Neubourg. Received April 13, 1939.

132567. Galot. or Railé Précoce.

132568. Long Bois Rouge.

132569. Long Bois Tardive.

132572, Rouge de Trèves.

132573 to 132589.

From the Union of Soviet Socialist Republics. Scions presented by S. N. Shundenko, Institute of Plant Industry, Leningrad. Received April 13, 1939.

132573 to 132575. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132573, Messemianka Mitchurina,

132574. Red Stanart.

132575. Slavjanka.

132576. Prunus cerasus L. Amygdalaceae.

Krassa Severa.

132577. Pyrus sp. Malaceae.

Krassnoparkhasnaja.

132578. Prunus cerasus L. Amygdalaceae.

Shubinka.

132579. Prunus sp. Amygdalaceae.

Valadimir Skaja.

132580, Pyrus. Malaceae.

Beré Zimmaja-Mitchurina.

132581 to 132586. Prunus spp. Amygdalaceae.

132581 to 132582. PRUNUS CERASIFERA Ehrh.

[Received without further notes.]

132582. Yellow.

Sour cherry.

Sweet cherry.

Sweet cherry.

Plum.

Plum.

Plum.

Apple.

132570. Noire de Vitry.

132571. Reine des Pommes.

Sour cherry.

Pear.

Sour cherry.

Pear.

Myrobalan plum.

132583 to 132586. PRUNUS spp.

132583. Received as *Cerasus maximoviczii*, a name for which a place of publication has not been found.

132584. Koslowskaje.

132585. Ozimaja Krasnaja, a plum.

132586. Renclod Reforma, a plum.

132587 and 132588. PRUNUS SPINOSA L.

Sloe, blackthorn.

132587. Tērn Sladkyi.

132588. Tërn Dessertny.

132589. Pyrus. Malaceae.

Pear.

Finlandskaja Zholtaja.

132590. Sorghum sp. Poaceae.

From British East Africa. Seeds presented by D. C. Edwards, Officer in Charge, Grassland Improvement, Nairobi. Received April 11, 1939.

A variety cultivated by the natives as a food crop. It is apparently perennial and may have possibilities as a forage crop.

# 132591 and 132592.

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received April 11, 1939.

132591. Persea krugh Mez. Lauranceae.

Collected in the Maricao Forest. An evergreen tree, sometimes 45 feet high, with oblong-lanceolate to elliptic, leathery leaves 2 to 4 inches long and globular, black drupes about  $\frac{1}{2}$  inch in diameter. Native to Puerto Rico.

132592. Tabebuia glomerata Urban. Bignoniaceae.

A handsome tree about 30 feet high, with long-petioled 5-foliolate leaves with obovate leaflets 2 to 6 inches long, acuminate at the apex. In late February, when nearly leafless, it is covered with clusters of bright-yellow flowers about ½ inch long. Native to Trinidad and Tobago.

### 132593 to 132611.

From England. Seeds presented by the Director, Royal Botanic Gardens, Kew, Surrey. Received April 10, 1939.

132593. ALLIUM FARRERI W. T. Stearn. Liliaceae.

An onion native to Siku, China, with 4 to 6 linear leaves 10 to 15 inches long and lax umbels of 6 to 20 campanulate red-purple flowers.

For previous introduction see 132067.

132594. Acer griseum (Franch.) Pax. Aceraceae. Paperbaark maple.

A handsome maple up to 30 feet in height, native to western China. The coarsely toothed trifoliolate leaves are 1 to 2 inches long. The striking feature of this maple is the cinnamon-brown papery bark which flakes off like that of the river birch.

For previous introduction see 97500.

132595 to 132597. Deutzia spp. Hydrangeaceae.

132595. Deutzia Monbeigh W. W. Smith.

For previous introduction and description see 132364.

132596. Deutzia scabra Thunb.

Fuzzy deutzia.

132597. Deutzia sieboldiana Maxim.

Siebold deutzia.

This is the lowest growing of all the deutzias, of a very compact habit, with small white, loose flower panicles which are not very conspicuous. Native to Japan.

For previous introduction see 49943.

132598 to 132610. Philadelphus spp. Hydrangeaceae.

Mockorange.

132598. PHILADELPHUS ARGYROCALYX Wooton.

A branching shrub 3 to 6 feet high, with elliptic-ovate leaves about 1 inch long and solitary white flowers. It is allied to *Philadelphus microphyllus*. Native to New Mexico.

For previous introduction and description see 132548.

132599. PHILADELPHUS HENRYI Koehne.

A shrub about 4 feet high, with chestnut-brown bark, narrow-ovate, slightly hairy, papery leaves 1 to 2 inches long, and white flowers about 1 inch across in racemes of 2 to 12 flowers. Native to Yunnan.

For previous introduction see 103130.

132600. PHILADELPHUS HIRSUTUS Nutt.

132601. PHILADELPHUS LEWISH Pursh.

Lewis mockorange.

One of the most floriferous of all the taller species, with graceful pendulous branches. The white flowers are more than 1 inch across. Native to western North America.

For previous introduction see 49949.

132602. PHILADELPHUS MAGDALENAE Koehne.

Magdalena mockorange.

A bushy mockorange from Szechwan, China, which becomes about 6 feet high, with finely toothed, narrow leaves and white flowers 1 inch in diameter, borne in early June in few-flowered racemes.

For previous introduction see 63363.

132603. PHILADELPHUS MICROPHYLLUS A. Gray.

For previous introduction see 131767.

132604. PHILADELPHUS PEKINENSIS Rupr.

Peking mockorange.

For previous introduction see 131770.

132605. PHILADELPHUS PURPURASCENS (Koehne) Rehd.

A shrub up to 12 feet high, with spreading and arching branches, ellipticovate or ovate to lanceolate leaves, and racemes of 5 to 9 pure-white tragrant flowers. Native to western China.

For previous introduction see 132044.

132606. PHILADELPHUS SATSUMANUS Siebold.

Satsumi mockorange.

For previous introduction and description see 132371.

132607. PHILADELPHUS SERICANTHUS Koehne.

Silk mockorange.

A white-flowered shrub 10 feet high, native to thickets of western Szechwan, China, at altitudes of 4,200 feet.

For previous introduction see 53724.

132608. PHILADELPHUS TOMENTOSUS Wall.

A shrub up to 9 feet tall, with elliptic-ovate or ovate leaves 2 to 4 inches long and racemes of 5 to 7 fragant flowers. Native to the temperate Himalayas.

For previous introduction see 131774.

132609. PHILADELPHUS VERRUCOSUS Schrad.

132610. PHILADELPHUS SUBCANUS VAR. WILSONII Rehder.

For previous introduction and description see 132526.

132611. PHILLYREA LATIFOLIA L. Oleaceae.

Broadleaf phillyrea.

An evergreen shrub or small tree up to 30 feet high, native to the Mediterranean region. The shining dark-green leaves are 2 inches long, and the racemes of small flowers are followed by small black fruits ¼ inch in diameter.

For previous introduction see 131776.

# 132612. Annona sp. Annonaceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in April 1939.

Plants grown from seed sent in from Guatemala and described as a thick-skinned annona called *cherimulla*; from San Marcos.

# 132613 to 132616.

From Colombia. Seeds presented by Eduardo Hernandez A., Pijao, Caldas. Received April 3, 1939.

132613. Annona sp. Annonaceae.

A native species.

132614. CALLIANDRA Sp. Mimosaceae.

A native species.

132615. Passiflora ligularis Juss. Passifloraceae.

Sweet granadilla.

For previous introduction see 114343.

132616. Passiflora quadrangularis L.

Giant granadilla.

For previous introduction see 114539.

# 132617 and 132618. Prunus armeniaca L. Amygdalaceae. Apricot.

From Manchuria. Seeds presented by A. D. Woeikoff, Harbin, through Harlow Rockhill, Conrad, Iowa. Received April 13, 1939.

132617. No. 1.

132618. No. 2.

# 132619. LUCUMA NERVOSA DC. Sapotaceae.

Canistel.

From Florida. Seeds collected near Coconut Grove by G. H. Corsan, Islington, Ontario, Canada, and presented by C. A. Reed, Bureau of Plant Industry. Received April 14, 1939.

A small tree up to 25 feet high, with spreading branches and oblong leaves 4 to 8 inches long. The ovoid, orange-yellow, edible fruits are 2 to 4 inches long with soft, mealy, bright-orange flesh of rich sweet flavor. Native to northern South America.

For previous introduction see 75201.

# 132620 to 132624.

From England. Plants purchased from Walter C. Slocock, Ltd., Woking, Surrey. Received April 18, 1939.

132620 to 132622. Deutzia spp. Hydrangeaceae.

132620. DEUTZIA Sp.

Received under the name "farrerii," for which a place of publication has not been found.

132621. DEUTZIA PARVIFLORA Bunge.

Mongolian deutzia.

A hardy ornamental shrub 6 feet high with corymbs of white flowers.

For previous introduction see 93114.

132622. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Var. Purpurea. A form with purplish flowers.

132623. PHILADELPHUS CORONARIUS L. Hydrangeaceae.

Var. Aurea. A variety with the young leaves bright yellow, later turning greenish yellow.

For previous introduction and description see 132333.

132624. PHILADELPHUS.

Var. Savilos. A hybrid with white flowers.

132625. Juglandaceae. Juglandaceae.

Persian walnut.

From Canada. Scions presented by G. H. Corsan, Islington, Ontario.

Circassian walnut.

132626 to 132629. Eucalyptus spp. Myrtaceae.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received April 17, 1939.

132626. EUCALYPTUS CALOPHYLLA Lindl.

Var. Rosea. A form with pink flowers.

For previous introduction see 106333.

132627. EUCALYPTUS GUMMIFERA (Gaertn.) Hochr. (E. corymbosa J. E. Smith).

A medium-sized evergreen tree native to Australia, with leathery, lanceolate leaves and large corymbs of fragrant yellowish-white flowers.

For previous introduction see 106334.

132628. Eucalyptus haemastoma J. E. Smith.

A large tree with a smooth mottled trunk, coriaceous lanceolate-falcate leaves, and small white flowers in axillary clusters or small terminal panicles and small globular or pear-shaped fruits less than ½ inch in diameter.

For previous introduction see 75628.

132629. EUCALYPTUS MARGINATA J. E. Smith.

A shrub or, under favorable circumstances, a tall tree often clear of branches for two-thirds its height. The hard durable wood is used for timber, piles, and railway ties. The trees will grow in a great variety of soils, but prefer moist, well-drained situations.

For previous introduction see 123776.

# 132630 to 132640.

From France. Plants purchased from Grandes Roseraies du Val de La Loire, Orleans. Received April 21, 1939.

132630. CEANOTHUS. Rhamnaceae.

Var. Sirius.

132631 to 132638. DEUTZIA spp. Hydrangeaceae.

132631 to 132633. DEUTZIA.

132631. Var. Crenata Azaleaflora.

132632. Var. Crenata Macrothyrsa.

132633. Var. Suspensa.

132634. Deutzia glomeruliflora Franch.

For previous introduction see 34536.

132635. DEUTZIA HYPOLEUCA Maxim.

A Japanese shrub with sharp-pointed, serrulate, oval leaves with hairy lower surfaces, and flowers, either solitary or in clusters of 2's or 3's. The fruits are capsules about  $\frac{1}{2}$  inch long.

For previous introduction see 43840.

132636. DEUTZIA LONGIFOLIA Franch.

Longleaf deutzia.

Among the many attractive species of deutzia, this is considered to be one of the most handsome. It comes from western China and is a shrub about 6 feet high, with narrow leaves, whitish below, and rosy flowers about 1 iuch across, produced in rounded clusters 2 to 3 inches in diameter. Received as "Var. Purpurea, a form with rosy flowers."

132637. DEUTZIA MOLLIS Duthie.

A very distinct and beautiful species from central China. The white or pink-tinged flowers are in flat corymbose panicles.

For previous introduction see 49942.

132638. X DEUTZIA WILSONI Duthie.

132639 and 132640. PHILADELPHUS. Hydrangeaceae.

132639, Var. Favorite.

132640, Var. Sulviana.

# 132641 to 132673.

From Germany. Plants purchased from J. Lehnert, Kamp (Rhein). Received April 21, 1939.

132641 to 132646. Amygdalus persica L. Amygdalaceae.

Peach.

132641. Kernechter vön Vorgebiege.

132642. Müllers Goldpfirsich.

132643. Rekord von Alfter.

132644. Roter Ellerstädter.

132645. Sämling von Kamp.

132646. Veredelter Weinbargspfirsich.

132647. Malus sylvestris Mill. Malaceae.

Apple.

Dülmener Rosenapfel.

132648. Prunus sp. Amygdalaceae.

Frühzwetsche.

132649. Malus sylvestris Mill. Malaceae.

Apple.

Rheinischer Winterrambour.

132650 to 132659. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

132650. Ananas.

132651, Andenken an Robertsau.

132652, Blanchet Fils.

132653. Camper, späte.

132654. Grosse Frühaprikose.

132655. Kamper Beste.

132656. Niederwerther Beste.

132657. Sierische Aprikose.

132658, Triumph von Trier.

132659. Versailler.

132660 to 132673. PRUNUS spp.

132660 to 132662. PRUNUS AVIUM L.

Sweet cherry.

132660, Bernhard-Nette.

132661. Bopparder Kracher.

132662. Camper Mittelfrühe.

132663. X PRUNUS EFFUSA (Host) Schneid.

Elizabeth Surma.

132664 to 132671. PRUNUS AVIUM L.

Cherry.

Sweet cherry.

132664. Giespitter, Kamper Rote (Bornhofer Frühe).

132665. Grosse Prinzessinkirsche.

132666. Kaiser Franz (Zeppelin).

132667. Kamper Schwarze ("Kemps").

132668. Maibigarreau.

132669. Perle von Finkenburg.

132670. Sämling von Werth.

132671. Schwarze Hängische.

132672. PRUNUS CERASUS L.

Spanische Glaskirsche.

132673. PRUNUS AVIUM L.

Sweet cherry.

Sour cherry.

Werners Frühe.

# 132674 to 132690.

From the Union of South Africa. Bulbs purchased from John Martley, Banhoek, Stellenbosch. Received April 24, 1939.

132674. Anoiganthus breviflorus (Harv.) Baker. Amaryllidaceae.

A plant with 3 or 4 narrow, strap-shaped, channeled leaves, 1 foot or more long, appearing with the flowers, and an umbel of 2 to 10 bright-yellow or white funnel-shaped flowers about 1 inch long; native to Natal and the Cape region, ascending the mountains to about 6,000 feet altitude.

132675 to 132678. Babiana spp. Iridaceae.

132675. BABIANA HIEMALIS L. Bolus.

An early-flowering babiana with 3 to 5 leaves in a short stiff fan and a short simple spike of 4 to 6 pale-blue flowers. Native to South Africa.

132676. Babiana plicata (L.) Ker.

A dwarf, sweet-scented, early-flowering babiana with 5 to 6 lanceolate leaves, 3 to 6 inches long, and 4 to 6 flowers in a simple or forked spike, usually shorter than the leaves. The ringent lilac or reddish perianth is about 1 inch long. Native to South Africa.

132677 and 132678. Babiana stricta var. sulphurea (Jacq.) Baker.

A large babiana with spikes 1 foot long of milk-white or sulfur-yellow flowers. Native to South Africa.

132679. Geissorhiza splendidissima Diels. Iridaceae.

A low irislike plant from South Africa, 4 to 6 inches high, with 3 linear leaves 2 to 5 inches long and small blue flowers in a 3- to 5-flowered lax spike.

For previous introduction see 105282.

132680. HESPERANTHA ANGUSTA (Willd.) Ker. Iridaceae.

A hesperantha with 3 or 4 linear, grasslike leaves, the lower 4 to 6 inches long, the upper sheathing the slender simple or forked stem. The few white flowers are in a lax spike. The curved perianth tube is ¼ inch long, and the segments are ½ inch long. Native to South Africa.

132681. HESPERANTHA BUHRII L. Bolus.

A hesperantha about 12 inches high, with several narrow leaves up to 8 inches long and a lax, flexuose spike of about 7 small rose flowers.

For previous introduction see 128423.

132682. IXIA sp. Iridaceae.

Introduced under the name "cochlearis," for which a place of publication has not been found.

132683. Melasphaerula graminea (Thunb.) Ker. Iridaceae.

A dainty bulbous plant with several linear leaves in a distichous basal rosette and a slender stem up to 2 feet high bearing a broad lax panicle of small yellowish-green flowers having purplish-black veins. Native to South Africa.

132684. ROMULEA AMOENA Schlechter. Iridaceae.

A crocuslike herb with cylindrical-filiform leaves and 1 or 2 bright rose-lilac flowers on a short scape. Allied to Romulea hirsuta from which it differs in its glabrous leaves and larger flowers. Native to South Africa.

132685. ROMULEA SABULOSA Schlechter.

A romulea with radical, filiform, terete, erect leaves and an erect or ascending scape up to 4 inches high with 1 or 2 campanulate rosy flowers. Native to South Africa.

132686. SYNNOTIA BICOLOR (Thunb.) Sweet. Iridaceae.

For previous introduction see 14988.

132687 to 132690. Tritonia spp. Iridaceae.

132687. TRITONIA DEUSTA (Soland.) Ker.

A tritonia with 4 to 10 large copper-colored flowers in a lax spike.

For previous introduction see 128435.

132688 and 132689. TRITONIA HYALINA (L.) Baker.

A tritonia with slender or branched stems about 1 foot high; flowers pale salmon, marked with white outside, in a raceme. Native to South Africa.

For previous introduction see 118820.

132688. Var. No. 2.

132689, Var. No. 3.

132690. TRITONIA LINEATA (Salisb.) Ker.

A tritonia with linear leaves up to 1 foot long in a basal rosette, a slender, simple or forked stem, the terminal spike lax, 4 to 6 inches long with white or pale-pink flowers. The perianth tube is broad, funnelform in the upper half, with the anthers protruding. Native to South Africa.

132691. Fragaria moschata Duchesne. Rosaceae. Strawberry.

From France. Plants purchased from Vilmorin-Andrieux & Co., Paris. Received April 24, 1939.

Marguerite Lebreton.

132692. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Australia. Seeds presented by Dr. H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received April 26, 1939.

Range de Marmande.

132693 to 132727.

From the Netherlands. Bulbs purchased from C. G. van Tubergen Ltd., Haarlem. Received April 25, 1939.

132693 to 132696. ALLIUM spp. Liliaceae.

132693. ALLIUM CYANEUM Regel.

A rather dwarf plant, less than 1 foot high, with small heads of pendulous pale-blue flowers. Native to northern China.

For previous introduction see 132066.

132694. ALLIUM MACRANTHUM Baker.

A handsome allium from the eastern Himalayas. The flat leaves are over 1 foot long, and the mauve-purple flowers are produced in clusters of 50 or more on scapes 2 feet high.

For previous introduction see 91275.

132695. ALLIUM NARCISSIFLORUM Vill. (A. pedemontanum Willd.).

An onion, native to Italy, about 9 inches high, with rose-colored flowers in nodding heads.

For previous introduction see 124941.

132696. ALLIUM TIBETICUM Rendle.

A dwarf allium with 2 to 3 narrow linear leaves and an umbel of deep-blue flowers. Allied to *Allium sikkimense*. Native to Tibet.

849283-50-4

132697 and 132698. LAPEYROUSIA CRUENTA (Lindl.) Benth. (Anomatheca cruenta Lindl.). Iridaceae.

A South African plant which somewhat resembles Freesia, but has no fragrance. It is 6 to 10 inches tall and blooms in the summer and fall. The thin linear leaves, usually 6, are 6 to 12 inches long, erect in a basal tuft, and the bright-carmine flowers with 3 darker spots at the base of the 3 smaller segments are 1 inch across.

For previous introduction see 45321.

132697. The type.

132698. Var. Alba.

132699. CYRTANTHUS MACOWANI Baker. Amaryllidaceae.

A South African species with 2 or 3 narrowly linear flaccid leaves 12 to 18 inches long and a stalk about the same height, bearing an umbel of 4 to 10 bright-red tubular flowers 1 to 2 inches long.

For previous introduction see 89643.

132700. CYRTANTHUS PARVIFLORUS Baker.

A cyrtanthus with several linear flaccid leaves about 1 foot long and a flower stem 6 to 12 inches high, bearing an umbel of 6 to 8 bright-red tubular flowers 1 inch or more long.

For previous introduction see 89646.

132701. HYMENOCALLIS LONGIPETALA (Lindl.) Macbr. (Elisena longipetala Lindl.). Amaryllidaceae.

A hymenocallis with about 6 linear leaves 2 to 3 feet long and an umbel of 5 to 10 flowers, white tinged with green. The perianth tube is short, broadly funnel-formed, the linear segments about 4 inches long and the deflexed funnel-shaped cup over 1 inch long. Native to Peru.

132702. Eurycles amboinensis (L.) Lindl. (E. sylvestris Salisb.). Amaryllidaceae.

An amaryllid with several petioled, cordate leaves up to 1 foot broad and a dense umbel of numerous large white flowers. Native to the Malay region.

132703. GLORIOSA VIRESCENS Lindl. Melanthiaceae.

Glorylily.

A vinelike perennial which supports itself by the tendril-bearing tips of the oblong-lanceolate leaves, 3 to 6 inches long. The yellow and red flowers, 3 inches across, borne in a lax terminal corymb, are reflexed and slightly undulate.

For previous introduction see 118420.

132704. Griffinia hyacinthina Ker. Amaryllidaceae.

An amaryllid with 4 or 5 thin, oblong leaves, appearing after the flowers, with blades 6 to 9 inches long and equally long, channeled petioles. The bright-lilac flowers with short tubes and limbs 2 inches long are in umbels of 8 to 10. Native to Brazil.

132705. Habranthus brachyandrus (Baker) Sealy. Amaryllidaceae.

A Paraguayan habranthus with 3 or 4 erect pale-green leaves and a peduncle about 1 foot long bearing a single flower; this has a large funnel-shaped perianth, purplish red with pale-pink tips.

For previous introduction see 110676.

132706. HABRANTHUS ROBUSTUS Herbert.

A tender bulbous plant, native to Argentina, 6 to 9 inches high with glaucous linear leaves which appear after the very large showy flowers. The latter are a delicate pink and about 2½ inches long.

For previous introduction see 80016.

132707. Haemanthus katherinae Baker.

Bloodlily.

An attractive plant, native to South Africa, with 3 to 6 oblong pointed leaves borne on a separate stem that appears with the flowers. The bright-red flowers are produced at the summit of the upright peduncle growing from the case of the leaf stem.

For previous introduction see 61248.

132708. HIPPEASTRUM RETICULATUM VAR. STRIATIFOLIUM (Herbert) Baker. Amaryllidaceae.

A variety with leaves broader than those of the type and with white keels. 132709. HIPPEASTRUM RUTILUM (Edwards) Herbert.

A hippeastrum with small bulbs, 2 to 3 inches in diameter, and bright-green leaves 1 foot long and over 1 inch wide; the glaucous scape, as long as the leaves, is somewhat compressed and bears 2 to 4 red flowers. Native to Brazil.

For previous introduction see 93160.

132710 to 132719. HYMENOCALLIS spp. Amaryllidaceae.

132710. Hymenocallis Littoralis Salisb.

Spiderlily.

132711. HYMENOCALLIS MACROSTEPHANA Baker.

A hymenocallis with 8 or 9 oblanceolate, loosely arcuate leaves 2 to 3 feet long appearing with the much shorter scape which bears an umbel of 6 to 10 fragrant, pure-white flowers. The perianth tube is 3 inches long, green in the lower part. The linear-rotate segments are more than 3 inches long, and the funnel-shaped crown is about 2 inches long and the same diameter as the irregularly toothed throat. Closely allied to Hymenocallis speciosa and possibly a hybrid of that species with H. calathina.

132712. Hymenocallis rotata (Ker) Herbert.

132713. HYMENOCALLIS SENEGAMBICA Kunth and Bouché.

A hymenocallis with sword-shaped, arcuate leaves about 2 feet long and an umbel of 6 to 8 white flowers. The perianth tube is slender, 5 to 6 inches long, the narrow linear segments are about 4 inches long, and the funnel-shaped cup is 1 inch long. An African plant, perhaps introduced from America.

132714. HYMENOCALLIS SPECIOSA (L. f.) Salisb.

A species with dark-green leathery, petiolate, oblanceolate leaves 1½ to 2 feet long and an umbel of 7 to 15 attractive, fragrant white flowers. The perianth tube is greenish, up to 3 inches long, and the segments are nearly as long. Native to the West Indies.

132715. HYMENOCALLIS CALATHINA (Ker) Nichols.

Lilybasket.

A species native to Peru and Bolivia, with 6 to 8 strap-shaped leaves less than 2 feet long and a 2-edged scape about 2 feet high, bearing a sessile umbel of 2 to 5 flowers. The perianth tube, 2 to 4 inches long, is green and enlarged above; the lanceolate segments, as long as the tube, are white, and the corollalike cup is green striped, with rounded fringed lobes.

For previous introduction see 127063.

132716 and 132717. HYMENOCALLIS.

A hybrid of *Hymenocallis calathina* and *H. longipetala*, with pure white flowers. Introduced under the name "festalis," for which a place of publication has not been found,

132716. Typical form.

132717. Triumph. A form with very large white flowers.

132718. Hymenocallis harrisiana Herbert.

A species, native to Mexico, with 3 to 6 narrowly obovate leaves 1 foot long, a slender glaucous scape shorter than the leaves, and a sessile umbel of 2 to 3 fragrant white flowers. The tube is 3 to 4 inches long, the linear segments are about 3 inches long, and the funnel-shaped cup is plicated and toothed.

For previous introduction see 93164.

132719. HYMENOCALLIS.

Var. Olympic.

132720. Pamianthe peruviana Stapf. Amaryllidaceae.

A Peruvian amaryllid with a stem up to  $2\frac{1}{2}$  feet high, a tuft of 5 to 7 long linear, bright-green leaves, and an umbel of 2 to 4 fragrant whitish flowers. The perianth is green in bud, later white or flushed with cream except for the green cylindric tube about 5 inches long. The outer segments are oblong, about 4 inches long, with a firm green mucro, and the equally long inner segments have a short white mucro. Allied to Pancratium and Hymenocallis.

132721. Sprekelia formosissima (L.) Herbert. Amaryllidaceae.

St. Jameslily.

A lily, native to Mexico, with 3 to 6 linear leaves 1 to 2 feet long and a reddish scape 1 foot high with 1 large gaping bright-crimson flower 3 to 4 inches across.

For previous introduction see 119242.

132722. CYPELLA PLUMBEA Lindl. Iridaceae.

A Brazilian cypella with lanceolate plicate basal leaves 1 to 2 feet long and a stout stem 2 to 4 feet high, bearing fugitive, dull-lilac flowers. The outer segments are broad, obovate, cuneate, 1½ to 2 inches long, and the inner with a small obovate blade and a long claw.

132723 to 132725. TIGRIDIA PAVONIA (L. f.) Ker. Iridaceae.

Common tigerflower.

132723. Var. Alba. A variety with white flowers.

132724. Var. Alba Immaculata. A spotless white variety, a sport of var. Alba. 132725. Var. Lutea Immaculata.

132726. TRICYRTIS MACROPODA Miquel. Melanthiaceae. Speckled toadlily.

A perennial herb 2 to 4 feet high, with oblong leaves and loose corymbs of light-purple flowers having minute dark-purple spots. It is native to China and Japan.

For previous introduction see 95679.

132727. Habranthus robustus (Herbert) Baker. Amaryllidaceae.

For previous introduction and description see 132706.

132728 and 132729. Lupinus albus L. Fabaceae. White lupine.

From Germany. Seeds presented by the Institut für Planzenbau u. Pflanzenzüchtung, Landsberg. Received April 12, 1939.

132728. Free from the bitter principle.

132729. Var. Beuscher, a bitter type.

132730 to 132737. Persea americana Mill. Lauraceae. Avocado.

From California. Plants obtained from the Subtropical Fruit Research Station, Indio. Received April 26, 1939.

Originally collected in Mexico by A. D. Shamel in the fall of 1936.

132730. La Blanc. From the La Blanc garden, Atlixco, Puebla.

132731. No. 4. From the garden of Señora Carmen Camarillo Valazquez, Atlixco, Puebla.

132732. No. 6. From the garden of Señorita Josefine Carrera, Las Camelias gardens, Atlixco, Puebla.

132733. No. 7. From the garden of Señor Marcial Rodriguez, Mexatango, Puebla.

132734. Redo No. 1. From the seedling avocado planting on the Eldorado, Sinaloa, Mexico, on the plantation of Don Diego Redo.

132735. Redo No. 2. From the same planting as the preceding [P. I. 132734].

132736. No. 8 San Pedro. From the garden of the hydroelectric plant on the San Baltazar River, San Pedro, Puebla.

132737. Tepic. From the planting along the municipal canal, Tepic, Nayarit.

### 132738 to 132757.

From Germany. Plants purchased from Franz Bobeth, Meissen-Dobritz, Saxony. Received April 26, 1939.

132738 to 132750. Amygdalus persica L. Amygdalaceae.

Peach.

132738, Anneliese Stoll.

132745. Musser.

132739. Erica Rudolph.

132746. Oberpräsident von Schorlemer.

132740. Frau Marie Rudolph.

132747. Präsident Griepenkerl.

132741. Girard I.

132748. Sämling von Wassenberg.

132742. G. X.

132749. Steinmüllers Blutpfirsich.

132743. Lückenbüsser I.

132750. Uruguay.

132744, Lückenbüsser II.

Amygdalaceae. 132751 and 132752. Amygdalus persica var. Nectarina Ait. Nectarine.

132751, Carolina,

132752. Rote Nectarine.

132753 to 132756. CYDONIA Spp. Malaceae. Quince.

132753. Badener.

132755. Konstantinopler.

132756. Persische Zuckerquitte. 132754. Fabre. 132757. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Königin von Württemberg.

# 132758 to 132766.

From Germany. Plants purchased from Rehfelder Baumschulen, Wilhelm Witt. Torgau (Elbe). Received April 26, 1939.

132758 to 132761. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

132758, Adersleber Kalvill.

132760. Harberts Reinnette.

132759. Halberstädter Jungfernapfel.

132761. Landsberger Reinnette. Sour cherry.

132762. PRUNUS CERASUS L. Amygdalaceae. Schattenmorelle.

132763 and 132764. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

132763. Braunauer.

132764. Maibigarreau.

132765 and 132766. PYRUS COMMUNIS L. Malaceae.

Common pear.

132765. Alexandre Lucas.

132766. Le Lectier.

# 132767 to 132772.

From England. Plants purchased from William Barron & Son, Ltd., Elvaston Nurseries, Borrowash. Received April 27, 1939.

132767. CEANOTHUS. Rhamnaceae.

Var. Spectabilis Roseus.

132768. Deutzia. Hydrangeaceae.

Var. Mirabilis.

132769 to 132772. PHILADELPHUS spp. Hydrangeaceae.

132769 and 132770. PHILADELPHUS.

132769. Var. Bicolore.

132770. Var. Burfordiensis.

132771. PHILADELPHUS SCHRENKII Rupr.

Schrenk mockorange.

132772. PHILADELPHUS.

Var. Yokohama.

### 132773 and 132774.

From England. Plants purchased from John Scott & Co., Merriott, Somerset. Received April 28, 1939.

132773. CEANOTHUS. Rhamnaceae.

Var. Delight. An evergreen hybrid with racemes of very deep-blue flowers. 132774. Philadelphus. Hydrangeaceae.

Var. Burkwoodii. A variety with large fragrant white flowers with a lilac blotch at the base.

132775. Prunus armeniaca L. Amygdalaceae.

From Argentina. Seeds presented by G. H. Hodges through Swift & Co., La Plata, Buenos Aires. Received April 25, 1939.

Wild apricots, introduced as stock for commercial varieties of peaches.

# 132776 and 132777. Impatients roylei Walp. Impatientaceae.

Snapweed.

From Germany. Seeds purchased from Ernst Benary, Erfurt. Received April 21, 1939.

An erect annual 4 or 5 feet high, with ovate to ovate-lanceolate leaves and dark-purple, short-spurred flowers on long stalks. Native to the temperate slopes of the western Himalayas from Nepal to Marri, India, between 6,000 and 8,000 feet altitude.

For previous introduction see 127781.

132776. Var. Rosa Falter.

132777. The type.

# 132778 to 132782. AVENA SATIVA L. Poaceae.

Oats.

From the Union of South Africa. Seeds presented by the Stellenbosch-Elsenburg College of Agriculture, Stellenbosch. Received April 24, 1939.

132778. Algerian.

132781. Langgewens.

132779. Boer.

132782. Winter Dun.

132780, Jengensklip.

# 132783 to 132785. Prunus spp. Amygdalaceae.

From the Union of Socialist Soviet Republics. Scions presented by S. N. Sundenko, Institute of Plant Industry, Leningrad. Received May 1, 1939.

132783. PRUNUS Sp.

Ideal cherry.

132784. Prunus sp.

Liubka cherry.

132785. PRUNUS Sp.

Skorospelka Krassnaia plum.

# 132786 and 132787. PHILADELPHUS. Hydrangeaceae.

From Canada. Plants presented by F. L. Skinner, Manitoba Hardy Plant Industry, Dropmore, Manitoba, at the request of Prof. J. S. Shoemaker, University of Alberta, Edmonton, Alberta. Received May 2, 1939.

132786. Var. Patricia.

132787. Var. Mr. Thompson.

# 132788. Philadelphus. Hydrangeaceae.

From Canada. Plants presented by W. R. Leslie, Superintendent, Experimental Station, Morden, Manitoba. Received May 2, 1939.

Var. Thelma.

Received as Philadelphus macrophylla var. Thelma.

132789. Sporobolus rigens (Trin.) E. Desv. Poaceae.

From Argentina. Seeds collected by T. H. Goodspeed, Director, University of California Botanical Garden, Second Expedition to the Andes. Received April 21, 1939.

A perennial grass with stiff, upright, leathery leaves and large whitish panicles. Native to Chile.

For previous introduction see 62069.

132790 to 132794. Stizolobium spp. Fabaceae. Velvetbean.

From Mauritius. Seeds presented by G. E. Bodkin, Director of Agriculture, Reduit. Received April 24, 1939.

132790. STIZOLOBIUM ATERRIMUM Piper and Tracy.

A locally grown variety.

132791 to 132794. STIZOLOBIUM spp.

Received under the name "chlorospermum," for which a place of publication has not been found.

Locally grown varieties.

132791. STIZOLOBIUM sp.

132793. STIZOLOBIUM Sp.

**132792.** Stizolobium sp. 132794. Stizolobium sp.

132795 and 132796.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered May 3, 1939.

Originally presented by L. W. Bryan, Hilo, Hawaii.

132795. Acacia koa A. Gray. Mimosaceae.

Koa.

C-27066. A large spreading tree up to 60 feet high, native to the Hawaiian Islands. The coriaceous falcate phyllodes are 5 to 7 inches long, and the small white flowers are in globular heads gathered into axillary racemes. The wood, which is called Hawaiian mahogany, is excellent for veneers, and the bark is used for tanning.

For previous introduction see 86693.

132796. Sophora Chrysophylia (Salisb.) Seem. Fabaceae.

C. 27065. An attractive native Hawaiian tree up to 30 feet high, with pinnate leaves composed of 13 to 21 obovate-oblong obtuse leaflets ½ to 1 inch long, tawny or grayish-pubescent beneath, less so above, and pale-yellow flowers about 1 inch long followed by 4-winged pods 4 to 6 inches long.

132797. Eucalyptus Rubida Deane and Maiden. Myrtaceae.

From Australia. Seeds purchased from Percy Murphy, "Grandview," Woy Woy, New South Wales. Received April 24, 1939.

A tree with smooth white bark showing plum-colored patches, thick, dull-green, narrowly lanceolate leaves, and small flowers in clusters of 3 or 4, followed by top-shaped fruits ¼ inch in diameter.

For previous introduction see 90705.

# 132798 to 132813.

From Hawaii. Seeds presented by Robert A. Lyman, at the request of J. C. Ripperton, agronomist, University of Hawaii, Honolulu. Received April 18, 1939.

132798. Desmanthus virgatus (L.) Willd. Mimosaceae.

For previous introduction see 110188.

132799. Desmodium intortum (Mill.) Urb. Fabaceae.

132800. HETEROPOGON CONTORTUS (L.) Beauv. Poaceae.

An excellent forage grass which is perennial and produces seed readily. It is the dominant grass of the Ati Plains, Kenya Colony, Africa.

For previous introduction see 51226.

132801. Indigofera endecaphylla Jacq. Fabaceae.

Indigo.

An annual or biennial prostrate legume 2 to 3 feet long, with 7 to 9 oblong leaflets and dense racemes of violet-purple flowers. It is used as a cover crop. Native to tropical Africa.

For previous introduction see 77296.

132802. INDIGOFERA HIRSUTA L.

Indigo.

An annual 3 feet high with crimson flowers. Used as a cover crop. For previous introduction see 107803.

132803. ISCHAEMUM LAXUM R. Br. Poaceae.

Grage

A perennial grass, native to tropical Asia and Australia.

132804. LEUCAENA GLAUCA (L.) Benth. Mimosaceae.

For previous introduction see 110884.

132805. LOTUS CORNICULATUS L. Fabaceae.

Birdsfoot trefoil.

A low-growing legume with yellow flowers.

For previous introduction see 111582.

132806. Melinis minutiflora Beauv. Poaceae.

Molasses grass.

For previous introduction see 118389.

132807. MICROLAENA STIPOIDES (Labill.) R. Br. Poaceae. Meadow ricegrass.

A slender perennial grass, plentiful in lowland districts in Australia and New Zealand, chiefly near the sea. It is a valuable lawn and pasture grass.

For previous introduction see 49019.

Grass.

132808 to 132810. Pennisetum spp. Poaceae.

132808. Pennisetum complanatum (Nees) Hemsl.

A grass native to Guatemala, with slender wiry stems up to 6 feet high, narrow succulent leaves, and a foxtail seed head 5 to 6 inches long. It grows well on dry land, but is much more succulent during the wet season.

For previous introduction see 49763.

132809. PENNISETUM PURPUREUM Schumach.

Napier grass.

A grass native to Northern Rhodesia where it grows on river banks in alluvial soil.

For previous introduction see 89626.

132810. Pennisetum setosum (Swartz) L. Rich.

A grass cultivated for forage.

For previous introduction see 117956.

132811. Stylosanthes guianensis (Aubl.) Swartz. Fabaceae.

A branching herbaceous perennial about 3 feet high, with rusty hirsute stems, trifoliolate leaves of lanceolate, sharp-pointed leaflets, and globose heads of small fragrant yellow flowers, subtended by leafy bracts. It is native to Guiana and Brazil where it is grown as forage.

For previous introduction see 89214.

132812. STYLOSANTHES MUCRONATA Willd.

A much-branched undershrub 1 to 2 feet high, native to southeastern Asia and tropical Africa, with rigidly coriaceous trifoliolate leaves. Of value as a forage crop.

For previous introduction see 103836.

132813. TRICHOLAENA REPENS (Willd.) Hitchc. Poaceae.

An annual or short-lived perennial grass with slender stems, often decumbent at the base, about 3 feet high. Native to South Africa.

For previous introduction see 129590.

# 132814 to 132820. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by J. B. Griffing, Escola Superior de Agricultura, Viçosa, Minas Geraes. Received May 4, 1939.

132814. Y 28-2-9.

132818. Y 528-6.

132815. Y 28-3-3.

132819. Gr 200-11.

132816. Y 278-1.

132820. Gr 200-12.

132817, Y 278-21,

132821 to 132825. ACTINIDIA spp. Dilleniaceae.

Plants growing at the United States Plant Introduction Garden, Glenn Dale, Md. Numbered May 4, 1939.

132821 to 132824. ACTINIDIA ARGUTA (Sieb. and Zucc.) Miquel. Bower actinidia.

132821 and 132822. Received October 3, 1922, from Henry Hicks, Westbury, Long Island, N. Y.

132821. No. 1.

132822. No. 2.

132823 and 132824. Received September 26, 1923, from A. R. Shattuck, Lenox, Mass.

132823. Received as *Actinidia quinata*, for which a place of publication has not been found.

132824. [No data.]

132825. ACTINIDIA Sp.

B. 31974.

132826. Philadelphus lewish Pursh. Hydrangeaceae.

Lewis mockorange.

From Canada. Plants presented by Prof. J. N. Shoemaker, University of Alberta, Edmonton, Alberta. Received May 5, 1939.

Var. Waterton.

# 132827 to 132839.

From Poland. Plants purchased from Zakład Pomologiczny, A. Girdwoynia, w. Ołtarzewie, Warszawa. Received May 5, 1939.

132827 to 132830. Malus sylvestris Mill. Malaceae.

Apple.

132827. Ananas Berzenicki. 132828. Malinowa Oberlandska.

132829. Piekne Ottarzewa. 132830. Reneta Woskowa.

132831 to 132838. Prunus spp. Amygdalaceae.

131831 to 132835. PRUNUS AVIUM L.

Sweet cherry.

132831. Chrzgetha Kozerska.

132832. Czarna Najlepsza.

132833. Kanarkowa.

132834. Miódowka.

132835. Wolska Wczesna.

132836. PRUNUS CERASUS L.

Sour cherry.

Ksigzeca.

132837. PRUNUS ARMENIACA L.

Apricot.

Damazon.

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132838. PRUNUS AVIUM L.

Wegierka.

132839. PYRUS sp. Malaceae.

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Pear.

Salisbury.

132840. Prunus armeniaca L. Amygdalaceae.

Apricot.

Sweet cherry.

From Canada. Plants presented by W. R. Leslie, Superintendent, Dominion Experimental Station, Morden, Manitoba. Received May 6, 1939.

Scout.

# 132841 to 132870.

From Italy. Seeds presented by the Societa Bolognese "Produttori Sementi," Bologna. Received May 8, 1939.

132841 to 132850. Oryza sativa L. Poaceae.

Rice.

 132841. Agostano.
 132846. Originario.

 132842. Americano 1600.
 132847. P. 6.

 132843. Balilla.
 132848. Vialone.

 132844. Bentivoglio.
 132849. No. 82.

 132845. Novelli Cigante.
 132850. No. 317.

132851 to 132865. Triticum Aestivum L. Poaceae.

Common wheat.

 132851. Damiano Chiesa.
 132859. Reno.

 132852. Frassineto 405.
 132860. Rieti 11.

 132853. Inallettabile Fam. 96.
 132861. Riale.

 132854. Inallettabile Fam. 210.
 132862. Roma.

 132855. Littorio.
 132863. San Giorgio.

 132856. Mentana.
 132864. Villa Glori.

 132857. Pieve.
 132865. Virgilio.

132858. Quaderna.

132866 to 132870. ZEA MAYS L. Poaceae.

Corn.

 132866. Mais Ibrido 37.
 132869. Mais Nano 16.

 132867. Marano.
 132870. Mais Pela's 9.

132868. Mais Mano 2.

132871. Bambusa ventricosa McClure. Poaceae.

Bamboo

From Florida. Plants growing at the United States Plant Introduction Garden. Coconut Grove. Numbered May 8, 1939.

132872. FLINDERSIA OXLEYANA F. Muell. Rutaceae.

From Australia. Seeds presented by the Government Botanist, Botanic Museum and Herbarium, Botanic Gardens, Brisbane. Received May 25, 1939.

A tall, much-branched tree, often becoming 100 feet in height with opposite compound leaves which are crowded under the loose, many-flowered panicles. The bright-yellow, strong and fibrous wood is used in cabinet work; it is not readily attacked by termites.

For previous introduction see 56191.

132873. Omanthe costaricana (Oerst.) O. F. Cook. Phoenicaceae.

From Costa Rica. Seeds presented by the Goodyear Rubber Co., San José. Received May 8, 1939.

An attractive small tufted palm, sometimes 8 to 10 feet high, with striking clusters of bright-green leaves. The pinnae, 17 to 20 on a side, are similar to those of *Neanthe bella*. Native to Costa Rica.

# 132874 to 132883.

From India. Plants collected at Saharanpur by Walter Koelz, Bureau of Plant Industry. Received May 14, 1937. Numbered in May 1939.

132874. Barringtonia acutangula (L.) Gaertn. Lecythidaceae.

A medium-sized evergreen tree with obovate leaves about 5 inches long and pendulous racemes of small pink flowers. The wood is soft and white with a pretty silver grain and is used for furniture. Native to India.

For previous introduction see 116718.

132875. ERYTHRINA Sp. Fabaceae.

Received under the name "blackii," for which a place of publication has not been found.

132876. IXORA UNDULATA ROXD. Rubiaceae.

A large evergreen shrub or small tree with thin, undulate lanceolate leaves 5 to 9 inches long and spreading, pyramidal or rounded corymbs of small greenish-white flowers. Native to India.

132877. IXORA SD.

132878. Jasminum pubescens (Retz.) Willd. Oleaceae. Slender jasmine.

A climbing or scrambling hairy shrub from Borneo. The opposite, narrowovate leaves are bright green above and pubescent beneath, and the fragrant white flowers, 1 inch across, are in large dense hanging heads.

132879. Jasminum sambac (L.) Ait.

Arabian jasmine.

Arabian jasmine is cultivated in India for the sake of the oil obtained from the fragrant flowers; it is used in perfumery.

For previous introduction see 61230.

132880. Caesalpinia pulcherrima (L.) Swartz. Caesalpiniaceae.

Flowerfence.

For previous introduction see 114869.

132881. Shorea robusta Gaertn. f. Dipterocarpaceae.

Salt-tree.

A large, resinous, gregarious forest tree up to 100 feet high or sometimes stunted, with large, oblong-ovate leaves and pale-yellow flowers ½ inch long in lax terminal panicles. It is valued for its teaklike wood. Native to India.

132882. FIRMIANA COLORATA (ROXb.) R. Br. (Sterculia colorata Roxb.). Sterculiaceae.

A small deciduous tree, native to tropical Asia, with large roundish 3-lobed leaves and small, very numerous, vivid orange-scarlet flowers which appear in dense terminal panicles before the leaves. The tree is quick growing and probably flowers very young.

For previous introduction see 124731.

132883. Sterculia sp. Sterculiaceae.

132884. Anthurium dominicense Schott. Araceae.

From Puerto Rico. Plants collected in the Marine Insular Forest, near the Mayaguez Experiment Station, by H. P. Traub, Bureau of Plant Industry. Received August 1, 1935. Numbered in May 1939.

A terrestrial or epiphytic anthurium with a short stem, rosulate leaves, the oblong-lanceolate to oblong-ovate blades 8 to 16 inches long, and a spadix of globular, reddish berries. Native to the West Indies.

132885. Chamaedorea sp. Phoenicaceae.

Palm.

From Mexico. Plants presented by W. E. Sexton, Vero Beach, Fla., through the Bureau of Entomology and Plant Quarantine. Received July 18, 1935. Numbered in May 1939.

132886 to 132889. Chamaedorea spp. Phoenicaceae.

From Mexico. Plants presented by F. MacDougall. Received February 23, 1938. Numbered in May 1939.

132886. From hills just north of Tonala, Chiapas.

132887 to 132889. From San Miguel, Chimalapa, Oaxaca.

132890. Coccothrinax crinita Becc. Phoenicaceae.

Palm.

From California. Plants presented by David Barry, Los Angeles. Received October 10, 1936. Numbered in May 1939.

Plants propagated from seeds obtained from Cuba.

A fan-leaved palm, native to Cuba, with a slender spineless trunk crowned by a large cluster of roundish leaves, divided into narrow acute obliquely folded leaves. The juicy berrylike fruits are purplish black.

For previous introduction see 106654.

132891. Coffea excelsa Cheval. Rubiaceae.

Coffee.

From the Canal Zone. Seeds presented by J. E. Higgins, Director, Canal Zone Experiment Gardens, Summit. Received April 13, 1935. Numbered in May 1939.

A coffee which thrives from sea level to 700 m. altitude, succeeds well on rather stiff clayey soils, and is quite drought resistant. It may be grown with an annual rainfall of 48 inches. It is the most resistant to blight and drought of any of the coffees. The plants begin to fruit between 4 and 5 years, but the first full crop is borne between 7 and 8 years. Native to tropical Africa.

For previous introduction see 63751.

132892. Cymbopogon nardus (L.) Rendle. Poaceae.

Citronella grass.

From California. Plants presented by Mrs. P. H. Ducker, La Canada. Received October 17, 1938. Numbered in May 1939.

For previous introduction see 34729.

132893. Dracontium costaricense Eugl. Araceae.

From Panama. Corn presented by Francis Iglseder, Penonome. Received August 19, 1933. Numbered in May 1939.

A tropical brown-spotted aroid with a long-stemmed, deeply 3-parted leaf 3 feet across, a slender peduncle 3 feet high, with a lanceolate spathe 1 foot long and a spadix almost as long. Native to Costa Rica.

132894 and 132895. Guadua spp. Poaceae.

Bamboo.

From the Canal Zone. Plants presented by W. R. Lindsey, Canal Zone Experiment Gardens, Summit. Received September 15, 1938. Numbered in May 1939

132894. GUADUA AMPLEXIFOLIA Presl.

Native to Panama.

132895. GUADUA ANGUSTIFOLIA Kunth.

Originally from Ecuador.

132896. Inodes texana O. F. Cook. Phoenicaceae. Texas palmetto.

From Mexico. Plants presented by Prof. H. H. Bartlett, University of Michigan, East Lansing. Received September 12, 1930. Numbered in May 1939.

A tall erect handsome fan-leaved palm, sometimes up to 50 feet high, native to the banks of the lower Rio Grande below Brownsville, Tex., and Matamoros, Mexico. The trunks of the older trees are smooth, while the persistent leaf-stalks form a network on the trunks of the younger trees. The leaves are light green, about 5 feet wide, and are borne in a large terminal cluster. The edible fruits are round, fleshy, black, and about  $\frac{5}{2}$  inch in diameter. They are sold in the Matamoros market under the name *micharo*.

For previous introduction see 75258.

132897. IPOMOEA ALBIVENIA (Lindl.) Sweet. Convolvulaceae.

Morning-glory.

From Africa. Seeds collected by Dr. Thomas Barbour, Harvard University. Received September 24, 1934. Numbered in May 1939.

Collected on the beach north of Lourenço Marques, Mozambique. A perennial shrubby climber with large white flowers.

For previous introduction see 34168.

132898. Iris sp. Iridaceae.

From Turkey. Roots presented by Dr. B. V. D. Post, of Roberts College, Istanbul, through H. L. Westover and F. L. Wellman, Bureau of Plant Industry, United States Department of Agriculture. Received May 19, 1936. Numbered in May 1939.

132899. Joannesia Princeps Vell. Euphorbiaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received September 17, 1935. Numbered in May 1939.

A large tropical tree with handsome evergreen 3- to 7-foliolate leaves about 4 inches long and coconutlike fruits about 5 inches in diameter with 4 large oily seeds. It is related to the tung-oil tree (*Aleurites fordii*). The oil belongs to the semi-drying class and has a laxative effect four times as great as that of castor oil, but has an agreeable odor and flavor.

For previous introduction see 123220.

132900. Lonchocarpus sp. Fabaceae.

From Ecuador. Cuttings collected by Mrs. Ynes Mexia. Received May 23, 1935. Numbered in May 1939.

132901. NEOMARICA GRACILIS (Herb.) Sprague. Iridaceae.

From Madagascar. Plants presented by Bargyla Rateaver, Fort Dauphin. Received September 18, 1935. Numbered in May 1939.

A tropical irislike Brazilian plant with 6 to 8 sword-shaped leaves over 1 foot long and several fugitive flowers about 2 inches across. The outer flower segments are obovate, white, with basal cross marks of yellow and brown, and the inner segments are small, reflexed, and blue.

132902. Litchi chinensis Sonner. Sapindaceae. Litchi.

From Florida. Seeds presented by P. W. Campbell, Estero, Lee County. Received June 30, 1933. Numbered in May 1939.

132903. LOPHOPHORA WILLIAMSII (Lem.) Coult. Cactaceae. Peyote.

From Texas. Presented by the Hyde Park Floral Co., Austin. Received June 21, 1939.

A small simple or proliferous, spineless, dull bluish-green cactus, globular or somewhat flattened on top, 2 to 3 inches across, with 7 to 13 broad, roundish ribs bearing few low tubercles and small pale-pink to white central flowers. Distributed from central Mexico to southern Texas. The dried tops of this cactus, known as "mescal buttons," are eaten by the Indians in the Southwest during religious rites and are highly narcotic.

132904. Mangifera indica L. Anacardiaceae.

Mango.

From Jamaica, British West Indies. Seeds presented by the Director of Agriculture, Hope Gardens, Kingston. Received July 31, 1934. Numbered in June 1939.

132905. ZAMIA PUMILA L. Cycadaceae.

From Florida. Plant collected by Prof. R. N. Lobdell, Everglades Experiment. Station, Belle Glade. Received September 23, 1934. Numbered in May 1939.

Collected west of Port Orange, Fla. A tropical American palmlike cycad with the trunk mostly underground. The compound leaves, 2 to 4 feet long, are made up of 20 to 50 coriaceous shining leaflets with entire margins except for a few teeth at the tip. The conclike fruits, 2 to 5 inches long, are covered with tomentose hexagonal scales and the angled red seeds are 1 inch long.

For previous introduction see 90941.

132906. Quercus glauca Thunb. Fagaceae. Blue Japanese oak.

Plants growing at the United States Plant Introduction Garden, Savannah, Ga. Numbered May 9, 1939.

132907 to 132911. Hedera spp. Araliaceae.

Ivy.

From England. Plants purchased from L. R. Russell Ltd., Richmond Nurseries, Windlesham, Surrey. Received May 9, 1939.

132907. Hedera colchica var. dentata Hibb.

Var. Variegata. A variety with leaves of thinner texture than those of the type and with small remote teeth.

132908 and 132909. HEDERA HELIX L.

English ivy.

132908. The type.

132909. Var. Digitata. A form in which the leaves have unusually long slender lobes.

132910 and 132911. HEDERA.

132910. Var. Jubilee.

132911. Var. Sheen Silver.

# 132912 and 132913. Philadelphus. Hydrangeaceae.

From England. Plants purchased from Pennell & Sons, Lincoln. Received May 9, 1939.

132912, Var. Monster.

132913. Var. Perle Blanche.

### 132914 to 132920. Oryza sativa L. Poaceae.

Rice.

From Indochina. Seeds presented by the Director of the Indochina Office of Rice Government General of Indochina, Saigon. Received May 9, 1939.

132914. Puang-Ngeon.

132918. Sai-Bui Bao 3.

132915. Puang-Ngeon 3.

132919, Sarm Deun.

132916. Puang-Ngeon 4.

132920. Tun-Sart.

132917. Sai-Bui-Bao.

### 132921 and 132922.

From China. Scions and seeds presented by Peter P. Mirksch, Tientsin. Received May 10, 1939.

132921. ACTINIDIA ARGUTA (Sieb. and Zucc.) Miquel. Dilleniaceae.

Bower actinidia.

From the Handao-Hetze station, Manchurian Railway, east of Harbin. A hardy plant, almost frostproof, with large greenish berries of winelike flavor.

132922. VITIS AMURENSIS X LABRUSCA. Vitaceae.

Grape.

A hardy Russian grape.

# 132923 to 132996. Haworthia spp. Liliaceae.

From South-West Africa. Plants purchased from Wilhelm Triebner, S. W. A. Succulents Nurseries, Windhoek. Received May 10, 1939.

132923. Haworthia Affinis Baker.

132924. HAWORTHIA ALTILINEA VAR. LIMPIDA (Haw.) v. Poelln.

The leaves of this variety have smooth keels and margins rarely furnished with minute teeth.

### 132925. HAWORTHIA ANGUSTIFOLIA Haw.

Received under the varietal name "subfalcata," for which a place of publication has not been found.

### 132926. HAWORTHIA ARISTATA Haw.

A haworthia with a dense rosette of numerous ovate-lanceolate leaves up to  $2\frac{1}{2}$  inches long, dark green to bright green, often becoming reddish in sunny situations.

For previous introduction see 133443.

### 132927. HAWORTHIA BILINEATA Baker.

A stemless haworthia with a rosette 3 inches across of about 15 oblong-lance-olate leaves  $1 \times$  to 2 inches long without terminal bristles. The transparent tip has 1 to 3 dark lines on the upper surface. Allied to  $Haworthia\ cuspidata$ .

### 132928. HAWORTHIA PILIFERA Var. COLUMNARIS (Baker) v. Poelln.

A haworthia with a rosette of numerous obovate, cuneate, ascending dullgreen leaves, transparent at the tips, the margins with minute teeth. Received as *Haworthia columnaris* Baker.

### 132929. HAWORTHIA CORDIFOLIA Haw.

A haworthia with a leafy stem 6 to 8 inches high and trifarious, ovate-deltoid leaves about 1½ inches long. Allied to *Haworthia asperiuscula*. Native to South Africa.

### 132930. HAWORTHIA CYMBIFORMIS Haw.

A succulent, native to South Africa, with rosettes 2 to 4 inches broad of 20 to 25 obovate leaves 2 inches long, pale green marked on the upper half with vertical lines of darker green.

For previous introduction see 78211.

### 132931. HAWORTHIA DECIPIENS V. Poelln.

A stemless haworthia with a rosette about 3 inches across of many oblong-lanceolate leaves toothed at the tips. Allied to *Haworthia arachnoidea*. Native to South Africa.

#### 132932. HAWORTHIA PILIFERA VAI. DIELSIANA V. Poelln.

A fast-growing haworthia with a rosette about 6 inches across of numerous oblong-acuminate leaves marked with many longitudinal darker green lines on both surfaces. The leaf margins are smooth or sometimes covered with minute white teeth. The leaf tip is transparent. Received as *Haworthia dielsiana* v. Poelln.

### 132933. HAWORTHIA GORDONIANA V. Poelln.

A stemless haworthia with somewhat proliferous rosettes, 1 to  $1\frac{1}{2}$  inches across, of many gray-green, lanceolate or oblanceolate leaves about 1 inch long. Allied to  $Haworthia\ cooperi$ . Native to South Africa.

### 132934. HAWORTHIA GREENII Baker.

A haworthia with a stem about 7 inches high and lanceolate deltoid leaves over 1 inch long, having small light flecks or dots (not tubercles.) Allied to *Haworthia coarctata*. Native to South Africa.

### 132935. HAWORTHIA UMBRATICOLA VAR. HILLIANA V. Poelln.

A variety with fewer, smaller leaves, curved inward, and several dark lines on the upper leaf surface; may not be distinct from H. incurvula. Received as  $Haworthia\ hilliana\ v.$  Poelln.

### 132936. HAWORTHIA HURLINGII V. Poelln.

A stemless haworthia, proliferous from the base, forming clumps about 1½ inches across of pale-green, sometimes reddish, oblong to deltoid leaves less than 1 inch long, with 5 to 9 darker netted lines. Allied to *Haworthia reticulata*. Native to South Africa.

### 132937. HAWORTHIA HURLINGII Var. AMBIGUA Triebn. and v. Poelln.

A variety with leaves more spreading and often broader than the type.

### 132938. HAWORTHIA INTEGRA V. Poelln.

A stemless haworthia with a dense rosette of many small leaves. Allied to *Haworthia reticulata*. Native to South Africa.

### 132939. HAWORTHIA MARGARITIFERA VAR. ERECTA (Haw.) Baker.

A variety with the leaves smaller and the tubercles smaller and more crowded than in the type.

### 132940. HAWORTHIA MINIMA Baker.

A stemless haworthia with a small dense rosette of self-colored lanceolate leaves about ½ inch long with bristles at margins and ends. Native to South Africa.

### 132941. HAWORTHIA NOTABILIS V. Poelln.

A haworthia with a rosette of numerous, erect, dark-green lanceolate leaves  $1\frac{1}{2}$  to 2 inches long.

# 132942. HAWORTHIA PALLIDA Haw.

A haworthia with a dense rosette, 2 to 3 inches across, of ascending, lanceolate, pale-green leaves, the upper third of leaf with vertical lines of darker green, the tip with a pellucid awn, and margin with ciliate teeth.

### 132943. HAWORTHIA PAYNEII v. Poelln.

A stemless haworthia with a rosette about 2 inches across of many gray-green, lanceolate leaves, toothed on the upper half. The scape bears about 12 white flowers. Native to South Africa.

### 132944. HAWORTHIA PEARSONI C. H. Wright.

A stemless haworthia with a dense rosette of about 80 oblanceolate oblong, translucent leaves 1 inch long, the margins with flattened deltoid teeth. The pale flesh-colored flowers are in a lax raceme. Allied to *Haworthia translucens*.

### 132945. HAWORTHIA TRANSLUCENS Haw.

A succulent with a rosette of lanceolate, ascending, pale-green leaves, 2 inches long, having a long transparent awn at the tip and margined with deltoid, transparent teeth. Native to South Africa. Received as *Haworthin pelluscens* Haw.

#### 132946. HAWORTHIA PICTA V. Poelln.

A stemless haworthia with few leaves (many in cultivation) in a dense rosette about 3 inches across. The ovate-oblong, green leaves are over 1 inch long, the upper part rectangularly recurved, the triangular face almost flat, pellucid, with numerous shiny tubercules and minute whitish flecks. A remarkable member of the Retusae group.

### 132947. HAWORTHIA PILIFERA Baker.

A haworthia with a rosette 2 inches in diameter of 20 to 30 fleshy oblong leaves, the tips transparent and bristle-toothed at margins, and a racemal foot high of greenish-white flowers. Native to South Africa.

#### 132948. HAWORTHIA PLANIFOLIA Haw.

A haworthia with a rosette 2 to 4 inches across, ovate or oblanceolate, obtuse leaves  $1\frac{1}{2}$  to 2 inches long, almost entire or with few bristles. Closelv related to  $Haworthia\ cymbiformis$ .

### 132949. HAWORTHIA PLANIFOLIA VAR. SETULIFERA V. Poelln.

A variety with straight or somewhat curved terminal bristles ½ inch long. The oblong-obovate leaves are about 2 inches long and smooth on the edges and keel.

### 132950. HAWORTHIA PLANIFOLIA VAR. SUBLAEVIS V. Poelln.

A variety with oblong-lanceolate or ovate-lanceolate leaves  $1\frac{1}{2}$  inches long with terminal bristles  $\frac{1}{10}$  to  $\frac{1}{5}$  inch long.

132951. HAWORTHIA PYGMAEA V. Poelln.

A haworthia with a rosette up to 2 inches across of 7 to 12 thick, subcordate-triangular, rigid leaves about 1 inch long. The leaves are blunt, without bristles. Resembles *Haworthia asperula*.

132952. HAWORTHIA RECURVA Haw.

A haworthia with a rosette, 2 to 3 inches across, of 12 to 15 deltoid, much recurved, rigid leaves up to 1½ inches long; nearly flat on the face, pale green with vertical lines of darker green, rounded on the back, keeled upwards, dark green and scabrous with small crowded tubercles.

132953. HAWORTHIA RETICULATA Haw.

A cespitose haworthia with smooth, light-green leaves, finely denticulate, % to 1 inch long, acute with about 10 connected nerves. The inflorescence is 1 foot high and the flowers are rosy lined.

132954. HAWORTHIA RETICULATA VAR. ACUMINATA V. Poelln.

A variety varying from the type in its long acuminate leaves.

132955. HAWORTHIA RETICULATA Haw.

Received under the varietal name "commaeta," for which a place of publication has not been found.

132956. HAWORTHIA RETUSA (L.) Haw.

A haworthia with a rosette 2 to 3 inches across of 10 to 15 deltoid, recurved, smooth, pale-green leaves, 1 to  $1\frac{1}{2}$  inches long and marked on the upper half of the face with pale vertical lines.

132957. HAWORTHIA RETUSA VAR. MUTICA (Haw.) Baker.

A variety with leaves not cuspidate at the tip.

132958. HAWORTHIA RUGOSA (Salm-Dyck) Baker.

A species with a rosette, 5 to 6 inches across, of numerous crowded, lanceolate-deltoid, acuminate, green leaves 3 to 4 inches long. The leaf face is flat, the back rounded, keeled upwards and scabrous over both faces with whitish tubercles.

132959. HAWORTHIA RYDERIANA V. Poelln.

A stemless haworthia with a rosette  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches across of many dark or brownish-green, obovate, deltoid, acuminate leaves about  $1\frac{1}{2}$  inches long with minute teeth on the margins. Native to Cape Colony, South Africa.

132960. HAWORTHIA SCABRA Haw.

A haworthia with a rosette 2 inches in diameter of about 10 ovate, ascending, dull-green leaves 1½ to 2 inches long and rough with crowded tubercles. The leaf face is flat or slightly concave and the back rounded with the tip keeled.

132961. HAWORTHIA SCHMIDTIANA V. Poelln.

A species up to 16 inches high, with broad, ovate-lanceolate recurved-tipped leaves 1 inch long, arranged in 3 slightly spiral rows. The young leaves are very dark green and the warty tubercles glistening; the older leaves become duller in color. Related to *Haworthia viscosa*.

132962. HAWORTHIA SCHMIDTIANA VAR. ANGUSTATA V. Poelln.

132963. HAWORTHIA SCHMIDTIANA VAR. SUBERECTA V. Poelln.

132964. HAWORTHIA SCHULDTIANA V. Poelln.

A stemless haworthia with rigid, erect, green or reddish-green, oblong-lanceolate leaves 1½ inches long. Related to Haworthia retusa.

132965. HAWORTHIA SCHULDTIANA VAR, MINOR Triebn, and v. Poelln.

A variety with small leaves.

132966. HAWORTHIA SCHULDTIANA VAR. ROBERTSONENSIS V. Poelln.

A variety with leaves erect and more numerous than the type.

132967. HAWORTHIA SEMIGLABRATA Haw.

A haworthia with 30 to 40 crowded, ascending, lanceolate-deltoid, bright-green leaves about 3 inches long, and many rather large white tubercles mainly on the back of the leaves; closely related to *Haworthia margaritifera*. Native to South Africa.

132968. Haworthia sessiliflora Baker.

A haworthia with a sessile rosette  $2\frac{1}{2}$  to 3 inches across of about 20 ovate, much recurved, bright-green leaves, 1 to  $1\frac{1}{4}$  inches long. Native to South Africa.

132969. HAWORTHIA PILIFERA VAI. STAYNERII V. Poelln.

The leaves of this variety have a smooth keel, ciliate margin, and the upper surface pale green with several green lines. Received as *Haworthia stayneri* v. Poelln.

132970. HAWORTHIA PILIFERA VAR. SALINA V. Poelln.

A variety with short, abruptly pointed leaves having 4 or 5 green lines on the upper surface. Received as *Haworthia stayneri* var. salina v. Poelln.

132971 and 132972. HAWORTHIA MINIMA Baker.

132971. A stemless haworthia with a small dense rosette of self-colored lanceolate leaves about ½ inch long with bristles at margins and ends. Native to South Africa. Received as *Haworthia tenera* v. Poelln.

132972. Received as "Haworthia tenera var. major," for which a place of publication has not been found.

132973. HAWORTHIA TESSELLATA Haw.

A stemless haworthia with a rosette  $2\frac{1}{2}$  to  $3\frac{1}{2}$  inches across of 10 to 15 deltoid leaves 1 to 2 inches long, having small tubercles on the brown lower side and a network of 3 to 5 whitish lines on the upper surface. Native to South Africa.

132974. HAWORTHIA TESSELLATA VAR. INFLEXA Baker. (H. pseudotessellata v. Poelln.).

A variety with leaves concave on the upper surface, having 5 to 7 lines united to form a network. Native to South Africa.

132975. HAWORTHIA TESSELLATA VAR. PARVA (Haw.) Baker.

A variety with a rosette about 2 inches across of deltoid leaves 1 inch long, more or less flat on the upper surface, with tubercles on the lower side in 5 to 7 lines. Native to South Africa.

132976. HAWORTHIA TESSELATA VAR. TUBERCULATA V. Poelln.

A variety in which the leaves have large tubercles on the lower surface, arranged in cross lines toward the tip. Native to South Africa.

132977. HAWORTHIA TORTUOSA Haw.

A haworthia with a stem about 5 inches high, trifarious, with ovate-lanceolate, dark-green leaves and a lax raceme of whitish, red-nerved flowers. Native to South Africa.

132978. HAWORTHIA TRIEBNERIANA V. Poelln.

A species with a rosette about 2½ inches across of thick, erect, lanceolate leaves about 1½ inches long; leaf face nearly flat, green; lower surface convex, keeled with light minute tubercles; margins with whitish teeth; tip pellucid, deltoid and smooth.

132979. HAWORTHIA TRIEBNERIANA VAR. DEPAUPERATA V. Poelln.

A haworthia with gray-green or dark-green leaves, smooth or with a few tubercles on the lower surface.

132980. HAWORTHIA TRIEBNERIANA VAR. DIVERSICOLOR Triebn, and v. Poelln.

A variety differing from the type in its narrower leaves which vary from gray green to yellowish green or red.

132981. HAWORTHIA TRIEBNERIANA VAR. SUBTUBERCULATA V. Poelln.

A species with leaves smaller than those of the type, dark green and with many tubercles on the lower surface.

132982. HAWORTHIA TRUNCATA Schönl.

Received as "forma crassa," a form in which the truncate apex of the leaves is about ½ inch thick.

132983. HAWORTHIA TUBERCULATA V. Poelln.

A haworthia with a rosette of numerous falcate, deltoid-lanceolate leaves up to 3 inches long. The leaves are erect spreading or incurved, brownish green, never shining, and covered with glossy-tipped tubercles. Related to *Haworthia rugosa*.

132984. HAWORTHIA TUBERCULATA VAR. SUBEXPANSA V. Poelln.

A variety always stemless and with leaves less numerous and more spreading than the type.

132985. HAWORTHIA TURGIDA Haw.

A haworthia with a rosette 2 to  $2\frac{1}{2}$  inches across of 20 to 30 short oblongacute, recurving leaves that are smooth, very turgid, and marked on the upper half of the face with 5 to 7 vertical lines.

132986. HAWORTHIA UMBRATICOLA V. Poelln.

A proliferous haworthia with numerous pale-green, shining pellucid, obovate to oblong leaves about  $1\frac{1}{2}$  inches long. Related to  $Haworthia\ reticulata$ .

132987. HAWORTHIA UNICOLOR V. Poelln.

A stemless haworthia with numerous, ovate-lanceolate, bright-green, bristle-tipped leaves.

132988. HAWORTHIA VARIEGATA L. Bolus.

A stemless haworthia with a rosette of 20 to 30 linear-lanceolate leaves about 2 inches long. The ciliated leaves have small pale flecks. Allied to  ${\it Haworthia}$  angustifolia. Native to South Africa.

132989. HAWORTHIA VENOSA (Lam.) Haw.

132990. Haworthia viscosa var. concinna (Haw.) Baker.

A variety with leaves longer and more recurved than the type.

132991. HAWORTHIA VISCOSA VAR. INDURATA (Haw.) Baker.

A variety differing from the type in the fewer leaves, which are thicker, longer, and less concave on the face.

132992. HAWORTHIA VISCOSA VAR. PSEUDOTORTUOSA (Salm-Dyck) Baker.

A variety with rows of leaves twisted spirally.

132993. HAWORTHIA VISCOSA Var. TORQUATA (Haw.) Baker.

A variety with longer, ovate-lanceolate leaves than the type which are spirally arranged.

132994. HAWORTHIA VISCOSA (L.) Haw.

Variety Typica. A haworthia with a leafy stem  $\frac{1}{2}$  to 1 foot long and trifarious, ascending ovate leaves about 1 inch long. The dull-green leaves are sometimes viscous. Native to South Africa.

132995. HAWORTHIA WHITESLOANEANA V. Poelln.

A stemless species with few obovate, oblong, green leaves about  $1\frac{1}{2}$  inches long, the face truncated at the tip, and the back with pellucid, solitary, roundish low tubercles. Related to  $Haworthia\ retusa$ .

132996. HAWORTHIA WOOLLEYII V. Poelln.

A stemless proliferous haworthia with rosettes  $2\frac{1}{2}$  to 4 inches across, of many opaque, ovate-lanceolate leaves about  $2\frac{1}{2}$  inches long. The face is

smooth, bright green with several dark-green anastomosing lines, and the back is dark green with transverse bands of tubercles. Related to *Haworthia venosa*.

### 132997 and 132998.

From Sumatra. Seeds presented by the Directeur, Algemeen Proefstation, Algemeen Vereeniging van Rubberplanters ter Ooostkust van Sumatra. Received May 9, 1939.

132997. Canavalia sp. Fabaceae.

Received as Canavalia rosea, which is now referred to C. maritima, but the seeds are not of that species.

132998. Pueraria Phaseoloides (Roxb.) Benth. Fabaceae.

A twining, semishrubby plant densely covered with brown hairs. The leaflets are green above and densely matted beneath with gray hairs, and the reddish flowers are in long-stemmed racemes. Native to tropical regions of the Himalayas.

For previous introduction see 130946.

# 132999. Jugland Regia L. Juglandaceae.

Persian walnut.

From Rumania. Seeds presented by Prof. I. Safts, at the request of Dr. N. Saulescu, Director Stațiunea de Ameliorarea Plantelor și Controlul Semințelor, Cluj. Received May 1, 1939.

### 133000 to 133006. Oryza sativa L. Poaceae.

Rice.

From India. Seeds presented by C. R. Srinivasa Ayyangar, Paddy Specialist, Coimbatore. Received May 11, 1939.

133000. Var. Ainaura. (Russian T. 753.)

133001. Var. Italica. (Russian T. 748.)

133002. Var. Subvulgaris. (Russian T. 755.)

133003. Var. Vialianica. (Russian T. 751.)

133004. Var. Vulgaris. (Russian T. 749.)

133005. Var. Vulgaris. (Russian T. 758.)

133006. Chinese wild rice.

# 133007 to 133013. Brassica oleracea var. capitata L. Brassicaceae. Cabbage.

From the Union of Soviet Socialist Republics. Seeds presented by Dr. S. N. Shundenko, Institute of Plant Industry, Leningrad. Received May 3, 1939.

A collection of white cabbage varieties.

133007. Belorusskaja. No. 184. USSR.

133008. Kashirka. No. 1428. USSR.

133009. Marnopolka. No. 1002. Bulgaria.

133010. Moskovskaja Posdniaja. No. 176. USSR.

133011. Possopskaja. No. 1254.

133012. Slavianka. No. 1538.

133013. Valvatievskaja. No. 1255. USSR.

### 133014 to 133031.

From Africa. Seeds presented by F. M. Rogers, Superintendent of Plantations, East African Agricultural Research Station, Amani, Tanga, Tanganyika Territory. Received April 27, 1939.

133014. Areca catechu L. Phoenicaceae.

Betel palm.

The betel palm bears at the tip of the trunk, 40 to 100 feet high, a large crown of pinnately divided leaves, 4 to 6 feet long, the lowest usually pendulous.

The ovoid, smooth fruits, 1 to 2 inches in diameter, are orange-yellow or scarlet and furnish the well-known betel nut. It is native to southeastern Asia.

For previous introduction see 97540.

133015. Butia eriospatha (Mart.) Becc. Phoenicaceae. Apricot palm.

A handsome pinnate-leaved palm with violet-colored stems, creamy flowers, and edible yellow fruits the size of a small plum. Native to Brazil.

For previous introduction see 104239.

133016. CARLUDOVICA PALMATA Ruiz and Pav. Cyclanthaceae.

A stemless plant, native to Peru, with palmately divided palmlike leaves about 2 feet across on petioles 4 to 6 feet high. The leaves are used for making panama hats.

For previous introduction see 94184.

133017. CINCHONA OFFICINALIS L. Rubiaceae.

A tree, native to the Andes, yielding a bark remarkably rich in quinine which crystallizes readily as quinine sulfate.

For previous introduction see 126238.

133018. CINCHONA PUBESCENS X OFFICINALIS.

Introduced under the specific name "robusta," for which a place of publication has not been found.

133019. CINCHONA PUBESCENS Vahl.

133020. Elaeis guineensis Jacq. Phoenicaceae.

African oil palm.

For previous introduction see 104336.

133021. LIVISTONA AUSTRALIS (R. Br.) Mart. Phoenicaceae.

Australian fan palm.

A slender palm from 30 to 40 feet high, with a smooth trunk 8 to 10 inches in diameter and a dense crown of circular leaves 2 to 4 feet in diameter divided nearly to the base into narrow plicate segments. The moderately hard, light-colored wood is used for light construction work and the leaves are used for making baskets. The unexpanded fronds, after being dipped into boiling water, are dried, shredded, and the fiber used in making hats resembling panama hats.

For previous introduction see 98502.

133022. Livistona Chinensis (Jacq.) R. Br.

Chinese fan palm.

A palm, native to China, with a short thick trunk up to 6 feet high and 1 foot in diameter and having a crown of reniform, palmately divided leaves, 4 to 6 feet across, on petioles about 5 feet long, which are armed below the middle with recurved brown spines over an inch long.

For previous introduction see 116784.

133023. LIVISTONA OLIVAEFORMIS Mart.

A fan palm, native to Brazil, with a medium-sized trunk, petioles spiny at the base, and the leaf segments divided into long linear pendent lobes 12 to 15 inches long and solitary, olive-shaped fruits.

For previous introduction see 80766.

133024. Mascarenhasia elastica Schum. Apocynaceae.

A tree native to tropical Africa. It is a source of rubber and the timber also is said to be excellent.

For previous introduction see 131493.

133025. Podocarpus usambarensis Pilger. Taxaceae.

A tall evergreen tree, sometimes over 250 feet high, with a light crown of slender scattered branchlets and narrow linear leaves about 3 inches long. In eastern tropical Africa, where it is native, it is used as timber.

133026. Ptychococcus paradoxus (Scheff.) Beccari. Phoenicaceae. Palm

A slender palm, native to New Guinea, with a trunk 9 to 13 feet high, covered with a dense white tomentum. The regularly pinnately divided leaves have 6 to 15 broadly lanceolate segments with obliquely truncate tips.

For previous introduction see 129873.

133027. PTYCHOSPERMA MACARTHURI Wendl. Phoenicaceae.

Palm.

A palm, native to Australia, which grows to a height of 30 feet, but is usually a dwarf in cultivation with suckers from the base, making a bushy plant. The smooth ringed trunk is crowned by a dense cluster of pinnate leaves with arching leaflets 6 to 9 inches long.

For previous introduction see 104700.

133028. Ptychosperma sp.

Palm.

133029. Raphia Ruffia (Jacq.) Mart. Phoenicaceae.

Palm.

A feather-leaf palm with a trunk about 25 feet high, nearly erect leaves up to 65 feet long, numerous broad-linear, rather rigid pinnae 2 to 5 feet long, and scaly ellipsoid fruits 1 or 2 inches long. From the leaves of this and other species of Raphia is obtained the commercial fiber known as raffia. Native to Madagascar and eastern tropical Africa.

133030. ROYSTONEA OLERACEA (Jacq.) O. F. Cook. Phoenicaceae.

For previous introduction see 97551.

133031. Tectona grandis L. f. Verbenaceae.

Teak.

Palm.

A tall evergreen tree native to southern and central Asia, with opposite ovate leaves and white or bluish flowers in terminal panicles 6 inches long. The wood is highly prized by shipbuilders because of its great strength and durability.

For previous introduction see 123569.

133032. Cucumis melo L. Cucurbitaceae.

Muskmelon.

From Turkey. Seeds presented through Perry N. Whitehurst, Quitman, Ga. Received May 4, 1939.

Alkissar.

133033 to 133035. Hibiscus spp. Malvaceae.

From India. Seeds purchased through the Director, Imperial Institute of Agricultural Research, Pusa, Bihar. Received May 1, 1939.

133033 and 133034. Hibiscus cannabinus L.

Ambari hemp.

For previous introduction see 75895.

133033. Pusa type No. 3.

133034. Pusa type No. 6.

133035. Hibiscus sp.

Received as *Hibiscus sabdariffa* variety *Altissima*, but the seeds are not of that species.

133036 to 133053.

From India. Seeds presented by the Secretary, Imperial Council of Agricultural Research, India Department of Agriculture, New Delhi. Received April 21, 1939.

133036 to 133041. Andropogon spp. Poaceae.

Grass.

133036. Andropogon annulatus Forsk.

Palwan.

A perennial grass, native to India, much used as fodder.

For previous introduction see 41885.

133037. Andropogon caricosus L.

A grass with erect stems forming tufts at the rooting nodes. Native to tropical Asia.

For previous introduction see 49507.

133038. Andropogon foveolatus Delile.

A perennial grass with slender, densely tufted stems  $\frac{1}{2}$  to nearly 2 feet high. Native to tropical Africa.

133039. Andropogon intermedius R. Br.

Sandhaur grass. From the North Kheri Forest Division, United Provinces. A perennial grass with a short hard rhizome and erect or ascending stems, 3 feet long, pale green or with a reddish tinge, and obovoid panicles 2 to 3 inches long. Native to tropical Africa.

For previous introduction see 126469.

133040. Andropogon pertusus (L.) Willd.

A perennial grass with hairy nodes commonly found in the Aberdares Mountains up to 9,000 feet altitude. It is leafy and productive and spreads by its strong rhizomes. Native to East Africa.

For previous introduction see 75287.

133041. Andropogon pumilus Roxb.

A slender grass with stems 6 to 18 inches high, native to the drier parts of India.

For previous introduction see 41890.

133042. Cymbopogon Martini (Roxb.) W. Wats. Poaceae. Grass.

A stout perennial grass, native to northern India, which becomes about 6 feet high and has long, very smooth, rich-green leaves of delicate texture. The perfume commercially known as "Rusa oil" is obtaind from this grass,

For previous introduction see 65700.

133043. Heteropogon contortus (L.) Beauv. Poaceae.

Grass.

An excellent perennial forage grass which seeds readily. It is the dominant grass of the Ati Plains, Kenya Colony, Africa.

For previous introduction see 132800.

133044. Heteropogon triticeus (R. Br.) Stapf.

Grass.

A tall stout grass said to be 10 feet high. Native to Queensland, Australia. 133045 and 133046. Chrysopogon montanus Trin. Poaceae. Grass.

A handsome perennial grass from 3 to 5 feet high. In India it has an excellent reputation as a fodder grass and the seeds are collected and used as food by the natives.

For previous introduction see 102079.

133045. The type.

133046. Var. Robusta.

133047 to 133053. Sorghum spp. Poaceae.

133047. SORGHUM HALEPENSE (L.) Pers.

Johnson grass.

133048. Sorghum purpureo-sericeum (Hochst.) Aschers. and Schweinf.

A robust annual grass with erect stems 3 to 4 feet high and linear leaves 8 to 10 inches long. Native to Ethiopia.

For previous introduction see 49509.

133049 to 133053. Sorghum vulgare Pers.

133049. 5 Short.

133050, 5 Tall.

133051, 8 B.

133052. No. 9.

133053, 30 C.

133054. Gossypium sp. Malvaceae.

Cotton.

From Nigeria. Seeds presented by Kenneth H. Prior, C. M. S. Training College, Awka, Southern Nigeria. Received May 17, 1939.

A locally grown cotton, used by the natives for weaving. Found growing reasonably well at the end of the dry season, in very heavy clay soil.

133055 to 133057. Gossypium spp. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by J. B. Hutchinson, Cotton Research Station, Trinidad. Received May 18, 1939.

133055. Gossypium mustelinum Watt.

A wild, bushy, perennial cotton with cordate, 3-lobed, thick leaves over 3 inches long and yellow, purple-tinged flowers. Native to Brazil and Colombia.

133056. Gossypium raimondii Ulbrich.

A shrub or small tree, native to Peru.

For previous introduction see 132512.

133057. Gossypium taitense Parl.

A wild cotton, native to Polynesia.

For previous introduction see 129568.

133058. Hibiscus. Malvaceae.

Hibiscus.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in May 1939.

P. I. G. No. 9048. Var. Lutea. A large single, cream-colored hibiscus which has been growing for several years at the Coconut Grove Plant Introduction Garden, but is believed to have been introduced from the Hawaiian Islands. The flowers are from 4 to 6 inches across, petals moderately full, Pale Ochraceous Buff (Ridgway) merging into white which surrounds a large carmine eye, over 1 inch across in the larger flowers. The column is white above and carmine below, the carmine extending into the white in 5 lanceolate teeth; the stigmas are Baryta Yellow (Ridgway). The leaves are small and the bush is fairly low and compact in habit, but only moderately vigorous in growth. It is believed to be a hybrid.

133059. Prunus Mahaleb L. Amygdalaceae. Mahaleb cherry.

From Switzerland. Seeds presented by B. P. Hochreutiner, Jardin Botanique, Université de Genève, Geneva. Received May 16, 1939.

Seeds from wild trees.

133060 to 133064. Sorghum spp. Poaceae.

From India. Seeds presented by the Secretary of the Imperial Council of Agricultural Research, India, Department of Agriculture, New Delhi. Received May 8, 1939.

133060. Sorghum cernuum var. orbiculatum Snowden.

Safed Bandila. A variety cultivated in the Central Provinces of India.

133061. Sorghum cernuum var. agricolarum (Burkill) Snowden.

Gunjya. A variety cultivated in the Central Provinces, India.

133062. Sorghum membranaceum var. ehrenbergianum (Koern.) Snowden. Jogdhan. A cultivated variety.

133063. Sorghum Roxburghii var. Hians Stapf.

Motichura. An annual grass with tall stout stems cultivated in India.

133064. VETIVERIA ZIZANIOIDES (L.) Nash.

Grass.

Gander grass. A stout grass with tufted stems 2 to 5 feet high, rigid leaves 1 to 2 feet long, and erect conical panicles up to a foot long. Native to southern India.

For previous introduction see 67412.

133065 to 133085. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received May 17, 1939.

133065. SOLANUM ABBOTTII Leonard.

A spiny shrub 3 to 5 feet high, with sinuately 5- to 7-lobed leaves, oblong-elliptic in outline, 5 to 7 inches long, and racemes 5 to 7 inches long of 8 to 14 small, violet flowers. Native to the Dominican Republic.

133066. Solanum Boergeri Bukasov.

An herb, native to Uruguay. Allied to Solanum commersonii.

133067. Solanum catarthrum Juzepchuk.

A herbaceous solanum with stems up to 18 inches high. Native to the Peruvian Andes.

133068. SOLANUM Sp.

Received under the specific name of "choclo," for which a place of publication has not been found.

133069. SOLANUM SP.

Received under the specific name of "ciecae," for which a place of publication has not been found.

133070. SOLANUM COYOACANUM Bukasov.

A Mexican solanum allied to Solanum cardiophyllum.

133071. Solanum depexum Juzepchuk.

An herb, native to Argentina. It is apparently a geographical race of Solanum acaule and is said to be frost-resistant.

133072. Solanum garciae Juzepchuk and Bukasov.

An herb, native to Argentina. Allied to Solanum gibberulosum.

133073. Solanum Gibberulosum Juzepchuk and Bukasov.

An herb, native to Argentina.

133074. Solanum Henryi Bukasov and Lechnovitz.

A low herb allied to Solanum commersonii. Native to Uruguay.

133075. Solanum Herrerae Juzepchuk.

A solanum native to southern Peru; possibly a wild species.

133076. Solanum horovitzii Bukasov.

An herb with stems about 18 inches high. Allied to Solanum setulosum. Native to Argentina.

133077. Solanum knappei Juzepchuk and Bukasov.

A low-stemmed herb, native to Argentina. Allied to Solanum subtilius.

133078. Solanum Laplaticum Bukasov.

An herb with stems about 1 foot high. Allied to Solanum commersonii. Native to Argentina.

133079. SOLANUM MACOLAE Bukasov.

An herb with stems over 1 foot high. Native to Argentina.

133080. Solanum maglia Schlecht.

A wild species, native to Chile, with oblong tubers about  $1\frac{1}{2}$  inches long. For previous introduction see 70996.

133081. Solanum mamilliferum Juzepchuk and Bukasov.

Native to southern Peru and Bolivia.

For previous introduction see 103033.

133082. Solanum sp.

Received under the specific name "mastillanii," for which a place of publication has not been found.

133083. Solanum ohrondii Carr.

A solanum allied to the potato (Solanum tuberosum), with small tubers. Native to Uruguay.

133084. Solanum parodii Juzepchuk and Bukasov.

An herb, native to Argentina. Allied to Solanum gibberulosum.

133085. Solanum schickii Juzepchuk and Bukasov.

An herb, native to Argentina. Allied to Solanum chacoensis.

### 133086 to 133091.

From Southern Rhodesia. Seeds presented through Douglas Aylen, Agricultural Experiment Station, Salisbury. Received May 6, 1939.

133086. CROTALARIA JUNCEA L. Fabaceae.

Sunn-hemp.

A plant cultivated for its fiber and as forage.

For previous introduction see 117934.

133087. Dolichos biflorus L. Fabaceae.

Twinflower dolichos.

The green pods are used as food and the dried beans as fodder.

For previous introduction see 115467.

133088. GLYCINE JAVANICA L. Fabaceae.

A wide-climbing perennial vine, native to Asia and Africa where it is used as a cover crop. The slender stems are silky pubescent; the trifoliolate leaves have ovate leaflets 2 to 4 inches long, finely pubescent beneath, and the small bright-red flowers are in axillary racemes 3 to 6 inches long.

For previous introduction see 95378.

133089. Sorghum sp. Poaceae.

Grass.

Perennial Sudan grass.

133090. SORGHUM SD.

Grass.

Wintersome grass.

133091. STIZOLOBIUM Sp. Fabaceae.

Somerset velvetbean.

# 133092 to 133095. Avena sativa L. Poaceae.

Oats.

From Finland. Seeds presented by the Central Experiment Station of Finland, Division of Plant Breeding, Suomi. Received May 12, 1939.

133092. Esa.

133094. Pellervo.

133093. Kyoto.

133095. Tammi.

# 133096 to 133102. Malus sylvestris Mill. Malvaceae. Apple.

From England. Scions and plants presented by Dr. R. G. Hatton, Director, East Malling Research Station, East Malling, Kent. Received May 18, 1939.

133096. Allsops.

133100. Merton No. 779.

133097. Ivory's Double Vigour.

133101. Merton No. 789.

133098. Kirk's.

133102. Merton No. 793.

133099. Merton No. 778.

155055. Merion No. 11

### 133103 to 133122.

From India. Seeds purchased from G. Ghose & Co., Town-End, Darjeeling. Received May 5, 1939.

133103 to 133106. ACER spp. Aceraceae.

Maple.

133103. ACER CAMPBELLII Hook. f. and Thoms.

A tree up to 50 feet high, native to India. The bright-green 5- to 7-lobed leaves are 4 to 7 inches across and contrast sharply with the bright-red petioles 1 to 3 inches long. The small green-and-white flowers are borne in cymes 2 to 6 inches long.

For previous introduction see 100502.

133104. ACER Sp.

Received under the specific name "gosachuli," for which a place of publication has not been found.

133105. ACER OSMASTONI Gamble.

A large Himalayan maple which becomes 100 feet tall and grows wild in Sikkim, India, at about 7,000 feet altitude. The 1- to 3-lobed leaves are papery and about 5 inches long.

For previous introduction see 64167.

133106. ACER STACHYOPHYLLUM Hiern.

A small maple, native to Sikkim, India, at 10,000 feet altitude.

For previous introduction see 61743.

133107. Bucklandia populnea R. Br. Hamamelidaceae.

A large evergreen tree, native to the eastern Himalayas, which grows to a height of 80 feet. The dark-green leaves are broadly triangular, and the yellow flowers are in globose heads.

For previous introduction see 76898.

133108. CLEMATIS GREWIAEFLORA DC. Ranunculaceae.

A woody climbing vine with densely tomentose, simply pinnate leaves, native to India. The 3 to 5 broadly cordate leaflets have serrate margins, and the tubular-campanulate tawny-yellow flowers are 1 to 2 inches long.

For previous introduction see 99727.

133109. Colchicum luteum Baker. Melanthiaceae.

A spring-blooming colchicum with few fleshy strap-shaped leaves about 9 inches long and 1 to 3 golden flowers over 1 inch across. Native to the temperate Himalayas from 4,000 to 7,000 feet altitude.

For previous introduction see 123667.

133110. Daphne oleoides Schreb. Thymelaeaceae.

Olive daphne.

An evergreen shrub up to 3 feet high, with pubescent branches, hairy, obovate-lanceolate leaves, and white or pale-lilac flowers in few-flowered heads. Native to southeastern Europe.

For previous introduction see 79987.

133111. DAPHNE SUREIL Smith and Cave. Thymelaeaceae.

An erect evergreen shrub, 3 to 10 feet high, with alternate lanceolate or linear-lanceolate leaves about 4 inches long and small whitish flowers ½ inch long. Native to the eastern temperate Himalayas.

For previous introduction see 102904.

133112 to 133117. LILIUM Spp. Liliaceae.

Lily.

133112. LILIUM BAKERIANUM Coll. and Hemsl.

A lily with a gray-green stem, 3 to 4 feet high, scattered ascending, linear to lanceolate leaves 2 to 3 inches long, and 1 to 6 nodding, fragrant, campanulate flowers 2 to 3 inches broad, opening greenish yellow and changing to creamy white, heavily spotted inside with chocolate purple. It is native to Burma and western China.

For previous introduction see 92407.

133113. LILIUM NEILGHERRENSE Wight.

A lily from the Neilgherry Hills, India, where it grows at altitudes of 5,000 to 8,000 feet. It resembles in a general way *Lilium regale* of China, but differs in its more slender, less widely open, trumpet-shaped flowers which are greenish-white without and pure white within.

For previous introduction see 80011.

133114. LILIUM NEPALENSE D. Don.

A showy lily with a slender erect stem 2 to 3 feet long, leafy to the inflorescence. The glossy, bright-green leaves, 4 to 6 inches long, are oblong-lanceolate and 5-ribber. The flowers, 4 to 6 inches long, are greenish yellow outside and yellow within and, except in the upper third, flushed with purplish black. The oblanceolate segments are reflexed only in the upper half. The purplish-black filaments bear yellow anthers nearly an inch long. Native to the central Himalayas at about 8,000 feet altitude.

For previous introduction see 128956.

133115. LILIUM OCHRACEUM Franch.

A rare and beautiful lily from Burma. This is a very variable species producing flowers which range in color from deep golden yellow to pale yellow, stained in various degrees with deep wine purple.

For previous introduction see 99899.

133116. LILIUM POLYPHYLLUM D. Don.

A lily with a stoloniferous white, pink-tinged bulb, a smooth green stem 4 to 5 feet high, and numerous erect, scattered linear to oblong-lanceolate leaves, 2 to 8 inches long. The fragrant nodding flowers, 2 to 12 in a lax umbel or raceme, are pale creamy yellow outside, marble-white, streaked and spotted with purple within, and are 2 to 3 inches across. Native to the western Himalayas between 6,000 and 12,000 altitude.

For previous introduction see 126542.

133117. LILIUM WALLICHIANUM Schult. f.

Wallich lily.

A lily 4 to 6 feet high, with linear leaves 6 to 9 inches long and usually solitary, creamy, waxy-white, fragrant flowers 9 inches long that are golden yellow at the base inside and green outside.

For previous introduction see 124750.

133118. Malus sikkimensis (Hook. f.) Koehne. Malaceae. Sikkim crab.

A small tree, rather bushy in habit, that grows wild in the interior of Sikkim, India, at altitudes up to 10,000 feet. The narrowly oval leaves are very woolly beneath, and the white flowers, rosy in the bud, are about 1 inch across and are borne very freely in 4- to 8-flowered clusters. The pear-shaped fruits are dark red with paler dots and are about ½ inch wide.

For previous introduction see 80646.

133119. OPHIOPOGON CLARKEI Hook. f. Liliaceae.

An evergreen with rigid, prostrate stems 8 to 10 inches long, a terminal tuft of curved linear leaves 8 to 12 inches long, and racemes 3 to 4 inches long of few whitish flowers less than 1 inch across. Native to the Himalayas at about 6,000 feet altitude.

133120. OPHIOPOGON INTERMEDIUS D. Don.

A hardy perennial indigenous to Ceylon, with grasslike leaves and white flowers. It reaches a height of 12 inches and is suited only to moist shady places.

For previous introduction see 104374.

133121. PITTOSPORUM FLORIBUNDUM Wight and Arnott. Pittosporaceae.

A handsome subtropical tree with a short straight trunk, spreading branches, and numerous vellowish flowers in terminal panicles. The tree has strong,

tough, light-colored wood and yields an aromatic resin or oleo-resin having very adhesive properties. The tree is native to the outer Himalayas where it ascends to 3,500 feet altitude.

For previous introduction see 94100.

133122. Pyrus sp. Malaceae.

Received under the specific name "macrantha," which is not a valid name.

### 133123 to 133127. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received May 22, 1939.

133123. Solanum Boergeri Bukasov.

A species native to Uruguay. Allied to Solanum commersonii.

For previous introduction see 133066.

133124. SOLANUM Sp.

Received under the specific name "dolichostigma," for which a place of publication has not been found.

133125 and 133126, SOLANUM MACOLAE Bukasov,

An herb with stems over 1 foot high, native to Argentina.

133125. D. 55.

133126, D. 70.

For previous introduction see 133079.

133127. Solanum schickii Juzepchuk and Bukasov.

An herb, native to Argentina. Allied to Solanum chacoensis.

For previous introduction see 133085.

# 133128 and 133129. Triticum Aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by Dr. H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received May 23, 1939.

133128, Eureka C. 12503.

133129, Eureka C. 12890,

### 133130 to 133133.

From Southern Rhodesia. Plants presented through Douglas Aylen, Agricultural Experiment Station, Salisbury. Received May 22, 1939.

133130. Brachiaria dictyoneura (Fig. and DeNot) Stapf. Poaceae. Grass.

A tufted perennial with ascending stems up to 3 feet high. Native to tropical Africa. The grass grows well on very poor soils, forming a dense, fairly palatable sward, and it has the advantage that it can be readily established from seed.

For previous introduction see 127622.

133131. EULALIA GENICULATA Stapf. Poaceae.

Grass.

A perennial grass with stems about 2 feet high. Native to tropical Africa.

133132. Manisuris altissima (Poir.) Hitchc. (Rottboellia altissima Poir.). Poaceae.

A perennial grass with stems about 3 feet high, distributed through warm temperate and tropical regions in both hemispheres. Received as *Haemarthria fasciculata*, a synonym.

133133. Leersia hexandra Swartz. Poaceae.

Grass.

A very leafy grass, native to Brazil, about 3 feet high; it is readily eaten by cattle.

For previous introduction see 77059.

133134. Triticum dicoccum Schrank. Poaceae.

Emmer.

From Peru. Seeds presented by A. Martin Lynch, Lambayeque. Received May 12, 1939.

133135 and 133136. Cocos Nucifera L. Phoenicaceae.

Dwarf coconut.

From Panama. Fruits presented by J. H. Permar, United Fruit Co., Almirante. Received May 25, 1939.

133135. Niño, a green dwarf coconut, originally from the College of Agriculture, Laguna, Philippine Islands. An early and prolific bearer and a fine dooryard plant.

133136. A yellow dwarf coconut, originally from Java. An early and prolific bearer and a fine dooryard plant.

133137. Eucalyptus stuartiana F. Muell. Myrtaceae.

From Australia. Seeds presented by A. Murphy and E. Mertensen, Woy Woy. Received May 22, 1939.

Apple-scented gum. A stocky erect tree which becomes 30 to 40 feet high, with a trunk 1 foot in diameter and drooping foliage. It is closely related to Eucalyptus viminalis, but is easily distinguished from it by having 3 flowers in an umbel, by the fibrous bark, roundish seedling leaves, and smaller flowers. The timber is hard but, not being straight-grained, is difficult to split. It is used for fence posts and fuel.

### 133138 to 133171.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Academy of Sciences, Leningrad. Received May 18, 1939.

133138. AGROPYRON CANINUM (L.) Beauv. Poaceae.

Awned wheatgrass.

133139. AGROPYRON TRICHOPHORUM (Link) Richt.

133140 to 133150. ASTRAGALUS Spp. Fabaceae.

133140. ASTRAGALUS ALOPECUROIDES L.

Foxtail milkvetch.

An erect pubescent species 2 to 5 feet high, with narrowly oval leaves and yellow flowers produced in thick oblong spikes. Native to Siberia.

For previous introduction see 110873.

133141 and 133142. ASTRAGALUS CICER L.

A European perennial with prostrate or ascending stems.

For previous introduction see 115417.

133143 and 133144. ASTRAGALUS GLYCYPHYLLOS L.

Milkvetch.

A prostrate, spreading, herbaceous perennial, native to Asia Minor.

For previous introduction see 123442.

133145. ASTRAGALUS KULABENSIS Lipsky.

An erect perennial about 3 feet high, with leaves of 15 to 20 elliptic or elliptic-lanceolate leaflets and pale-yellow flowers in nearly sessile heads almost 2 inches across. Native to Turkistan.

133146 and 133147. Astragalus sieversianus Pall.

An erect or ascending perennial with oblong hairy leaflets and axillary clusters of pale-yellow flowers. Native to central Asia.

For previous introduction see 116698.

133148. ASTRAGALUS TRAUTVETTERI Bunge.

A subcaulescent herbaceous perennial. Native to Asia.

133149. ASTRAGALUS Sp.

133150. ASTRAGALUS Sp.

133151 to 133158. Bromus spp. Poaceae.

Bromegrass.

133151. Bromus danthoniae Trin.

For previous introduction see 108883.

133152. Bromus erectus Huds.

Meadow bromegrass.

For previous introduction see 111279.

133153. Bromus oxyopon Schrenk.

A tall annual grass up to 2 feet high, with flat linear leaves. Native to Turkistan.

For previous introduction see 107031.

133154. Bromus racemosus L.

Chess or cheat, a smooth weed of waste places, which grows from 1 to 3 feet tall. Native to Europe.

For previous introduction see 53038.

133155 and 133156. Bromus secalinus L.

Chess.

For previous introduction see 119629.

133157. BROMUS STERILIS L.

For previous introduction see 119633.

133158. Bromus tectorum L.

For previous introduction see 119631.

133159 to 133168. Poa spp. Poaceae.

Grass.

133159 and 133160. POA ANNUA L.

133161. POA BULBOSA L.

An important pasture grass which grows over a wide range of altitude.

133162. POA COMPRESSA-L.

Canada bluegrass.

133163 to 133165. Poa pratensis L.

Kentucky bluegrass.

133166. Poa sibirica Roshev.

A perennial grass with stems 11/2 to 4 feet high. Native to Siberia.

133167 and 133168. Poa Trivialis L.

Rough bluegrass.

133169 and 133170. TRIGONELLA CAERULEA (L.) Seringe. Fabaceae.

For previous introduction see 131592.

133171. TRIGONELLA FOENUM-GRAECUM L.

Fenugreek.

133172. CITRUS BERGAMIA RISSO. Rutaceae.

Bergamot.

From Italy. Scions presented by Dr. Antonio Biraghi, Regia Stazione di Patologia Vegetale, Rome. Received May 29, 1939.

133173 to 133177. Papaver somniferum L. Papaveraceae.

Opium poppy.

From Turkey. Seeds presented by S. A. and H. Toupoukian, Istanbul, through Mrs. Fred Boehm, Ltd., London, England. Received May 24, 1939.

133173. No. 1.

133176. No. 4.

133174. No. 2.

133177. No. 5.

133175. No. 3.

133178. Eragrostis obtusa Munro. Poaceae.

Grass.

From the Union of South Africa. Seeds presented by the Curator, McGregor Museum, Kimberley, Cape Province. Received May 22, 1939.

A densely cespitose perennial grass, native to South Africa, with wiry stems 6 to 18 inches high and linear long-pointed leaves 2 to 3 inches long.

For previous introduction see 128669.

### 133179 to 133193. TRITICUM AESTIVUM L. Poaceae. Common wheat.

From Italy. Seeds presented by the Director, R. Instituto Agronomico per L'Africa Italiana, Ministero Del'Africa Italiana, Firenze. Received May 31, 1939.

A collection of locally grown wheats from Ethiopia.

133179. No. 715. Arrara Ferres, from Makalle.

133180. No. 780. Hard wheat from Cercer.

133181. No. 785. Hard wheat from Arussi.

133182. No. 837. Hard white wheat from Addis Ababa.

133183. No. 839. Gondorè from Gimma.

133184. No. 784. Black-grained wheat from Arussi.

133185. No. 792. Mixed varieties from Altipiano.

133186. No. 835. Mixed varieties from Addis Ababa.

133187. No. 840. Negussè, from Gimma.

133188. No. 841. Oromò, from Gimma.

133189. No. 836. Red-grained wheat from Addis Ababa.

133190. No. 781. Soft-grained wheat from Cercer.

133191. No. 782. Soft-grained wheat from Harar.

133192. No. 783. Soft-grained wheat from Arussi.

133193. No. 838. Soft-grained wheat from Addis Ababa.

# 133194 and 133195. Ficus spp. Moraceae.

Fig.

From India. Seeds presented by Charles Knowlton, Patiala State, through Ira J. Condit, University of California Experiment Station, Riverside, Calif. Received June 1, 1939.

133194. Ficus sp.

No. 1. A spreading tree, probably evergreen, with inedible green and red, long-stalked fruits.

133195. Figure sp.

No. 2. An erect tree with smooth bark; fruit small, blue, edible and palatable.

133196. Capsicum frutescens L. Solanaceae. Redpepper.

From Hungary. Seeds presented by A. G. Senes, New York, N. Y., through W. R. Beattie, Bureau of Plant of Industry. Received June 1, 1939.

133197 to 133204. Solanum tuberosum L. Solanaceae. Potato.

From Germany. Tubers presented by the Gutsverwaltung Maleksberg, at the request of the Corn Products Refining Co., New York, N. Y. Received May 29, 1939.

133197, Centa.

133201. Prisca.

133198. Fridolin.

133202. Sieglinde.

133199. Mittelfrühe.

133203. Stärkeragis.

133200. Ostbote.

133204, Voran.

133205. Paivaea langsdorffii Berg. Myrtaceae.

From Brazil. Seeds presented by N. R. Thomas, São Paulo. Received June 1, 1939.

Cambucy. A shrub 8 to 12 feet high, with rigid, ovate to oblong leaves about 2 inches long; axillary white flowers and edible but astringent fruits, used for flavoring beverages. Native to São Paulo, Brazil.

### 133206 to 133210.

From Chile and Argentina. Seeds presented by Dr. T. H. Goodspeed, University of California. Received June 3, 1939.

133206. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

From Valparaiso, Chile, January 1939. A variety with red seeds.

133207 and 133208. Cucumis melo L. Cucurbitaceae.

Muskmelon.

Varieties, of excellent flavor, cultivated in central Chile.

133207. No. 1.

133208. No. 2.

133209. Gossypium sp. Malvaceae.

Collected by A. E. Rogonese, December 9, 1938, northeast of Santa Fé, Argentina. A perennial cotton, probably originally from the Indians of Formosa.

133210. Lycopersicon sp. Solanaceae.

Tomato.

Collected at Tactal, Chile, January 14, 1939.

133211 to 133213. Fragaria spp. Rosaceae.

Strawberry.

From Canada. Plants presented by Dr. A. W. S. Hunter, Central Experimental Farm, Ottawa. Received June 5, 1939.

133211. FRAGARIA Sp.

Claribel.

133212. Fragaria sp.

John.

133213. FRAGARIA Sp.

MacKenzie.

133214. HYPHAENE TURBINATA Wendl. Phoenicaceae.

Palm.

From Africa. Seeds from Kenya Colony, presented through Dr. David Fairchild, Coconut Grove, Fla. Received June 6, 1939.

A palm with orbicular dull-brown fruits about 2 inches in diameter and seeds over 1 inch in diameter. Native to central Africa.

133215. SWIETENIA CANDOLLEI Pittier. Meliaceae.

# Venezuelan mahogany.

From Caracas, Venezuela. Seeds presented by L. R. Holdridge, Associate Forester, Southern Forest Experiment Station, Rio Piedras, Puerto Rico. Received May 31, 1939.

An evergreen tree up to 120 feet high, with rather leathery pinnate leaves 7 to 10 inches long. It is quite common in Venezuela from sea level up to about 3,000 feet and is an important timber tree.

133216 to 133219. Avena sativa L. Poaceae.

Oats.

From Germany. Seeds presented by Dr. R. Schick, Neu-Buslar. Received June 6, 1939.

133216. Baldur.

133218. Flämingstreue.

133217, Flämingsgold.

133219, Silberhafer,

133220. Agave bracteosa S. Wats. Amaryllidaceae.

From Maryland. Plant growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in June 1939.

Origin unknown. A trunkless agave with 3-sided, gray, sigmoidally spreading spineless leaves about 20 inches long and rather small flowers on a scape 3 to 5 feet high. Native to Mexico.

For previous introduction see 81077.

# 133221. Agave Parryi Engelm. Amaryllidaceae.

From Arizona. Plants collected by S. B. Detwiler, and presented through H. E. Allanson. Received April 9, 1929. Numbered in June 1939.

From the Dragoon Mountains, near Cochise Stronghold Ranger Station, Coronado National Forest. A stemless agave with very thick, rigid, spiny, oblong leaves over 1 foot long and a panicle of large yellow flowers. Native to Arizona.

# 133222 to 133229. GLYCINE MAX (L.) Merr. Fabaceae. Soybean.

From Java. Seeds presented by Hoofd v/h Landbouwkundig Instituut, Buitenzorg. Received June 8, 1939.

 133222. Kedelee. No. 16.
 133226. Kedelee. No. 367.

 133223. Kedelee. No. 27.
 133227. Kedelee. No. 469.

 133224. Kedelee. No. 29.
 133228. Kedelee. No. 523.

 133225. Kedelee. No. 276.
 133229. Kedelee Seleh.

### 133230 to 133253.

From South-West Africa. Plants purchased from Wilhelm Triebner, S. W. A. Succulents Nurseries, Windhoek. Received June 8, 1939.

### 133230. Gasteria sp. Liliaceae.

Received under the name "angustiarum," for which a place of publication has not been found.

### 133231. GASTERIA PARVIFOLIA Baker.

A gasteria with 10 to 12 lanceolate-deltoid leaves 2 to 3 inches long, in a dense rosette. The leaves, dull green changing to purple, have numerous small whitish immersed spots forming irregular bands on the face. Native to South Africa.

For previous introduction see 129374.

#### 133232. Gasteria caespitosa v. Poelln.

A somewhat proliferous tufted gasteria with distichous, smooth, erect or spreading leaves, the younger ones suberect, 4 inches or longer, about 1 inch broad at the base, gradually narrowing to the distinctly mucronate tip. The simple or branching scape, about 2 feet high, has small, bright-rose flowers. Related to *Gasteria nigricans* and similar to *G. maculata*, but it is nearly stemless. Native to South Africa.

### 133233 to 133253. HAWORTHIA Spp. Liliaceae.

### 133233. HAWORTHIA ARACHNOIDEA (Mill.) Haw.

A succulent, native to South Africa, with a very short stem, and rosettes 3 to 4 inches across of 30 to 40 thick lanceolate leaves 2 inches long having a long transparent awn and transparent teeth along the edges and keel.

For previous introduction see 78210.

#### 133234. HAWORTHIA BLACKBURNIAE Baker.

A short-stemmed haworthia with about 10 erect or ascending linear, leathery leaves up to 6 inches long.

### 133235. HAWORTHIA CASSYTHA Baker.

A haworthia with a leafy stem about 4 inches long, with many dull-green, ovate leaves 1 to 1¼ inches long, tubercled on the face and back, very rough and whitish on the margins. Native to South Africa.

### 133236. HAWORTHIA COOPERI Baker.

A stemless haworthia with a dense rosette, 2 to 2½ inches across, of 30 to 40 oblong-lanceolate leaves, transparent, and awned at the tips. The margin, keel, and awn of the leaves have pellucid teeth. The raceme consists of about 12 white flowers with reddish streaks in the center of the segments. Native to South Africa.

133237. HAWORTHIA SCHMIDTIANA VAR. DIVERSIFOLIA V. Poelln.

A variety with leaves in straighter ranks than the type, shorter, not recurved at the tips, and the tubercles are more regularly arranged in transverse rows and united along the margins. On the older leaves the tubercles form an interesting gray pattern.

133238. HAWORTHIA GLABRATA (Salm-Dyck) Baker.

A haworthia with a short stem, a dense rosette of lanceolate, deltoid, acuminate, glaucous-green leaves 4 or 5 inches long with distant whitish tubercles on the back.

133239. HAWORTHIA GLABRATA Var. CONCOLOR (Salm-Dyck) Baker.

A variety with small, uniformly colored tubercles.

133240. HAWORTHIA GRANULATA Marl.

A stemless haworthia with fleshy, ovate-lanceolate leaves about 1 inch long, smooth on the upper surface and with closely adjoining tubercles on the lower. The slender scape has few greenish-white flowers. Allied to *Haworthia scabra*. Native to South Africa.

133241. HAWORTHIA INCURVULA V. Poelln.

A stemless haworthia with about 40 broadly ovate-oblong entire, smooth, pale-green leaves less than 1 inch long. The face of the leaf is somewhat flat and slightly turgid toward the tip. The back is marked lengthwise with scarcely anastomosing pale-green lines.

133242. HAWORTHIA KINGIANA V. Poelln.

133243. Haworthia margaritifera var. corallina Baker.

A variety with green leaves about 2 inches long and many medium-sized tubercles in irregular cross bands on both leaf surfaces. Native to South Africa.

133244. HAWORTHIA MARGARITIFERA VAR. GRANATA (Willd.) Baker.

A variety with spreading green leaves  $1\frac{1}{2}$  to 2 inches long in a small rosette. Native to South Africa.

133245. Haworthia margaritifera var. semimargaritifera (Salm-Dyck) Baker.

A variety with fewer tubercles on the back of the leaf and the tubercles on the face, mostly on the keel.

133246. HAWORTHIA MARGARITIFERA (L.) Haw.

Var. *Typica*. A stemless haworthia with a dense rosette 4 inches across of turgid, ovate-deltoid leaves having prominent and pearl-like warts. Native to South Africa.

133247. HAWORTHIA MIRABILIS Haw.

A haworthia with a short stem, about 20 deltoid, recurved leaves 1 inch or longer, the face smooth, upper part marked with several pale vertical lines, the back rounded and scabrous with tubercles.

133248. HAWORTHIA PARADOXA V. Poelln.

A stemless haworthia with many thick obovate or obovate-oblong leaves in a rosette about 2 inches across. The back of the leaf is dark green with indistinct, darker longitudinal lines and lighter spots; the face is dark green with 1 to 2 indistinct longitudinal furrows and small whitish teeth on the margins. Native to South Africa.

133249. HAWORTHIA SUBATTENUATA (Salm-Dyck) Baker.

A haworthia with a rosette 4 or 5 inches across of numerous crowded, lanceolate-deltoid, acuminate leaves 2 to 3 inches long. The leaves are green when young, turning dull purple, flattish, and with few tubercles on the face, rounded on the back, and with copious, medium-sized whitish tubercles.

133250. HAWORTHIA SUBLIMPIDULA V. Poelln.

A haworthia with a rosette 1½ inches across of few narrow, ovatelanceolate, dark-green leaves 1 inch long. Related to *Haworthia retusa*.

133251. HAWORTHIA TISLEYI Baker.

A stemless haworthia with a dense rosette,  $2\frac{1}{2}$  to 3 inches across, of 30 to 40 deltoid-cuspidate leaves about 1 inch long. The few greenish tubercles are on both leaf surfaces. Native to South Africa.

133252. HAWORTHIA WILLOWMORENSIS V. Poelln.

133253. HAWORTHIA ZANTNERIANA V. Poelln.

A stemless haworthia, proliferous from the base, with few lanceolate-subulate, light, gray-green or brownish-green leaves 2 to  $2\frac{1}{2}$  inches long. The leaves have large pale flecks and stripes and are without teeth at the margin. Allied to *Haworthia variegata*. Native to South Africa.

133254. Areca catechu L. Phoenicaceae.

Betel palm.

From Puerto Rico. Seeds presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received June 10, 1939.

For previous introduction and description see 133014.

133255. Gossypium stocksii Masters. Malvaceae.

Cotton.

From India. Seeds presented by the Cotton Botanist, Coimbatore, through J. B. Hutchinson, Cotton Research Station, Trinidad, British West Indies. Received June 13, 1939.

A shrubby tropical Indian cotton, with small yellow flowers, native to the Sind District.

For previous introduction see 129567.

133256. Schizostachyum sp. Poaceae.

Bamboo.

From the Society Islands. Plants presented by L. Garnier, Jardin des Plantes, Papeete, Tahiti. Received June 13, 1939.

133257. Prunus Mahaleb L. Rosaceae.

Mahaleb cherry.

From the Union of Soviet Socialist Republics. Seeds presented by the Stalinabad Botanical Garden, Stalinabad. Received June 9, 1939.

133258 to 133260. Avena pubescens Huds. Poaceae.

From Canada. Roots presented by the Central Experimental Station, Ottawa. Received June 15, 1939.

For previous introduction see 107895.

133258. Ottawa No. 1421.

133259. Ottawa No. 1430.

133260. Ottawa No. 1435.

133261. CITRUS SINENSIS (L.) Osbeck. Rutaceae.

Orange.

From Brazil. Budsticks presented by Sterling G. Evans, Rio de Janeiro. Received June 15, 1939.

Bahianinha Navel.

133262 to 133266. Solanum tuberosum L. Solanaceae. Potato.

From Germany. Tubers presented by the Gustverwaltung Malekberg, at the request of the Corn Products Refining Co., New York, N. Y. Received June 15, 1939.

133262. Ackersegen. A late potato with yellow flesh and yellow skin, very high yield, good for food and industrial use.

133263. Fram. A late potato with yellow skin and white flesh which is 16.2 percent starch; medium yield.

133264. Gigant. A middle-late potato with yellow skin and yellow flesh; high yield, good for food and for industrial purposes; starch 15.3 percent.

133265. Parnassia. A middle-late potato with yellow skin and white flesh; good for food and industrial use.

133266. Stürkereiche I. A middle-late potato with yellow skin and white flesh; high yield, good for food and for industrial use; starch content high.

133267 to 133270. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received June 15, 1939.

133267. Choclo.

133269. Macmilanii.

133268. Ciegae.

133270. Riobambense.

### 133271 and 133272.

From Java. Plants purchased from G. Hof-Schmedes, Hotel Djocja, Batavia. Received June 16, 1939.

133271. CYMBOPOGON CITEATUS (DC.) Stapf. Poaceae.
133272. CYMBOPOGON NARDUS (L.) Rendle. Poaceae. Cit

Lemon grass. Citronella grass.

133273. Phaseolus vulgaris L. Fabaceae.

Common bean.

From Germany. Seeds purchased from Rudolf Schreiber & Son, Quedlinburg. Received June 14, 1939.

Schreiber's Granda.

# 133274 to 133282. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by the Instituto Agronómico do Estado de São Paulo, Campinas, through O. W. Herrmann and S. C. Evans, Farm Credit Administration, United States Department of Agriculture. Received June 19, 1939.

133274. I. A. 7470-21077-31614-46119-54556.

133275. I. A. 7111-028-112-31429-44799-52397.

133276. I. A. 7111-045-Cooperação No. 282.

133277. I. A. Piratiniga 086-2821-3974-42223.

133278. I. A. 7387-21193-31525-45904-54332.

133279. I. A. 7111-028-112-31439-44556-52042.

133280. I. A. Piratininga 086-2326-3304-43558.

133281. I. A. 7387-54010.

133282, I. A. 7470-21077-31614-46438-54578.

# 133283 to 133285. CYCLAMEN Spp. Primulaceae.

From Turkey. Tubers purchased through Edward C. Vick, Newark, N. J. Received June 19, 1939.

133283. CYCLAMEN CILICICUM Boiss. and Heldr.

A tuberous-rooted perennial with long-stemmed, oval, heart-shaped leaves, dark green and white mottled above. The flowers, white and rose-colored, are about  $\frac{3}{4}$  inch long. The plant is native to the Balearic Islands.

For previous introduction see 89088.

133284. CYCLAMEN Sp.

133285. CYCLAMEN Sp.

# 133286 to 133314. Triticum aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received June 20, 1939.

133286. Clarendon  $\times$  Hope  $\times$  Baringa 2438 L. 38.

133287.  $Dundee \times R. L. 595 3842 N. 38.$ 

133288. Dundee  $\times$  R. L. 595  $\times$  Ford  $\times$  Baringa 4968 L. 38.

133289. Dundee  $\times$  R. L. 595  $\times$  Ford  $\times$  Baringa 4965 L. 38.

133290. Dundee  $\times$  R. L. 595  $\times$  Nabawa 4959 L. 38.

133291. Eureka 2. C.

133292. Eureka C 12503.

133293. Federation X Hope X Dundee 3781 N. 38.

133294. Federation  $\times$  Hope  $\times$  Dundee 3787 D. 38.

133295. Federation × Hope × Dundee 3802 N. 38.

133296. Federation  $\times$  Hope  $\times$  Dundee 3804 N. 39.

133297. Hope × Currawa 2159 L. 38.

133298. Hope × Currawa 4882 L. 38.

133299.  $Hope \times Currawa$  9010 Gns 38.

133300. Hope × Currawa × Dundee 2164 L. 38.

133301. Hope × Currawa × Dundee 4885 L. 38.

133302. Hope × Currawa × Dundee 4887 L. 38.

133303. Kenya Florence Dundee × Dundee 9333 G. 38.

133304. Kenya Gular Ford Ghurka X Dundee 4609 L. 38.

133305. Kenya Gular Ford Ghurka X Dundee 4623 L. 38.

133306. Kenya × Pusa 4, 96-1-G1-2-2-L. 2122. L. 38.

133307. Kenya Pusa 4 × Dundee 4454 L. 38.

133308. Kenya Pusa 4 × Union 5088 L. 38.

133309. Kenya Pusa 4 × Union 5092 L. 38.

133310. Kenya Pusa 4 × Union 5099 L. 38.

133311. Kenya Reward × Dundee 2086 L. 38.

133312. R. L. × Dundee × Dundee 3835 N. 38.

133313. R. L. 723  $\times$  Hard Federation 2083 Gns 38.

133314. R. L. 723 × Hard Federation 3879 N. 38.

### 133315. Triticum aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by the Chamber of Commerce, Melbourne, Victoria. Received June 20, 1939.

Victorian wheat.

### 133316 to 133321.

From the Union of South Africa. Seeds presented by G. Bergh, Kimberley, Cape Province. Received June 13, 1939.

### 133316. Adansonia digitata L. Bombacaceae.

Baobab.

A tree about 60 feet high and sometimes 30 feet in diameter, with palmate leaves divided into 5 or 7 lanceolate leaflets, white flowers 6 inches across, and large gourdlike fruits with edible pulp. Native to tropical Africa.

For previous introduction see 80412.

133317. Bolusanthus speciosus (Bolus) Harms. Fabaceae.

A small ornamental tree with compound leaves and long racemes of violet flowers resembling those of the wistaria. The tree is subtropical in its requirements, grows best in good deep soil, and is propagated only by seeds. The hard white durable wood is used for wheel spokes. Native to South Africa.

For previous introduction see 80666.

133318. Entandophragma caudatum Sprague. Meliaceae.

Berg mahogany.

133319. FAUREA SALIGNA Harv. Proteaceae.

A shrub or small tree with lanceolate, sometimes subfalcate leathery leaves, shiny above, 3 to 6 inches long, and small pale-yellowish flowers in terminal spikes. The hard durable wood is said to be termiteproof. Native to South Africa and also found in tropical Africa.

133320. Peltophorum Africanum Sond. (Baryxylum africanum (Sond.) Pierre). Caesalpiniaceae.

A handsome yellow-flowered tree with a habit like Mimosa. It becomes 20 to 30 feet high and is native to tropical and subtropical Africa.

For previous introduction see 106549.

133321. Schotia transvaalensis Rolfe. Caesalpiniaceae.

Boerboom. A very ornamental, evergreen shade tree with brilliant scarlet flowers. Native to the Transvaal.

For previous introduction see 50183.

133322. Telfairia pedata (J. E. Smith) Hook. Cucurbitaceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered June 19, 1939.

A shrubby vine with pale-purple flowers, followed by oblong fruits 2 to 3 feet long; these contain an abundance of large seeds, sometimes called "oyster nuts," which yield an oil said to be equal in quality to olive oil. In Kenya Colony, Africa, where this plant is native, the seeds are boiled and used as food by the natives.

For previous introduction see 75930.

### 133323 to 133325.

From Venezuela. Seeds presented by C. A. Davila, Ministerio de Agricultura y Cria, Estación Experimental de Agricultura y Zootecnia, Caracas. Received June 20, 1939.

133323. Belencita hagenii Karst. Capparidaceae.

*Mamita Dulce.* A tropical evergreen tree with alternate, entire, acute heart-shaped leaves, large white flowers, and large green pendent fruits. Native to Colombia, near the coast.

133324. Morisonia americana L. Capparidaceae.

Mamita Chipororo. From Carora, Estado Lara. A small to medium-sized tree with oblong leathery leaves about 6 inches long and white flowers, followed by somewhat sweet, edible berries the size of a small orange. Found on dry coastal plains and up to 900 m. altitude.

133325. Swietenia candollei Pittier. Meliaceae. Venezuelan mahogany.

For previous introduction and description see 133215.

133326. Ravenala guyanensis Steud. Musaceae.

From Surinam. Seeds purchased from L. Stahel, Department of Agriculture, Paramaribo, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos, Cuba. Received June 16, 1939.

A banana relative which becomes 25 feet high, with a fanlike head. Its enormous flower spike is 9 feet long and as much as a man can carry. The seeds have an orange aril. Native to the Guianas.

For previous introduction see 101083.

### 133327 to 133330.

From New Zealand. Seeds presented by J. Montgomery & Co., Christchurch. Received June 19, 1939.

133327. DACTYLIS GLOMERATA L. Poaceae.

Certified Mother Cocksfoot.

133328. LOLIUM MULTIFLORUM Lam. Poaceae.

Italian ryegrass.

Orchard grass.

Italian Certified Mother ryegrass.

133329. LOLIUM PERENNE L.

Perennial ryegrass.

Perennial Certified Mother ryegrass.

133330. Trifolium repens L. Fabaceae.

White clover.

No. 7. Government Certified Mother Seed.

133331. Trifolium repens L. Fabaceae.

White clover.

From Wales. Seeds presented by the Welsh Plant Breeding Station, University College of Wales, Aberystwyth. Received June 22, 1939.

Aberystwyth S. 100. Pedigreed white clover, early type.

133332. Malus sylvestris Mill. Malaceae.

Apple.

From the Union of Soviet Socialist Republics. Scions presented by the Michurin Research Institute, Michurinsk. Received February 8, 1935. Numbered in June 1939.

Shafran-Kitaika.

### 133333 to 133375.

From Burma. Seeds collected by Capt. F. Kingdon Ward and presented by Dr. David Fairchild, Coconut Grove, Fla. Received June 21, 1939.

133333. ACER CAMPBELLII Hook. f. and Thomas. Aceraceae.

Maple.

K. W. No. 00238.

For previous introduction and description see 133103.

133334. ALTINGIA EXCELSA Noronha. Hamamelidaceae.

K. W. No. 00169. A magnificent tree of the tropical evergreen forests of India and the East Indies. In Java it yields a small quantity of the medicinal resin, known in Europe as "storax," which is obtained by incisions in the trunk. The tree is not regularly cultivated. The soft reddish-gray wood is used in India for ordinary domestic purposes.

For previous introduction see 67897.

133335. Berberis insignis Hook. f. and Thoms. Berberidaceae. Barberry.

K. W. No. 00107. A beautiful bush of erect habit with very few spines and large shining hollylike evergreen leaves 3 to 7 inches long. The golden-yellow flowers are borne in clusters of about 15 and are followed by ovoid black berries. Native to the eastern Himalayas.

For previous introduction see 80076.

133336. Berberis Wallichiana DC.

Barberry.

K. W. No. 0072.

For previous introduction see 116583.

133337. CARPINUS VIMINEA Lindl. Betulaceae.

A rather small tree with slender pendulous branches and ovate, caudate, doubly-serrate leaves 3 to 4 inches long. Native to the temperate Himalayas between 5,000 and 7,000 feet altitude.

For previous introduction see 113785.

133338 to 133343. CLEMATIS spp. Ranunculaceae.

133338. CLEMATIS RANUNCULOIDES Franch.

K. W. No. 0070. A clematis with a short thick woody rhizome and an erect simple flowering stem 2 to 3 feet high. The prominently nerved leathery

leaves are trifid or trilobed and from 2 to 3 inches long, and the 1 to 3 nodding flowers are rose-colored. The plant strongly suggests a ranunculus.

For previous introduction see 100524.

133339. CLEMATIS CHRYSOCOMA VAR. SERICEA (Franch.) C. Schneid.

K. W. No. 00289. An ornamental Chinese vine up to 20 feet long, with silky hairy rounded leaves and solitary or paired pinkish flowers 3 to 4 inches in diameter. Native to western China.

For previous introduction see 76224.

133340. CLEMATIS Sp.

K. W. No. 00480.

133341. CLEMATIS Sp.

K. W. No. 00480-A.

133342. CLEMATIS Sp.

K. W. No. 00103. A winter-flowering species.

133343. CLEMATIS Sp.

K. W. No. 00161.

133344. CLETHRA Sp. Clethraceae.

K. W. No. 00124.

133345. CYDONIA sp. Malaceae.

K. W. No. 00302.

133346. FIRMIANA COLORATA (Roxb.) R. Br. (Sterculia colorata Roxb.). Sterculiaceae.

For previous introduction and description see 132882.

133347. GAULTHERIA Sp. Ericaceae.

K. W. No. 00128. An evergreen shrub.

133348. GENTIANA CAMPANULATA Jacq. Gentianaceae.

K. W. No. 0025-A. A perennial gentian with simple erect stems up to 2 feet high and heads of showy yellow campanulate flowers. Native to Europe.

133349. GENTIANA Sp.

K. W. No. 0025.

133350 and 133351. GORDONIA AXILLARIS (Roxb.) Dietrich. Theaceae.

A large evergreen shrub or small tree up to 25 feet high, native to southern China. The oblanceolate leaves, 4 to 6 inches long, are dark green above, and the solitary, creamy-white flowers are 2 to 4 inches across.

For previous introduction see 105018.

133350. K. W. No. 0099.

133351, K. W. No. 00139.

133352. Iris sp. Iridaceae.

K. W. No. 00393.

133353. LILIUM BAKERIANUM Coll. and Hemsl. Liliaceae.

Lily.

K. W. No. 0095.

For previous introduction and description see 133112.

133354. LILIUM OCHRACEUM Franch.

Lily.

K. W. No. 0090. A rare and beautiful lily from Burma. This is a very variable species producing flowers which range in color from deep golden yellow to pale yellow, stained in various degrees with deep wine purple. Received as variety burmanicum.

133355. PITTOSPORUM sp. Pittosporaceae.

K. W. No. 0075.

133356 to 133368. Rhododendron spp. Ericaceae.

133356. Rhododendron bullatum Franch.

K. W. No. 00346. A loosely branched shrub up to 8 feet high, native to Yunnan, China. The branchlets are densely and softly woolly; the elliptic ovate leaves, 2 to 4 inches long, are puckered above and loosely woolly pubescent beneath; and the broadly tubular, pink-tinged white flowers, 2 to 3 inches long, are borne in terminal clusters.

For previous introduction see 111744.

133357. RHODODENDRON DECORUM Franch.

K. W. No. 00100. A small bushy tree bearing many flowered trusses of large snow-white, fragrant flowers. Found growing in the upper limit of subtropical forest.

For previous introduction see 100337.

133358 and 133359. RHODODENDRON DENDRICOLA Hutchinson.

A small shrub, usually epiphytic, with leathery, oblong-elliptic, acuminate leaves 3 to 4½ inches long, scaly beneath, and umbels of about 3 pink-tinged white flowers. The corollas are over 3 inches long with widely funnel-shaped tubes and 5 rounded lobes, the lower ones having orange marks. Native to northern Burma.

133358. K. W. No. 00281.

133359. K. W. No. 0052.

133360. Rhododendron eriogynum I. B. Balf. and W. W. Smith.

K. W. No. 0051. A shrub or small tree with leathery, oblong elliptic to oblong-lanceolate leaves 6 to 9 inches long and racemose umbels of 12 to 16 flowers which are fleshy, bright-red, tubular, campanulate, and 2 inches long. Native to Yunnan Province, China, at 9,000 feet altitude.

133361. RHODODENDRON MEGACALYX Balf, f. and Ward.

K. W. No. 00532. A bushy tree 10 to 15 feet high, native to northeastern Burma between 7,000 and 9,000 feet altitude. The elliptic to obovate-elliptic leaves 4 to 6 inches long are glabrous above and glaucous with small scales beneath. The fragrant white flowers, in clusters of about 5, have a bell-shaped calyx 1 inch long, and the broadly funnel-shaped corolla is more than 2 inches long.

For previous introduction see 100349.

133362. RHODODENDRON STENAULUM I. B. Balf. and W. W. Smith.

K. W. No. 00135. A shrub up to 16 feet high, with oblong-lanceolate, acuminate leaves 3 to 5 inches long, bright glossy-green above; and fragrant solitary soft purplish-rose, narrow-funnel-shaped flowers 2 inches long. Native to Yunnan.

133363. Rhododendron Yunnanense Franch. Yunnan rhododendron.

K. W. No. 00399. A low shrub 6 feet or less high, with narrowly elliptic, somewhat hairy leaves, and few-flowered clusters of broadly funnel-shaped flowers, white with the upper lobes spotted blood red. Native to Yunnan, China.

For previous introduction see 127632.

133364. RHODODENDRON Sp.

K. W. No. 0071.

133365. RHODODENDRON Sp.

K. W. No. 00203.

133366. RHODODENDRON Sp.

K. W. No. 0062.

133367. Rhododendron sp.

K. W. No. 00204.

133368. RHODODENDRON Sp.

K. W. No. 00280.

133369. Rhodoleia sp. Hamamelidaceae.

K. W. No. 0053.

133370. Sterculia coccinea Roxb. Sterculiaceae.

An evergreen shrub or small tree with entire, oblong-lanceolate leaves 6 to 16 inches long and pink flowers ½ inch long in slender axillary panicles, followed by leathery crimson follicles 3 to 4 inches long. Native to India.

133371. STERCULIA VILLOSA ROXD.

A large deciduous tree with leaves crowded at the ends of the branches, densely tomentose beneath, deeply 5- to 7-lobed; the blade 12 to 18 inches across, the petiole as long as the blade; and yellow flowers on long slender pedicels loosely arranged in long drooping panicles and followed by leathery follicles up to 3 inches long and bright red when ripe. The bark fiber is used for making rope. Native to India.

133372. Tetracentron sp. Magnoliaceae.

K. W. No. 00199.

133373. VIBURNUM sp. Caprifoliaceae.

133374. Wikstroemia sp. Thymelaeaceae.

K. W. No. 00142.

133375. Zanthoxylum sp. Rutaceae.

K. W. No. 00216.

133376. Acanthorniza sp. Phoenicaceae.

Palm.

From Mexico. Plants presented by F. McDougall, Tonala, Chiapas. Received February 23, 1938. Numbered in June 1939.

Collected in the hills just north of Tonala.

133377. Agave parviflora Torr. Amaryllidaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered June 28, 1939.

A stemless agave which forms a rounded rosette about 8 inches in diameter, with many ascending, gray-dotted, dark-green leaves 4 inches long and ¼ inch wide and small greenish-white flowers in an inflorescence about 5 feet long. Native to Mexico.

For previous introducttion see 128339.

133378. CITRUS HYSTRIX DC. Rutaceae.

Cabuyao.

From Ceylon. Plants growing at the United States Plant Introduction Garden, Glenn Dale, Md.; originally grown by the Office of Crop Physiology and Breeding Investigations. Numbered October 21, 1939.

Originally received from J. C. Willis, Director, Royal Botanic Gardens, Peradeniya, Ceylon, April 1912.

For previous introduction see 109719.

133379 to 133381.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered June 30, 1939.

133379. Bougainvillea sp. Nyctaginaceae.

A seedling of P. I. 99527, from which this differs so completely that no relationship would be suspected. The large bracts are Rosolane Purple (Ridgway). It flowers freely, and in growth habit is rather similar to the variety *Crimson Lake*.

133380. Diospyros ebenaster Retz. Diospyraceae.

Black sapote.

Originally received from the Deering estate, Buena Vista, and presented by Dr. David Fairchild, January 1924. The tree is a vigorous grower of compact habit; the fruit, externally resembling a green tomato, has chocolate-colored flesh of pleasant flavor and good texture.

For previous introduction see 88366.

133381. MIMUSOPS ELENGI L. Sapotaceae.

Originally received from the Department of Agriculture of Mauritius in February 1929. A vigorous, compact handsome tree with ornamental orange-colored fruits which pucker the mouth like a green persimmon. The tree is said to be used as stock on which to graft the sapodilla.

For previous introduction see 116051.

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# Plant Inventory No. 140

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. July 1950



# 9

PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1939 (Nos. 133382 to 134283)

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This inventory, No. 140, lists plant material (Nos. 133382 to 134283) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1939. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

Paul G. Russell,

Botanist.

Plant Industry Station, Beltsville, Md.

#### INVENTORY

**133382 to 133385.** Musa spp. Musaceae.

Banana.

From Cuba. Plants presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received July 1, 1939.

133382 to 133384. Musa paradisiaca L.

Plantain.

- 13382. Burro. A short stubby fruit, coarse in flesh and inferior in quality to both the Macho and Hembra varieties.
- 133383. Hembra. This plantain resembles the Macho variety, but is somewhat smaller and is inferior in quality. The flesh is said to be harder.
- 133384. *Macho*. This is the largest and best of the plantains, or cooking bananas, and is the standard variety of commerce. The fruits are from 9 to 12 inches long.

133385. Musa paradisiaca var. sapientum (L.) Kuntze.

Morado. A short, thick fruit with a thinnish red skin. It is best baked when it becomes dry and mealy.

<sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

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# 133386 to 133389. Solanum spp. Solanaceae.

From Peru. Tubers presented by Victor Marie, Superintendent, Estación Experimental Agrícola de la Molina, Lima. Received July 5, 1939.

A collection of wild potatoes.

133386. Solanum medians Bitter.

Nightshade.

A potatolike species which grows wild on the coast region of Peru and is exceedingly productive. The tubers are commonly 1 to 2 inches long and 1 inch in diameter, and the flesh is white and crisp but is not considered good to eat. Of interest to potato breeders.

For previous introduction see 62691.

133387. Solanum neoweberbaueri Wittm.

From Morro Solar, near Cherrillos. A rare wild potato native to the dry coastal region in the environs of Lima and Callao, growing always in stony situations and depending on fog for its water supply. There are several tubers, about  $\frac{1}{2}$  inch in diameter, on each plant. The plant belongs to a series of which Solanum maglia is the most common.

For previous introduction see 99075.

133388 and 133389. SOLANUM WITTMACKII Bitter.

A rare wild potato.

For previous introduction see 99109.

133388. From the pampa of Amancaes, near Lima.

133389. The same species after being cultivated for 3 years by the Section of Botany.

#### 133390. Melocactus guitarti León. Cactaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received July 1, 1939.

A globose, depressed cactus; when mature, about 4 inches high and 6 inches in diameter, having about 12 prominent ribs, are oles 1 inch apart with 9 or 10 yellowish rigid radical spines 1 inch long and 2 central spines over an inch long. The rosy flowers, about  $1\frac{1}{2}$  inches long, are borne on a cephalium about 3 inches in diameter and are followed by red berries. Allied to *Melocactus caesius* and native to Cuba.

#### 133391 to 133393.

From Africa. Seeds purchased from the Mount Elgon Nurseries, Kitale, Kenya Colony. Received July 5, 1939.

133391. Canarina eminii Aschers. Campanulaceae.

A tuberous-rooted, creeping perennial up to 6 feet long, with showy, bell-shaped, orange-scarlet flowers 3 inches long. Native to tropical Africa.

For previous introduction see 127053.

133392. GLORIOSA VIRESCENS Lindl. Melanthiaceae.

Glorylily.

A vinelike perennial which supports itself by the tendril-bearing tips of the oblong-lanceolate leaves, 3 to 6 inches long. The yellow and red flowers, 3 inches across, borne in a lax terminal corymb, are reflexed and slightly undulate. Native to tropical Africa.

For previous introduction see 132703.

133393. CYPELIA HERBERTII Herb. Iridaceae.

A plant with a bulbous base and linear leaves about 1 foot long. The erect branched stalk, 2 to 3 feet high, bears 5 or 6 flowers, each about 3 inches across; the petals are orange red with green markings at the base. Native to southern Brazil, Uruguay, and northern Argentina.

For previous introduction see 127786.

#### 133394 to 133412.

From South Africa. Seeds presented by the Director, National Botanic Gardens of South Africa, Kirstenbosch, Newlands. Received July 5, 1939.

# 133394 to 133410. Lachenalia spp. Liliaceae.

#### 133394. LACHENALIA BACHMANNI Baker.

A lachenalia with usually 2 linear, canaliculate leaves 4 to 8 inches long and a dense subspicate raceme of campanulate flowers ¼ inch long, the oblong segments white with a red keel.

#### 133395. LACHENALIA CONTAMINATA Ait.

A species with 6 to 10 erect channeled leaves 9 inches long, becoming terete along the distal half, and a dense raceme of campanulate white flowers each up to ¼ inch long, the inner segments tipped greenish brown and the outer ones often flushed red and shorter.

#### 133396. LACHENALIA GILLETTII Baker.

A lachenalia with 2 bright-green erect or spreading, obtuse leaves 2½ inches or longer and a spike of many small, white, purple-tipped flowers having exserted stamens.

#### 133397. LACHENALIA GLAUCINA Jacq.

A species with usually 2 lorate, smooth, often spotted leaves and a rather dense spike of erect white, red, yellow, or blue-tinged flowers,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long.

#### 133398. LACHENALIA JUNCIFOLIA Baker.

A lachenalia with usually 2 subterete, smooth leaves 4 to 8 inches long, and a raceme of 6 to 12 flowers, white tinged with red, about 1 inch long.

#### 133399. LACHENALIA MATHEWSII Baker.

A plant with 2 erect leaves, attenuate at tips, 4 to 7 inches long, and a few small yellow flowers in a raceme.

#### 133400. LACHENALIA MEDIANA Jacq.

A species with 2 linear-lanceolate to oblong, smooth erect leaves 1 foot long or more, and a lax raceme of greenish-white tubular flowers each up to  $\frac{1}{3}$  inch long, the outer segments oblong with a pale-blue basal blotch, the inner with a small reddish apical blotch.

#### 133401. LACHENALIA Sp.

Introduced with the specific name "membranacea," for which a place of valid publication has not been found.

#### 133402. LACHENALIA MUTABILIS Sweet.

A lachenalia, variable in height, but often becoming 1 foot high, with a showy spike of 50 or more flowers; the corolla is ½ inch long and the outer segments are bright blue, later changing to yellow, while the inner segments are green with darker green dots. It is allied to Lachenalia orchioides.

#### 133403. Lachenalia orthopetala Jacq.

A species with 4 or 5 erect, linear, subulate leaves 4 to 6 inches long, channeled down the face, and a dense spikelike raceme 1 to 4 inches long of many whitish or red-tinged flowers about ½ inch long.

#### 133404. LACHENALIA PALLIDA Ait.

A lachenalia with 2 strap-shaped, pustulate or blistered leaves and a peduncle 6 inches long bearing a moderately dense raceme of white flowers; these are ¼ inch long, the outer segments tipped green and shorter than the inner.

#### 133405. LACHENALIA Sp.

Introduced under the specific name "pillansii," for which a place of valid publication has not been found.

## 133394 to 133412—Continued

133406. LACHENALIA REFLEXA Thunb.

A plant with 2 falcate thin lanceolate leaves 4 to 6 inches long, clasping the base of the stem for 1 to 2 inches, and a spike 2 to 6 inches high of erect-spreading, yellowish, few, rarely many flowers 1 inch long.

133407. LACHENALIA ROODEAE Phillips.

A lachenalia with 2 spreading, ovate-lanceolate leaves 3 inches or longer and a dense spike of many purplish, campanulate flowers.

133408. LACHENALIA Sp.

Introduced under the specific name "suaveolens," for which a place of valid publication has not been found.

133409. Lachenalia unicolor Jacq.

A perennial with, usually, strap-shaped leaves 6 inches long and 1 inch broad and a stiffly erect peduncle 6 inches high bearing a dense raceme 2 to 4 inches long of bell-shaped, bright-red flowers ¼ inch long.

For previous introduction see 93539.

#### 133410. LACHENALIA UNIFOLIA Jacq.

A lachenalia usually having a single linear leaf clasping the base of the stem for 2 or 3 inches. The bell-shaped white flowers, tinged with red or blue, are  $\frac{1}{2}$  inch long and are borne in a lax raceme on a peduncle 1 foot high.

133411. LITTONIA MODESTA Hook. f. Melanthiaceae.

A tuberous-rooted climbing vine resembling Gloriosa.

For previous introduction see 31849.

133412. Bowiea volubilis Hook. f. Liliaceae.

An asparaguslike perennial with a globose bulb 4 to 6 inches in diameter, small erect linear leaves, and a slender twining stem 6 to 8 feet long. The numerous small greenish flowers are less than  $\frac{1}{2}$  inch long. Native to southern Africa.

For previous introduction see 127060.

#### 133413 to 133415.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in July 1939.

133413. Agastache cana (Hook.) Wooton and Standl. Menthaceae.

Bell No. 31858. Collected in Hillsboro Canyon, Ariz., in 1937 by L. N. Goodding, of the Soil Conservation Service.

For previous introduction see 116854.

133414. Agastache Barberi (Robinson) Epling.

Bell No. 31857. Collected in Sycamore Canyon, Ariz., November 15, 1937, by L. N. Goodding, of the Soil Conservation Service. A herbaceous perennial with slender, simple stems about 2 feet high, ovate-lanceolate, crenate leaves, 1 to 2 inches long, and small deep-crimson flowers in a long narrow panicle. Native to northwestern Mexico and the southwestern United States.

133415. Lobelia cardinalis ssp. graminea (Lam.) McVaugh. Campanulaceae.

Bell No. 32057. Collected at Ropes Springs, N. Mex., in 1937 by L. N. Goodding, of the Soil Conservation Service. A perennial lobelia with several distinct geographical varieties; native from the western United States to Central America.

#### 133416 to 133426.

From Brazil. Plants presented by the Jardim Botanico, Rio de Janeiro. Received July 12, 1939.

133416. Brunfelsia grandiflora D. Don. Solanaceae.

# 133416 to 133426—Continued

133417. Caesalpina echinata Lam. Caesalpiniaceae.

A tall tree native to the coastal forests of Brazil. The wood is used for dye and for violin bows.

133418. Camellia Japonica L. (Thea japonica Baill.). Theaceae.

Common camellia.

For previous introduction see 105704.

133419. Syagrus weddelliana (Wendl.) Beccari (Cocos weddelliana Wendl.). Phoenicaceae.

A palm with a slender trunk up to 7 feet high and gracefully drooping pinnate leaves nearly reaching the ground. The leaves, about 3 feet long, have numerous linear equidistant pinnae. Native to tropical Brazil.

133420. Guillelma gasipaes (H. B. K.) Bailey (*G. speciosa* Mart.). Phoenicaceae. Pupunha.

A palm, native to the Amazon region, where it becomes 60 feet high, and, like the pejibaye (Guilielma utilis), to which it is closely allied, the freely produced fruits are an important food in regions where it is indigenous.

For previous introduction see 93758.

133421. Jasminum pubescens (Retz) Willd. Oleaceae. Slender jasmine.

A climbing or scrambling shrub with narrow-ovate leaves, bright green above and pubescent beneath, and fragrant white flowers, 1 inch across, in large dense hanging heads.

For previous introduction see 132878.

133422. Lophanthera lactescens Ducke. Malpighiaceae.

133423. Malpighia coccigera L. Malpighiaceae.

A shrub about 3 feet high, with small, sinuate-dentate, oval to orbicular leaves, shining above, and small pink flowers followed by edible red drupes. Native to the West Indies.

133424. Malvaviscus mollis (Ait.) DC. Malvaceae.

A low shrub with obscurely lobed, toothed or wavy-margined leaves, velvety-pubescent beneath, and showy red flowers. Native to tropical America from Mexico to Colombia.

133425. Petrea racemosa Nees and Mart. Verbenaceae.

A tender woody twiner with entire, cuspidate, oblong leaves 2 or 3 inches long and long racemes of showy blue flowers. Native to Brazil.

133426. Rhododendron indicum (L.) Sweet. Ericaceae. Indica azalea.

133427. Calyptronoma rivalis (O. F. Cook.) Bailey. Phoenicaceae. Palm.

From Puerto Rico. Seeds presented by W. K. Bailey, Agricultural Experiment Station, Mayaguez. Received July 1, 1939.

A stout erect palm up to 25 feet high, with large leaves of numerous gracefully drooping pinnae and the spadix usually more than 3 feet long. Native to Puerto Rico where it is known only near San Sebastian, Aguadilla.

133428. Omanthe costaricana (Oerst.) O. F. Cook. Phoenicaceae. Palm.

From Costa Rica. Seeds presented by the Goodyear Rubber Co., San José. Received July 5, 1939.

An attractive, small-tufted palm, sometimes 8 to 10 feet high, with striking clusters of bright-green leaves. The pinnae, 17 to 20 on a side, are similar to those of *Neanthe bella*. Native to Costa Rica.

For previous introduction see 132873.

### 133429 to 133434.

From Brazil. Seeds presented by the Departamento de Industria Animal, Secção de produção Animal, Serviço de Agrostologia, Rio de Janeiro, through O. W. Herrmann, Farm Credit Administration. Received July 7, 1939.

133429. Desmodium discolor Vogel. Fabaceae.

Marmelada de cavallo. A shrubby erect hairy plant from southern Brazil, with oval membranous leaflets and large panicles of light-blue flowers. Cultivated in Brazil for forage and silage, being cut while young, as it becomes woody with age.

For previous introduction see 89213.

133430. HYPARRHENIA RUFA (Nees) Stapf. Poaceae.

Capim Jaraguá.

For previous introduction see 123699.

133431. MELINIS MINUTIFLORA Beauv. Poaceae.

Molasses grass.

Capim catingueiro.

For previous introduction see 132806.

133432. Panicum Maximum Jacq. Poaceae.

Guinea grass.

Capim sempre verde.

For previous introduction see 117954.

133433. PASPALUM NOTATUM Fluegge. Poaceae.

Bahia grass.

Grama de Batatais. A perennial tropical American grass, good for forage and for erosion control.

For previous introduction see 121415.

133434. Pennisetum purpureum Schumach. Poaceae.

Napier grass.

Capim elefante. An excellent fodder grass.

For previous introduction see 132809.

133435 to 133438. Avena sativa L. Poaceae.

Oats.

From Latvia. Seeds presented by the Priekuli un Stende Experimental Farms, through the Latvian Legation, Washington, D. C. Received July 13, 1939.

133435. Baltas (white).

133436. Dzintara (amber).

133437. Mazas Agras (small, early).

133438. Vainaga (crown).

#### 133439 and 133440.

From Hawaii. Seeds presented by L. W. Bryan, Division of Agriculture and Forestry, Hilo. Received June 24, 1939. Numbered in July 1939.

133439. Styphelia tameiameiae (Cham.) Muell. Epacridaceae.

Puakeawe. An evergreen shrub or small tree with stiff linear or oblong leaves about  $\frac{1}{2}$  inch long and small whitish flowers followed by white to red berries about  $\frac{1}{4}$  inch in diameter. Native to the Hawaiian Islands at altitudes up to 6,000 feet.

133440. Myoporum sandwicense (A. DC.) A. Gray. Myoporaceae.

Naio. A tree 20 to 30 feet high, sometimes a shrub, with alternate oblong leaves up to 6 inches long crowded toward the ends of the branches and clusters of small white flowers. The heartwood becomes very fragrant when dried, with an odor resembling that of sandalwood.

For previous introduction see 68157.

# 133441. Arachis hypogaea L. Fabaceae.

Peanut.

From Brazil. Seeds presented by John H. Wheelock, Pasadena, Calif., obtained from the Lavras Agricultural School, Lavras, Minas Geraes. Received July 12, 1939.

Red peanuts, obtained from a native family near Lavras.

#### 133442 to 13346.

88.

From Africa. Seeds presented by the Mount Elgon Nurseries, Kitale, Kenya Colony, at the request of Maj. F. Chater Jack. Received July 12, 1939.

133442. BAUHINIA FASSOGLENSIS Kotschy. Caesalpiniaceae.

A scandent shrub with large, suborbicular, leathery leaves, the leaflets connate, and numerous large yellow flowers in rather lax racemes. Native to tropical Africa.

For previous introduction see 113837.

133443. CRAIBIA BROWNII Dunn. Fabaceae.

133444. LOBELIA ABERDARICA R. E. Fries and T. C. E. Fries. Campanulaceae.

133445. Lobelia sp. Campanulaceae.

133446. Pentas longiflora Oliver. Rubiaceae.

# 133447. Muscari Heldreichii Boiss. Liliaceae. Grape-hyacinth.

From Rumania. Seeds presented by the Botanic Garden, Cluj. Received May 31, 1932. Numbered in July 1939.

An early flowering bulbous perennial, native to Greece, with linear leaves and elongated heads of amethyst flowers on scapes 4 to 6 inches high.

For previous introduction see 76351.

# 133448. Mussaenda frondosa L. Rubiaceae.

From Fiji. Seeds presented by the Director of Agriculture, Colony of Fiji, through David Fairchild. Received in June 1939. Numbered in July 1939.

Collected May 24, 1939, at Waidina, Fiji. A low erect shrub with oblong to ovate leaves and terminal cymes of yellow flowers with enlarged white calyx lobes. Native to India at altitudes up to 4,000 feet.

For previous introduction see 17708.

# 133449 and 133450. Citropsis spp. Rutaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in July 1939.

133449. CITROPSIS GILLETIANA Swingle and M. Kellerman.

Received about 1913 as seeds from Brother Gillete, of the Botanic Garden at Kisantu, Belgian Congo.

A spiny tree up to 30 feet high, with large leathery 3- to 5-foliolate leaves and numerous white flowers in axillary racemes, followed by globular, lemon-colored fruits about 1 inch in diameter. It is considered an important disease-resistant rootstock for cultivated citrus fruits. Native to the Belgian Congo.

133450. CITROPSIS SCHWEINFURTHII (Engler) Swingle and M. Kellerman.

C. P. B. 2902. Trees grown from seeds received from Uganda, British East Africa. A spiny shrub or small tree with 3- to 5-foliolate leaves and large white flowers in small axillary clusters. The orangelike fruits are about 1 inch in diameter. Native to tropical Africa.

For previous introduction see 109621.

# 133451. HIPPEASTRUM CANDIDUM Stapf. Amaryllidaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered July 15, 1939.

Originally collected at Port-au-Prince, Haiti, by the Allison V. Armour Expedition to the West Indies, and received May 4, 1933. A hippeastrum with narrow strap-shaped leaves about 1 foot long and a scape 2 feet high, having an umbel of 6 slightly sweet-scented flowers. The slender greenish perianth tube is about 4 inches long. The outer segments, 4 to 5 inches long with crisped margins, are oblanceolate, pure white, except the base, which is slightly suffused with green. The inner segments are similar but narrower. Native to Argentina.

#### 133452 and 133453.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in July 1939.

133452, Ardisia humilis Vahl. Myrsinaceae.

Plants grown from seeds sent from the Experiment Station, Eala, Belgian Congo, in January 1929. A bushy evergreen shrub 7 feet high, with thick elliptic leaves up to 4 inches long and abundant fruits ripening in the autumn and suggesting black shoe buttons.

133453. Brosimum alicastrum Swartz. Moraceae.

Plants grown from seeds collected at Petén, Guatemala, by O. F. Cook, of the Bureau of Plant Industry. A large tropical American tree with shining green, narrowly elliptic leaves, and round, orange-yellow, 1-seeded fruits about 1 inch in diameter. The fresh and fallen leaves are greedily eaten by cattle, as are also the starchy seeds.

For previous introduction see 66694.

# 133454 to 133456. Oryza sativa L. Poaceae.

Rice.

From the Federated Malay States. Seeds presented by the Director, Department of Agriculture, Kuala Lumpur. Received July 18, 1939.

A collection of dry-land rice, from Kelantan, Malaya.

133454. Jintan Kering.

133456. Sa-Brumi (Putch).

133455, Kaki Merpati,

# 133457 to 133465. Triticum aestivum L. Poaceae. Common wheat.

From Egypt. Seeds presented by the Ministry of Agriculture, El Giza. Received July 20, 1939.

133457. Beladi 116.

133462. Giza 7.

133458. Beladi 164.

133463, Giza 121.

133459. Durum H 2.

133464, Hindi D.

133460. Giza 1 E.

133465. Hindi 62.

133461. Giza 4.

#### 133466 to 133473.

From Sweden. Seeds presented by Dr. G. Nilsson-Leissner, Plant Breeding Institute of Svalöf, Svalöf. Received July 13, 1939.

133466 to 133468. Phleum pratense L. Poaceae.

Timothy.

133466. Bore.

133468. Gloria.

133467. Bottinia.

133469 to 133471. Poa spp. Poaceae.

Bluegrass.

133469. Fylking.

133471. Skandia II.

133470. Skandia I.

133472 and 133473. TRIFOLIUM REPENS L. Fabaceae.

White clover.

133472. F. C. No. 13213.

133473, F. C. No. 13214.

#### 133474 to 133478.

From New Zealand. Seeds presented by E. Bruce Levy, Director, Plant Research Bureau, Palmerston North. Received July 15, 1939.

133474 and 133475. LOLIUM MULTIFLORUM Lam. Poaceae. Italian ryegrass.

133474. New Zealand Certified Mother; Bb 277.

133475. New Zealand Pedigreed Bb 267.

133476 to 133478. LOLIUM PERENNE L. Poaceae.

Perennial ryegrass.

133476. New Zealand Government Stock Ba 6401.

133477. New Zealand Certified Mother; Ba 6421.

133478. New Zealand Certified Permanent Pasture Ba 6443.

# 133479 and 133480. Lupinus spp. Fabaceae.

Lupine.

From England. Seeds presented by H. Hope, Midland Agricultural College, Sutton Bonington, Loughborough. Received July 17, 1939.

133479. LUPINUS ANGUSTIFOLIUS L.

Sweet Blue Lupin.

133480. Lupinus luteus L.

European yellow lupine.

Pedigree Yellow Sweet Lupin.

## **133481 to 133492.** Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by J. B. Griffing, Director, Escola Superior de Agricultura, Viçosa, Minas Geraes. Received July 21, 1939.

A collection of cottonseeds. Each lot is from a single plant of superior progeny.

133481. Y. 278-12, 15.6, 25.32, 87.

133482, Y. 528-18, 12.1, 6.6, 35.26, 29.18.

133483. Gr. 6-10, 19.7, 11.4, 36.8, 28.2.

133484. Y. 38-9, 10.9, 5.81, 34.7, 28.6.

133485. Y. 278-5, 12.04, 6.32, 34.5, 28.12.

133486. Gr. C-36, 18.82, 11.3, 37.5, 30.08.

133487. Y. 38.11, 10.75, 5.5, 33.8, 30.5.

133488. Y. 528-25, 11.3, 7.0, 38.2, 27.2.

133489. Y. 278-7, 13.19, 7.18, 35.3, 30.25.

133490. Gr. C-29, 18.22, 11.6, 38.9, 27.22.

133491. Y. 278-17, 12.4, 6.18, 33.5, 30.36,

133492. Gr. C-40, 17.06, 11.66, 40.6, 26.68.

# 133493 and 133494. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

From Germany. Seeds presented by Dr. A. Schultz, Versuchs und Forschungsanstalt für Gartenbau, Berlin-Dahlem. Received July 21, 1939.

133493. Böettner Trieb.

133494. Maikönig Trieb.

# 133495. Hibiscus cannabinus L. Malvaceae. Ambari hemp.

From Brazil. Seeds presented by J. B. Griffing, Director, Escola Superior de Agricultura, Viçosa, Minas Geraes. Received July 21, 1939.

For previous introduction see 133034.

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133496. Citrus aurantifolia (Christm.) Swingle. Rutaceae. Lime.

From Surinam. Budsticks presented by Dr. D. S. Fernandez, Director, Colony of Surinam, Paramaribo. Received July 22, 1939.

A spineless and seedless form.

## 133497 to 133540.

From Australia. Plants purchased from L. P. Rosen & Sons, Carlingford, New South Wales. Received July 25, 1939.

133497 to 133510. Amygdalus persica L. Amygdalaceae. Peach.
133497. Bell's November. 133504. King of All.

 133498. Black Braddock.
 133505. Late Queen.

 133499. Braddock Imperial.
 133506. Mannell's Slip.

133500. Eclipse. 133507. Meteor.

133501. Elberta Camden. 133508. Phillip's Cling.

 133502. Italian Cling.
 133509. Pioneer.

 133503. Italian Slip.
 133510. Rennie.

133511 to 133519. Malus sylvestris Mill. Malaceae. Apple.

Apricot.

133511. Allsopp's Early. 133516. Kirks.

133512. Auradell. 133517. Mobb's Royal.

 133513. Carrington Striped.
 133518. Ruby Gem.

 133514. Dandry.
 133519. Waldron.

133515. Frimley.

133520 to 133523. Prunus armeniaca L. Amygdalaceae.

133520. Camden Superb. 133522. Glengarry.

133521. Cattell Early. 133523. Shipley Blenheim.

133524 to 133538. Prunus sp.

A collection of named plums.

133524. Anderson's Early.

133532. Jewel King.

133525. Chalco. 133533. King of Damsons.

 133526. Croswell's Prolific.
 133534. Lutherborough.

 133527. Discovery.
 133535. McNamara.

133528. Doris. 133536. Mrs. Burt.

133529. Early Gem. 133537. Paterson Early.

133530. Early Jewel. 133538. Tibbitt's.

133531. Early Purple.

133539 and 133540. Pyrus communis L. Malaceae. Common pear.

133539. Bailey's Bergamot.

133540. China.

# 133541 and 133542. Lycopersicon esculentum Mill. Solanaceae.

From Ecuador. Seeds presented by Commander George H. Dyott, through the consulate general, Guayaquil. Received July 21, 1939.

133541. A tomato found growing on low, very wet land. The vine was strong and healthy and produced a large number of exceptionally big fruits.

133542. A wild tomato which produces deep-red fruits  $\frac{3}{2}$  to  $\frac{1}{2}$  inch in diameter and 6 to 8 in a cluster set well apart. The vigorous healthy plant from which these seeds were collected covered a circle 10 feet in diameter.

#### 133543 to 133595.

From Australia.	Plants purch	hased from G.	A. Nobelius	& Sons,	Gembrook Nurs-
eries, Emeral	d, Victoria.	Received July	y 25, 1939.		

133543 to 133556. AMYGDALUS PERSICA L. Amygdalaceae. Peach.
133543. Barwon. 133550. Peak Cling.
133544. Bell's November. 133551. Peregrine.
133545. Catherine Ann. 133552. Pickering.

133546. Chapman. 133553. Pumps Seedling. 133547. Elberta Cling. 133554. Sure Crop.

133548. Hawkesbury Champion. 133555. Webb's Seedling.

133549. Ireland's Seedling. 133556. Willow-leaved Elberta.

133557 and 133558. Amygdalus persica var. nectarina Ait. Amygdalaceae. Nectarine.

133557. Fripp's Late.

133558. Victoria Rivers.

133559 to 133571. Malus sylvestris Mill. Malaceae. Apple.

133559. Australian Beauty. 133566. Red Statesman.

133560. Golden Reinette. 133567. Rymer.

 133561. Hopton.
 133568. Scarlet Pearmain.

 133562. Loy.
 133569. Sharp's Early.

 133563. November of Collins
 133569. Sharp's Early.

133563. Newmann's Seedling.133570. Stone Pippin.133564. Prince Alfred.133571. Summer King.

133565. Red Pomme de Neige.

133572 to 133584. Prunus spp. Amygdalaceae.

133572. Black Diamond cherry. 133579. Late Black Orleans plum.

133573. Dark Florence cherry.133580. Maguire plum.133574. Cole's Superior plum.133581. Purple Gage plum.133575. Crittendens plum.133582. Red Cherry plum.133576. Decaisne plum.133583. Splendor plum.133577. Emerald plum.133584. Yellow Cherry plum.

133578. Kirks plum.

133585 to 133590. Prunus armeniaca L. Amygdalaceae. Apricot.

 133585. Alsace.
 133588. Oullins.

 133586. Blenheim.
 133589. Roxburgh.

 133587. Newcastle.
 133590. Royal.

133591 to 133595. Pyrus communis L. Malaceae. Common pear.

133591. Black Achan. 133594. Stanley.

133592. Corona. 133595. Trésorier Lesacher.

133593. Packman's Late.

133596 to 133599. Prunus avium L. Amygdalaceae. Mazzard.

From the Netherlands. Seeds presented by the Arboretum Landbouwhoogeschool, Wageningen. Received July 25, 1939.

133600. Erica cinerea var. fulgida Regel. Ericaceae.

From England. Plants purchased from Prichard & Sons, Christchurch, Hants. Received September 30, 1935. Numbered in July 1939.

A very striking variety with red, almost scarlet flowers, but less vigorous than the type.

## 133601 to 133608.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, Tiflis Botanical Institute, Tiflis. Received July 31, 1939.

133601 to 133604. Bellevalia spp. Liliaceae.

133601. Bellevalia longistyla (Miscz.) Grossh.

A bulbous plant with lanceolate leaves about 1 foot high and  $\frac{1}{2}$  inch wide, and a panicle of 15 to 25 small rusty-purple, campanulate flowers. Native to the Caucasus region.

For previous introduction see 115865.

133602. Bellevalia makuensis Voronov.

A bulbous plant, native to dry places in the Caucasus, with leaves 8 to 12 inches long and  $\frac{1}{2}$  inch wide and a broad panicle of small brown-violet flowers.

For previous introduction see 108784.

133693. Bellevalia speciosa Voronov.

A bulbous plant native to Armenia and Transcaucasia, with 4 or 5 lorate narrow leaves about 6 inches long with narrow cartilaginous margins and small yellow flowers in a dense raceme about 7 inches long.

For previous introduction see 108785.

133604. Bellevalia Wilhelmsii (Stev.) Voron.

133605. CYCLAMEN IBERICUM Stev. Primulaceae.

A dwarf herbaceous perennial with oval-rounded leaves zoned with white, also purple flowers with darker-colored throats. Native to the Caucasus region.

For previous introduction see 109794.

133606. Muscari colchicum Grossheim. Liliaceae.

Grape-hyacinth. Grape-hyacinth.

133607. Muscari tenuiflorum Tausch. Liliaceae.

A grape-hyacinth from south-central Europe, similar to *Muscari comosum*, but generally smaller, with upright, narrower, linear leaves as tall as the stem, which is about 1 foot high. The lower fertile flowers, in a cylindrical raceme, are apple green with deep-brown, slightly recurved segments, while the numerous sterile flowers form a rather dense, long raceme above.

For previous introduction see 90636.

133608. Sternbergia colchiciflora Waldst. and Kit. Amaryllidaceae.

An autumn-blooming sternbergia with 4 to 6 erect linear leaves 3 to 4 inches long and bright-yellow flowers with the cylindrical perianth tube ½ inch or longer, also oblanceolate segments about 1 inch long. Native to southern Europe.

# 133609 and 133610. Prunus avium L. Amygdalaceae. Mazzard.

From Denmark. Seeds presented by the Universitetets Botaniske Have, Köbenhavn. Received July 31, 1939.

133609. Seeds from plants grown in the botanic garden at Copenhagen.

133610. Seeds from wild trees, collected in northern Sjaelland.

# 133611 to 133620. Solanum spp. Solanaceae.

From Argentina. Tubers presented by Paul O. Nyhus, Agricultural Attaché, American Embassy, Buenos Aires. Received August 8, 1939.

133611 to 133617. Solanum andigenum Juzepchuk and Bukasov.

A tuberous solanum native to Peru.

133611. Var. Del Cerro.

133612. Var. Runa Blanca.

# 133611 to 133620—Continued

133613. Var. Runa Colorada No. 1.

133614. Var. Overa.

133615. Var. Rumi Blanca.

133616. Var. Rumi Colorada No. 6.

133617. Var. Criolla Colorada.

133618. Solanum garciae Juzepchuk and Bukasov.

A tuberous herb, native to Argentina. Allied to Solanum gibberulosum.

For previous introduction see 133072.

133619. Solanum gibberulosum Juzepchuk and Bukasov.

A tuberous herb, native to Argentina.

For previous introduction see 133073.

133620. Solanum horovitzii Bukasov.

A tuberous herb with stems about 18 inches high. Allied to Solanum setulosum. Native to Argentina.

# 133621. Diospyros discolor Willd. Diospyraceae. Mabolo.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in July 1939.

Originally from Puerto Rico. A medium-sized tree with shining leaves 5 to 10 inches long, pubescent beneath. The velvety, dull-reddish, thin-skinned fruits, 3 inches long and nearly 4 inches in diameter, have firm, rather dry flesh of rather indefinite sweet flavor and 4 to 8 large seeds. Native to the Philippine Islands.

For previous introduction see 106988.

# 133622. Dendrocalamus asper (Schultes) Backer. Poaceae.

Bamboo.

From Surinam. Plants presented by the Department of Agriculture of Surinam, Paramaribo. Received August 1, 1939.

133623. Solanum sp. Solanaceae.

From Peru. From the Estación Experimental La Molina, Lima. Received August 8, 1939.

# 133624. Triticum aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by the University of Sydney, Sydney, New South Wales. Received August 8, 1939.

#### 133625 and 133626.

From Mexico. Bulbs presented by Christian Halbinger, Mexico, D. F. Received August 9, 1939.

133625. Nothoscordum bivalve (L.) Britton. Liliaceae.

A bulbous perennial with linear basal leaves and a scape about 1 foot high, bearing an umbel of small yellow flowers.

For previous introduction see 92497.

133626. Zephyranthes sp. Amaryllidaceae.

# 133627. Amygdalus persica L. Amygdalaceae.

Peach.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered August 9, 1939.

Seedling of P. I. 84273, the seeds of which were collected by H. L. Westover, Bureau of Plant Industry, in the market of Chimbai, Russian Turkistan, September 23, 1929.

# 133628. Zephyranthes sp. Amaryllidaceae.

From Mexico. Bulbs presented by Christian Halbinger, Mexico, D. F. Received August 12, 1939.

# 133629 to 133727. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received August 14, 1939.

133629. SOLANUM ARACC-PAPA Juzepchuk.

K. D. 82-A. A species native to Peru.

133630 to 133640. Solanum ajuscoense Bukasov.

133630. K. D. 191.

133631. K. D. 193.

133632, K. D. 195.

133633, K. D. 196.

133634. D. 197.

133635. D. 198.

Bukasov.

133636. D. 199. 133637. D. 200.

133638, D. 201.

133639, K. D. 202.

133640, D. 203,

133641 to 133655. Solanum antipoviczii Bukasov.

133641 to 133648. Forma coloratum.

133641. K. D. 128.

133641. K. D. 128.

133642. K. D. 129. 133643. K. D. 130.

133644. D. 136.

133645. K. 137.

133646. K. D. 138.

133647. D. 139.

133648, K. D. 143.

133649. D. 157. Forma densipilosum.

133650. D. 158. Forma densipilosum.

133651 to 133655. Variety Gundara.

133651. K. D. 147.

133654. K. D. 151.

133652. D. 149.

133655, K. D. 156,

133653, K. D. 150.

133656 to 133659. Solanum Boergeri Bukasov.

133656. K. D. 46.

133658, K. D. 46-4.

133657. K. D. 46-2.

133659. K. D. 46-12.

133660. Solanum catarthrum Juzepchuk.

B-32. A species with stems up to 12 inches high. Native to the Peruvian Andes.

For previous introduction see 133056.

133631. SOLANUM Sp.

B-46. Received under the specific name "chocclo," for which a place of valid publication has not been found.

For previous introduction see 133068.

133662. Solanum Emmeae Juzepchuk and Bukasov.

No. B-23.

133663. Solanum Garciae Juzepchuk and Bukasov.

No. K-11. A species native to Argentina. Allied to Solanum gibberulosum. For previous introduction see 133072.

# 133629 to 133727—Continued

133664. Solanum Gibberulosum Juzepchuk and Bukasov.

No. D-44. A species native to Argentina.

For previous introduction see 133078.

133665. SOLANUM LAPLATICUM Bukasov.

No. K-7. A species with stems about 1 foot high. Allied to Solanum commersonii. Native to Argentina.

For previous introduction see 133078.

133666 to 133682. Solanum leptostigma Juzepchuk.

A wild potato similar to Solanum tuberosum in habit. Native to Chile.

133675. K. D. 108. 133666. D. 90. 133667. D. 91. 133676. K. D. 110. 133677. K. D. 112. 133668. D. 97. 133669. K. D. 99. 133678. K. D. 114. 133670. D. 100. 133679. K. D. 115. 133671. K. D. 102. 133680. K. D. 119. 133672. K. D. 105. 133681. K. D. 120. 133673. K. D. 106. 133682. K. D. 121.

133674. K. D. 107. 133683. SOLANUM SP.

K. D. 39. Received under the specific name "macmillanii," for which a place of valid publication has not been found.

133634 to 133791. Solanum macolae Bukasov.

A species with stems over 1 foot high, native to Argentina.

For previous introduction see 133126.

133684. D. 53. 133693. K. D. 67. 133685, K. D. 55. 133694. K. D. 68. 133686, K. D. 57. 133695, K. D. 69. 133687. K. D. 58. 133696. D. 70. 133688, K. D. 59. 133697, K. D. 71. 133689. K. D. 61. 133698. K. D. 72. 133690, K. D. 62, 133699, K. D. 73. 133691. K. D. 63. 133709, K. D. 74. 133692. K. D. 65. 133701. K. D. 76.

133702. Solanum Mamilliferum Juzepchuk and Bukasov.

Native to southern Peru and Bolivia.

133704. K. D. 123.

For previous introduction see 133081.

133703. Solanum Millanii Bukasov and Lechnovitz.

133704 to 133707. Solanum molinae Juzepchuk.

A wild potato similar in habit to Solanum maglia. Native to Chile.

133706. K. D. 125.

133705. K. D. 124. 133707. K. D. 129.

133708. Solanum Parodii Juzepchuk and Bukasov,

A species native to Argentina, allied to Solanum gibberulosum.

For previous introduction see 133084.

## 133629 to 133727—Continued

133709 to 133724. Solanum schickii Juzepchuk and Bukasov.

A species native to Argentina, allied to Solanum chacoensis.

For previous introduction see 133127.

133709, K. D. 24. 133717, K. D. 33. 133710. D. 25. 133718. K. D. 34. 133711. D. 26. 133719. K. D. 35. 133712, K. D. 27. 133720, K. D. 36. 133713. D. 28. 133721. K. D. 37. 133714. D. 29. 133722. K. D. 38. 133723, K. D. 39. 133715, D. 30. 133716, K. D. 32. 133724. K. D. 54.

133725. Solanum verrucosum Schlecht.

No. K. D. 211. A Mexican potato closely related to Solanum tuberosum.

133726. Solanum leptostigma Juzepchuk.

No. K. D. 111. A wild potato similar to *Solanum tuberosum* in habit. For previous introduction see 133682.

133727. SOLANUM Sp.

No. D. 122.

# 133728. Hibiscus cannabinus L. Malvaceae.

Ambari hemp.

From Brazil. Seeds presented by Dr. John B. Griffing, Escola Superior de Agriculture e Veterinaria, Viçosa, Minas Gerais. Received August 15, 1939.

For previous introduction and description see 133495.

### 133729 to 133737.

From Australia. Plants purchased from Lasscock's Nurseries, Lockleys, South Australia. Received August 17, 1939.

133729 and 133730. Amygdalus persica L. Amygdalaceae. Peach. 133729. Crimson, a double-flowering peach.

133730. Mellor Park Crimson, a double-flowering peach.

133731. CITRUS LIMON (L.) Burm. f. Rutaceae.

Lemon.

Seedless Lisbon.

133732 and 133733. CITRUS NOBILIS VAR. DELICIOSA (Ten.) Mandarin orange. 133732. Beauty of Glen Retreat. 133733. Canton.

133734. CITRUS Sp.

Compuda orange.

133735. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceae. Loquat. Chatsworth Victory.

133736. Malus sylvestris Mill. Malaceae.

Cleopatra.

Common rhubarb.

Apple.

133737. RHEUM RHAPONTICUM L. Polygonaceae. Common r
Mould's Crimson.

# 133738 to 133740. Amygdalus persica L. Amygdalaceae. Peach.

From the Union of South Africa. Plants purchased from J. A. Herholdt & Sons Nurseries, Johannesburg. Received August 18, 1939.

133738. Alpha Supreme.

133739. Early Dawn.

133740. Jubilee.

#### 133741 to 133760.

From Australia. Plants purchased from Balhannah Nurseries, Balhannah, South Australia. Received August 24, 1939.

133741 to 133747. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

133741. Lady Palmerston.

133742. Millicent.

133743. Riverside (formerly Late Red Italian).

133744. Sims.

133745. Smiths.

133746. Wright's Early.

133747. Zerbes.

133748. CYDO NIA OBLONGA Mill. Malaceae.

Quince.

Smyrna.

For previous introduction see 128646.

133749 to 133752. Malus sylvestris Mill. Malaceae.

Apple.

133749. Red Statesman.

133750. Stone Pippin.

133751. Strawberry Pippin.

133752. Summer Strawberry.

133753 to 133759. Prunus spp. Amygdalaceae.

133753 to 133756. Prunus armeniaca L. Amygdalaceae.

Apricot.

133753. Newcastle Early.

133754. Oullins Early.

133755. Riverside.

133756. Skuse's Late.

133757. PRUNUS Sp.

Driver's Up-To-Date cherry.

133758. PRUNUS INSITITIA L.

Cole's Prolific damson.

133759. PRUNUS SALICINA L. Rubio.

Japanese plum.

133760. PYRUS COMMUNIS L. Malaceae.

Common pear.

Passans du Portugal.

133761. Gossypium sp. Malvaceae.

Cotton.

From Jamaica. Seeds presented by A. G. McCatty, Kingston. Received August 5, 1939.

Wild cottonseed collected on an island off the coast of Jamaica.

133762 to 133836. Solanum spp. Solanaceae.

From the Union of Soviet Socialist Republics. Tubers presented by the Institute of Plant Industry, Leningrad. Received August 26, 1939.

133762. SOLANUM ARACC-PAPA X GONIOCALYX.

K 9-170a-3.

133763. SOLANUM ARACC-PAPA X RYBINII.

K 9-193.

877548-50-3

# 133762 to 133836—Continued

133764. Solanum aracc-papa × rybinii × balinii.

K 9-194.

133765 and 133766. Solanum boyacense X aracc-papa.

133765. K 9-197a.

133766. K 9-198.

133767 to 133773. Solanum bukasovii × aracc-papa.

133767. 9-37, 7-22.

133771. 9-37-3, 7-22.

133768. 9-37, 7-22-1.

**133772.** 9–37–6, 7–22.

**133769.** 9–37, 7–22–5.

133773. K 9-69.

**133770.** 9-37, 7-22-7.

133774 to 133778. Solanum catarthrum × betula.

133774. 9-249. 5-238-1.

133777, 9-249, 5-238-4.

**133775.** 9–249, 5–238–2.

133778. 9-249, 5-238-5.

**133776.** 9–249, 5–238–3.

133779 to 133790. SOLANUM CHAUCHA X ARACC-PAPA.

133779. 9-154, B 63-1.

133785. K-9-155.

133780. 9–154. B 63–2.

133786. 9-155, 5-72-3.

133781, 9-154, B 63-3.

133787. 9-155, 5-72-4.

**133782.** 9–154, B 63–4.

133788. 9–155, 5–72–5.

**133783.** 9–154. B–63–5. **133784.** 9–154, B 63–6.

**133789.** 9–155, 5–72–6. **133790.** 9–155, 5–72–8.

133791 to 133807. SOLANUM CIECAE X RYBINII.

133791, 9-157, 5-163-2.

133800. 9-167, N 38-9-7.

133792. 9-167.

133801. 9–167, N 38–9–9.

**133793.** 9–167–6.

133802. 9–167, N 38–9–13.

133794. 9–167–21. 133795. 9–167. N 38–9. 133803. 9–167, N 38–9–16. 133804. 9–167, N 38–9–26.

133796. 9–167, N 38–25.

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133797. 9-167, N 38-9-2.

133805. 9–167–18, N 38–9.

133798. 9–167, N 38–9–28.

133806. 9–167–22, N 38–9.

133799. 9–167, N 38–9–5.

133807. 9-167-27, N 38-9.

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133808 and 133809. Solanum emmeae × goniocalyx.

133808. 9-168, A-4.

133809. 9-168, 7-8, A-11.

133810. Solanum garciae × schickii.

9-13.

133811 and 133812. Solanum gibberulosum X macolae.

133811. 9-30, N 39-10A.

133812. 9-30, N 39-10C.

133813 to 133818. SOLANUM GIBBERULOSUM X SCHICKII.

133813. K 9-10, 5-946-3.

133816. K 9-12.

133814. K-9-10, 5-946-4.

133817. K 9–12, 5–369–3.

133815. K 9-10. 5-946-6.

133818. K-9-12, 5-369-5,

# 133762 to 133836—Continued

133819. Solanum goniocalyx  $\times$  bukasovii  $\times$  rybinii.

9 - 196

133820. Solanum kesselbremeri × aracc-papa.

9-202.

133821. Solanum kesselbremeri × emmeae.

9-201.

133822 and 133823. Solanum Kesselbremeri X Phureja.

133822. 9-143.

133823, 9-144,

133824. SOLANUM LAPLATICUM X SCHICKII.

K 9-2.

133825 to 133830. Solanum macolae × catarthrum.

133825. 9-32, 5-61-2.

133828. 9-32, 5-61-16.

133826. 9-32, 5-61-5.

133829. 9-32. 6-61-9.

133827. 9-32, 5-61-7.

133830. 9-32, 6-61-15.

133831. Solanum phureja  $\times$  aracc-papa.

9-142.

133832. Solanum Rybinii  $\times$  Emmeae.

9-192.

133833. Solanum rybinii imes goniocalyx imes bukasovii.

9-195.

133834. SOLANUM CHAUCHA X RYBINII.

9-156 A.

133835. Solanum schickii × horovitsii.

9-19

133836. Solanum schickii × rybinii.

9-188, 5-182-3-1.

# 133837. Ixora sp. Rubiaceae.

From Puerto Rico. Plants presented by Atherton Lee, Director, Puerto Rico Experiment Station, Mayaguez. Received August 28, 1939.

Double Red. Originally obtained from Trinidad.

# 133838 to 133842. Prunus spp. Amygdalaceae.

From Massachusetts. Budsticks presented by Alfred Rehder, Arnold Arboretum, Jamaica Plain. Received August 28, 1939.

133838. Prunus avium var. aspleniifolia (Kirchn.) Jaeg.

A variety with deeply and irregularly toothed leaves.

133839. PRUNUS CERASUS L.

Sour cherry.

Rhexii.

133840. Prunus cerasus var. salicifolia Jaeg.

A variety with narrow leaves 4 to 6 inches long that are coarsely and doubly serrate.

133841. PRUNUS CERASUS VAR. UMBRACULIFERA Jaeg.

A variety of compact rounded habit, with small leaves.

# 133838 to 133842—Continued

133842.  $\times$  Prunus fontanesiana (Spach) C. Schneid. (Prunus avium  $\times$  mahaleb.)

An ornamental cherry resembling *Prunus avium*, with slightly pubescent branches, smaller and broader leaves less than 4 inches long, often rounded or subcordate at the base; flowers less than 1 inch across, and small dark-red, somewhat bitter fruits.

# 133843. Caesalpinia mexicana A. Gray. Caesalpiniaceae.

From Mexico. Seeds presented by Peter Heinz, Brownsville, Tex. Received August 24, 1939.

A shrub or small tree with oblong or orbicular leaflets up to 1 inch long and large racemes of rather large, yellow flowers which are borne throughout the year. Native to Mexico.

# 133844. Amygdalus persica L. Amygdalaceae.

Peach.

From California. Plants growing in the United States Plant Introduction Garden, Chico. Numbered August 30, 1939.

Selection (E-95-26). A freestone peach, Elberta type; flesh yellow tinged with red around the pit.

This is a seedling from P. I. 82646, which was received January 8, 1930. Collected by W. E. Whitehouse, Bureau of Plant Industry, in Andijan, Turkistan, U. S. S. R.

#### 133845 to 133888.

From New Zealand. Plants presented by H. R. Wright, Avondale, Auckland. Received August 30, 1939.

133845 to 133870. Amygdalus persica L. Amygdalaceae.

Peach.

133845. Black Prince.

133846. Free King.

133847. Free Queen.

133848. Golden Honey Cling Peacherine.

133849. Golden Honey Freestone.

133850. Golden Queen, late.

133851. Golden Queen, Seedling No. 1.

133852. Golden Queen, Seedling No. 2.

133853. Golden Queen, Seedling No. 3.

133854. Golden Queen, Seedling No. 4.

133855. Golden Queen, Seedling No. 5.

133856. Golden Queen, Seedling No. 6.

133857. Golden Queen, Seedling No. 7.

133858. Golden Queen, Seedling 'No. 8.

133859. Goodhue.

133860. Lippiatt's Large Queen.

133861. Lippiatt's Late, freestone.

133862. Pickering.

133863. Rikaku Jap.

133864. Rising Sun-Jap

133865. Tanaka Wase Jap.

133866. Tashebana Wase Jap.

133867. Turners Peacharine (J. H. Hale X Goldmine Nectarine).

#### 133845 to 133888—Continued

133868. Taylor's Red.

133869. White Elberta.

133870. Wright's Bountiful.

133871 to 133874. Amygdalus persica var. nectarina Ait.

Nectarine.

133871. Golden Cling, yellow flesh.

133872. Roxburgh, yellow flesh.

133873. Smart Red Wonder.

133874. Udy's Cling. Fine quality and later than Goldmine.

133875 to 133878. CITRUS spp. Rutaceae.

133875 and 133876. CITRUS LIMON (L.) Burm. f.

Lemon.

133875. Italian Pink Flesh.

133876. Variegated sport from Italian Pink Flesh.

133877. CITRUS AURANTIFOLIA (Christm.) Swingle.

Lime.

A seedless lime from Italy, with a very thin rind.

133878. CITRUS GRANDIS L.

Grapefruit.

Wheeny.

133879. Fragaria sp. Rosaceae. Wright's Prolific, strong grower.

Strawberry.

133880. Malus sylvestris Mill. Malaceae.

55880. MALUS SYLVESTRIS MIII. Maiaceae.

Apple.

133881 to 133888. PRUNUS spp. Amygdalaceae.

Red Irish Peach. A sport from Old Irish Peach.

133881 and 133882. PRUNUS SALICINA Lindl.

Japanese plum.

133881. Cambridge. A seedling from Burbank, but later and a better variety.

133882. Gladstone. A large yellow early plum.

133883. PRUNUS DOMESTICA L.

Common plum.

King Billy. Said to be a seedling from Angelina Burdett.

133884 to 133888. PRUNUS SALICINA Lindl.

Japanese plum.

133884. Laird's Early Seedling.

133885. Victory.

133886. Narrabeen.

133887. Wright's Delicious.

133888. Wright's Weeping.

# 133889 and 133890.

From the Union of Soviet Socialist Republics. Seeds presented by the Director, All-Union Scientific Research Institute of Medicinal Plants, Moscow District. Received August 10, 1939.

133889. Eremurus spectabilis Bieb. Liliaceae.

A handsome perennial 3 to 4 feet high, with light-green, triangular leaves and yellow flowers in racemes often 6 inches long. Native to the Caucasus region.

For previous introduction see 107354.

133890. Hemerocallis sp. Liliaceae.

133891 to 133893. Prunus avium L. Amygdalaceae. Mazzard.

From Austria. Seeds presented by the Direktion des Botanischen Gartens der Universität, Graz. Received August 22, 1939.

133891. From Platte bei Graz at 600 m. altitude.

133892. From Rickerlberg bei Graz at 400 m. altitude.

133893. From Tanneben bei Peggau (Grazer Bergland) at 815 m. altitude.

133894. MUNDULEA SUBEROSA (Roxb.) Benth. Fabaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received August 22, 1939.

A stout erect shrub with thick, corky bark, native to India and Ceylon. The coriaceous leaves are made up of 6 to 10 pairs of oblong-lanceolate leaflets 1 to 2 inches long, and the red, pea-shaped, thinly silvery flowers, 1 inch long, are in dense terminal racemes.

For previous introduction see 99672.

# 133895 to 133897. Prunus avium L. Amygdalaceae. Mazzard.

From Sweden. Seeds presented by Dr. Daniel Peterson, Botanic Garden, Göteberg. Received August 30, 1939.

Strains of wild cherries growing near Lake Vetter, in the south of Sweden. 133895. Black fruits.

133896. Red fruits.

133897. Black fruits.

#### 133898 to 133904.

From the Union of South Africa. Seeds presented by the Division of Plant Industry, Pretoria. Received August 10, 1939.

133898. PENNISETUM CILIARE (L.) Link. Poaceae.

Grass.

A perennial grass with ascending stems up to 2 feet high. Native to South Africa.

For previous introduction see 129587.

133899 to 133901. DIGITARIA spp. Poaceae.

Grass.

133899. DIGITARIA GAZENSIS Rendle.

A compactly tufted perennial grass. Native to South Africa.

133900. DIGITARIA SERIATA Stapf.

Fingergrass.

For previous introduction see 111105.

133901. DIGITARIA SMUTSII Sten's.

133902. Ehrharta sp. Poaceae.

Grass.

133903. Panicum deustum Thunb. Poaceae.

Grass.

A perennial grass up to 4 feet high, tufted on a short rhizome. Native to South Africa.

133904. Setaria sphacelata Stapf and Hubbard. Poaceae.

Grass.

A perennial grass 1½ to 6 feet high, densely tufted on a short, rarely elongated and creeping rhizome. Native to tropical Africa.

# 133905 and 133906. Prunus spp. Amygdalaceae.

From Rumania. Seeds presented by the Grădina Batanică a Universitătii Cluj. Received August 17, 1939.

133905. PRUNUS AVIUM L.

Mazzard.

133906. PRUNUS MAHALEB L.

Mahaleb cherry.

133907. Gossypium Barbadense L. Malvaceae. Sea-island cotton.

From the British West Indies. Seeds presented by J. B. Hutchinson, Cotton Research Station, Trinidad, through the Empire Cotton Growing Corporation. Received September 2, 1939.

Selected Montsterrat.

133908. ACTINIDIA CHINENSIS Planch. Dilleniaceae. Yang tao.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in September 1939.

Bell No. 32876. A form with very large fruits.

For previous introduction see 112053.

133909. Solanum Tuberosum L. Solanaceae.

Potato.

From England. Tubers presented by Dr. R. N. Salaman, National Institute of Agricultural Botany, Cambridge. Received September 6, 1939.

Var. Golden Wonder.

133910 to 133954.

From Australia. Plants purchased from John Brunning & Sons, Somerville Nurseries, Somerville, Victoria. Received September 6, 1939.

133910 to 133916. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

133910. Atropurpurea.

133914. Hauss.

133911. Early Dawn.

133915. Lyle's Early Red.

133912. Elberta (Dripstone).

133916. Mary's Choice.

133913. Golden Queen.

133917 and 133918. AMYGDALUS PERSICA VAR. NECTARINA Ait. Amygdalaceae. Nectarine.

133917. Fertile de Poiteau.

133918. Marina.

133919. CITRUS SINENSIS (L.) Osbeck. Rutaceae.

Orange.

Apple.

Poorman. 133920 to 133922. MALUS SYLVESTRIS Mill.

Malaceae.

133920. Cowell.

133922, Purpurea.

133921. Duke of Clarence.

133923 to 133951. PRUNUS spp. Amygdalaceae.

133923 to 133936. PRUNUS ARMENIACA L.

Apricot.

133923. Beauge.

133924. Belle de Toulouse.

133925. Brunning.

133926. Butler.

133927. Camden Superb.

133928, Early Cape.

133929. Glengarry.

133937 to 133940. PRUNUS SDD.

133937. Burgdoff's Seedling cherry.

133938. Florence cherry.

133939. Precoce de Boppard cherry.

133940. Twyford cherry.

133930. Newcastle. 133931. Pineapple.

133932. Robin's Imperial.

133933. Roxburgh Red.

133934, Salmon,

133935. Twyford Seedling.

133936. Warwick.

#### 133910 to 133954—Continued

133941. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

133947. Purple Gage plum.

133948. Sage plum.

133949. Splendour.

133950. Yellow Gage.

133954. Wilson's Ruby.

Moseri.

133942 to 133950. PRUNUS spp.

133942. Crittenden Damson.

133943. English Damson.

133944. Excelsior plum.

133945. Late Orange plum.

133946. Old Green Gage plum.

133951. PRUNUS.

Var. Vesuvius. A form with large purple leaves.

133952 to 133954. RHEUM RHAPONTICUM L. Polygonaceae. Common rhubarb.

133952. Stone's Ruby.

133953. Topp's Winter.

133955 and 133956. VITIS spp. Vitaceae.

Grape.

From Brazil. Cuttings presented by Dr. Felisberto C. Camargo, Instituto Agronómico, Campinas, São Paulo. Received September 7, 1939.

133955. Piravano hybrid No. 75.

133956. Piravano hybrid No. 166.

133957. Cocos Nucifera L. Phoenicaceae.

Coconut.

From Panama. Fruits presented by J. H. Permar, United Fruit Co., Almirante. Received September 7, 1939.

Var. Green Semi-dwarf, originally from Java.

#### 133958 to 133965.

From Réunion. Seeds presented by D. P. d'Emmerez de Charmoy, Directeur de la Station d'Essai Domaine de la Bretagne, Saint-Denis. Received July 29, 1939.

133958. Canavalia sp. Fabaceae.

133959. Phaseolus calcaratus Roxb. Fabaceae.

Rice bean.

133960. Phaseolus lunatus L.

Lima bean.

133961 and 133962. PUERARIA PHASEOLOIDES (Roxb.) Benth. Fabaceae.

A twining, semi-shrubby plant, densely covered with brown hairs. The leaflets are green above and densely matted beneath with gray hairs, and the reddish flowers are in long-stemmed racemes. Native to tropical regions of the Himalayas.

For previous introduction see 132998.

133963 and 133964. STIZOLOBIUM UTILE (Wall.) Piper and Tracy. Fabaceae.

For previous introduction see 25120.

133965. VIGNA SINENSIS (Torner) Savi. Fabaceae.

Cowpea.

# 133966. Pamianthe peruviana Stapf. Amaryllidaceae.

From Florida. Seeds presented by Wyndham Hayward, American Amaryllis Society, Winter Park. Received August 22, 1939.

A Peruvian amaryllid with a stem up to 2½ feet high, a tuft of 5 to 7 long linear, bright-green leaves, and an umbel of 2 to 4 fragrant whitish flowers. The perianth is green in bud, later white or creamy except for the green cylindric tube about 5 inches long. The outer segments are oblong, about 4 inches long, with a firm green mucro, and the equally long inner segments have a short white mucro. Allied to Pancratium and Hymenocallis.

For previous introduction see 132720.

#### 133967 to 133976.

Seeds and bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received September 7, 1939.

133967 to 133973. ALLIUM Spp. Liliaceae.

133967 to 133970. ALLIUM CEPA L.

Onion.

From Bombay, July 27, 1939. An onion which keeps well in warm damp air.

133967. No. 4420. 133968. No. 4421. 133969. No. 4422. 133970. No. 4423.

133971 to 133973. ALLIUM SATIVUM L.

Garlic.

133971 and 133972. Lassam. From Bombay July 27, 1939.

133971. No. 4418.

133972. No. 4419.

133973. Lassam. No. 4424. From Lahore, Punjab, July 30, 1939.

133974. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

No. 4428. Aru. From Lahore, Punjab, July 31, 1939. Fruit grown in Peshawar. A freestone peach 3 inches long, with a rather prominent beak; skin yellow with red cheek; flesh yellow and of excellent flavor.

133975. Mangifera indica L. Anacardiaceae.

Mango.

No. 4429. Am Sujiabadi. From Lahore, Punjab, July 31, 1939, from fruit said to have come from Sujiabadi, near Multan. Fruit small, beaked, 3½ inches high, bright yellow, "sucking type," i. e., with fiber around the seed, but of splendid subacid flavor. One of the best flavored mangoes of this region; Multan is one of the hottest regions of India and has freezing temperatures in winter.

For previous introduction see 132904.

133976. Eugenia sp. Myrtaceae.

No. 4427. Jambu. From Lahore, Punjab, July 30, 1939. A tall handsome tree with dark purple-red, plumlike fruits  $1\frac{1}{2}$  inches long. For trial as an ornamental tree in the warmest parts of the United States.

#### 133977 to 134009.

From the Union of South Africa. Plants purchased from J. A. Herholdt & Sons, Johannesburg, Transvaal. Received September 9, 1939.

133977 to 133993. Amygdalus persica L. Amygdalaceae. Peach.

133977. April Beet.

133986. Nooiens.

133987. Nooiens Herholdt's Strain

133979. Early Dawn.

133988. Parys Beauty.

133980. Empire.

133989. Seller's Golden Cling.

133981. Florida Crawford.

133978. Cape Early Cling.

133982. Herholdt's Late Cling.

133990. Springbok.

133991. Transvaal Yellow (Herholdt's Selected).

133983. Leader. 133984, Marina.

133992. Van Rensburg.

133993. X. M. K.

133985. Mary's Choice.

133994 to 133997. CYDONIA OBLONGA Mill. Malaceae.

133994. Cape Selected.

133996. Improved Borrie.

133995. China Mammoth.

133997. Wonder Quince.

133998 to 134000. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Quince.

133998. Christmas.

134000. Sweet Striped.

133999. Cleopatra.

133977 to 134009—Continued

134001 to 134005. PRUNUS ARMENIACA L. Amygdalaceae.

134004. Large Peach.

134001. Bush Peach. 134002. Early Cape.

134005. Precoce de Holland.

134003. Large Early Cape.

134006. Prunus domestica L.

Alberta plum.

134007 and 134008. PRUNUS SALICINA Lindl.

Japanese plum.

Apricot.

Plum.

134007, Hatankio Maru.

134008. Jap Greengage (Shiro Smomo).

134009. PYRUS COMMUNIS L. Malaceae.

Common pear.

Corona.

134010. Musa sp. Musaceae.

Banana.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered September 11, 1939.

Originally collected in New Guinea by the Archbold Expedition and presented by Col. R. H. Montgomery, Coconut Grove. The plant is said to become 10 feet tall and to bear 250 yellow cylindrical fruits in a bunch. The fruits, 5 inches long and over 1 inch in diameter, are white-fleshed and palatable, though seedy.

134011. Sabatia campestris Nutt. Gentianaceae.

From Texas. Seeds collected near Bonham by Claud Hope, Bureau of Plant Industry. Received September 12, 1939.

134012. Sorghum arundinaceum (Willd.) Stapf. Poaceae.

From Africa. Seeds presented by the Department of Agriculture, Salisbury, Southern Rhodesia. Received August 16, 1939.

A grass, native to Southern Rhodesia, which grows on heavy fertile black soils and is apparently perennial. It does not spread by underground roots but volunteers very freely from seed. The stems are somewhat woodier and more canelike than those of Sudan grass.

For previous introduction see 89030.

134013. Prunus Mahaleb L. Amygdalaceae.

Mahaleb cherry.

Seeds received from the Universitetets Botaniske Have, Köben-From Denmark. havn. Received September 12, 1939.

For previous introduction see 133906.

134014. RICINUS COMMUNIS L. Euphorbiaceae.

Castor-bean.

From Colombia. Seeds presented by W. A. Kyburz, Cali. Received September 12, 1939.

A plant about 5 feet high, with light-green leaves. The seed clusters remain almost complete on the plant until they are fully dry.

For previous introduction see 116068.

134015 to 134017.

From Central America. Plants presented by Austin Smith, Zarcero, Costa Rica. Received September 18, 1939.

134015. Anthurium Hoffmannii Schott. Araceae.

A terrestrial or epiphytic anthurium with ascending stems about 1 foot long; large leathery, cordate-ovate leaves, about 1 foot long, shiny green above, peduncles 6 inches to 1 foot long, broad lanceolate spathes 4 inches long, and a purplish-red spadix almost as long. Native to Costa Rica at altitudes up to 5,000 feet.

# 134015 to 134017—Continued

134016. PHILODENDRON HOFFMANNII Schott. Araceae.

A climbing arum, sometimes growing in clumps. The leaves are immense, often over 3 feet long, and the flowers are showy with constricted pink and white spathes. The plant grows in half shade from 3,000 to 7,000 feet altitude. Native to Costa Rica.

134017. PHILODENDRON VERRUCOSUM Schott.

A terrestrial or epiphytic philodendron with bronze-green cordate leaves up to 8 inches long, the upper surface with a beautiful velvety appearance, and deep-red petioles with soft slender scales. Native to Colombia and common in wet forests up to 5,500 feet in Costa Rica.

#### 134018 to 134041.

From New Zealand. Seeds presented by the Director, Botanic Gardens, Christchurch. Received September 18, 1939.

Unless otherwise mentioned, all of these plants are native to New Zealand.

134018 to 134022. Celmisia spp. Asteraceae.

134018. CELMISIA ARMSTRONGII Petrie.

A herbaceous perennial with strong stems crowned by radiating sword-shaped leaves 18 inches long having an orange midrib and covered with satiny tomentum. The heads of white flowers, 1 to 2 inches broad, are borne on white cottony scapes about the length of the leaves.

134019. CELMISIA DISCOLOR Hook. f.

A herbaceous perennial with stems branching at the base, often forming broad flat-topped cushions. The leaves are crowded, imbricated, leathery, and the large daisylike flower heads are white-rayed.

For previous introduction see 129774.

134020. CELMISIA INCANA Hook, f.

A short stout branching herbaceous perennial with broad plaited leathery leaves and large white-rayed flower heads.

For previous introduction see 129776.

134021. CELMISIA LYALLII Hook. f.

A herbaceous perennial with short stout stems crowned with dense tufts of crowded radiating, entire, narrow-ensiform rigid, leathery leaves 9 to 19 inches or more in length, and 1 or several scapes with solitary white flowers 1 to 2 inches across.

134022. CELMISIA NOVAE-ZELANDIAE (Buch.) Cheeseman.

A densely tufted perennial with woody stems 7 to 8 inches high, many leathery, linear leaves, and 2 to 3 scapes with large white-rayed flower heads.

For previous introduction see 129778.

134023. Chordospartium stevensoni Cheeseman. Fabaceae.

A leafless shrub or small tree up to 20 feet high with long slender pendulous branches and racemes 1 to 2 inches long of small purple flowers.

For previous introduction see 80566.

134024. Corokia buddleioides A. Cunn. Cornaceae.

A small tree with long narrow leaves, shining above and downy beneath. The small yellow flowers, ¼ inch long, are in slender panicles and are followed by orange-red fruits. Native to New Zealand where it flowers in December. The native name is *Korokia-taranga*.

For previous introduction see 129780.

134025. Fuchsia procumbens R. Cunn. Onagraceae. Trailing fuchsia.

A slender prostrate shrub with small ovate or cordate leaves and fragrant yellowish-green flowers ½ inch long; found in sandy or rocky places.

For previous introduction see 125142.

#### 134018 to 134041—Continued

134026. Hebe raoulii (Hook. f.) Cockayne and Allan. Scrophulariaceae.

Introduced under the varietal name "McCaskillii," for which a place of valid publication has not been found.

134027. Helichrysum bellidioides (Forst. f.) Willd. Asteraceae.

A trailing, somewhat woody perennial with ovate-spatulate leaves up to  $\frac{1}{2}$  inch long, white woolly beneath and green above, and solitary silvery-white flower heads up to  $\frac{1}{2}$  inch across.

134028. Hoheria glabrata Sprague and Summerhayes. Malvaceae.

134029. Leptospermum scoparium incanum Cockayne. Myrtaceae.

A small handsome evergreen tree with a rather dense head of upright spreading branches and pendulous branchlets, small ovate lanceolate gray-green leaves, and pale-pink flowers about ½ inch across.

134030. LIBERTIA IXIOIDES (Forst. f.) Spreng. Iridaceae.

A low herbaceous perennial with a short creeping rhizome which forms a compact clump like a beardless iris. It has rigid coriaceous linear leaves 1 foot long and large panicles of small white flowers on a stem 2 feet high.

For previous introduction see 129787.

134031. Myosotidium hortensia (Decaisne) Baill. Boraginaceae.

A stout succulent perennial herb 1 to 3 feet high, native to the Chatham Islands. The thick fleshy radical leaves, 6 to 12 inches long, are broadly cordate or reniform, and the blue flowers ½ inch across are borne in dense corymbose cymes.

For previous introduction see 103011.

134032. Podocarpus nivalis Hook. Taxaceae.

A much-branched, evergreen shrub, erect or prostrate in habit, with wide-spreading branches often rooting at the bases. The sessile, closely set, stiff, leathery, very narrow leaves are about ½ inch long and are not distichous. The fruit is a small oblong ovoid nut, and the enlarged fleshy fruiting stems are bright red. Of value as an erosion control plant.

For previous introduction see 89342.

134033. Pratia treadwellii G. W. Robinson. Campanulaceae.

A prostrate, branching, herbaceous perennial with stems 6 to 12 inches long, small, dark-green, broadly-ovate leaves, and solitary white flowers that are large for the genus; these are followed by purplish-red berries.

For previous introduction see 129798.

134034. PRATIA MACRODON Hook. f.

A fleshy herbaceous perennial with stout stems 1 to 5 inches long forming matted patches and broadly obovate, orbicular, thick leathery, deeply and coarsely toothed, cuneate leaves up to ½ inch long. The almost sessile, paleyellow, fragrant flowers are large for the genus.

134035. Rhipogonum scandens Forst. Smilacaceae.

A tall climbing shrub with oblong coriaceous leaves 3 to 5 inches long, small greenish flowers in axillary and terminal clusters, followed by bright-red globose berries. The long rough elastic stems have been used to make baskets.

For previous introduction see 77578.

134036. Senecio huntii F. Muell. Asteraceae.

A shrub or small round-headed tree 6 to 20 feet high, with close-set, entire, lanceolate or elliptic-oblong leaves up to 4 inches long and yellow flower heads about ¾ inch across in large terminal panicles.

134037. SENECIO MONROI HOOK f.

A much-branched slender shrub 2 to 6 feet high, with narrow oblong-obovate leathery leaves having wavy crenate margins, and numerous broadly turbinate yellow flower heads about  $\frac{1}{2}$  inch across. Native to New Zealand at 1,000 to 4,500 feet altitude.

## 134018 to 134041—Continued

134038. SONCHUS GRANDIFOLIUS T. Kirk. Cichoriaceae.

134039. Sophora prostrata J. Buch. Fabaceae.

A rigid, much-branched shrub 2 to 5 feet high. The compound leaves are made up of 2 to 4 pairs of very small oblong ovate leaflets, and the bright-yellow flowers, nearly 1 inch long, are in clusters of 2 to 3 or solitary.

For previous introduction see 101155.

134040. Veronica lyallii Hook. f. Scrophulariaceae.

A herbaceous perennial with slender, prostrate, rooting, diffusely branched stems up to  $1\frac{1}{2}$  feet long; thick, leathery, spreading, broad-ovate to oblong-ovate serrate leaves  $\frac{1}{4}$  to  $\frac{3}{4}$  inch long, and slender racemes of few to many rather large white flowers with pink veins. Native from sea level to 4,500 feet altitude.

134041. Wahlenbergia albomarginata Hook. Campanulaceae.

A perennial with several stems 4 to 12 inches high, mostly radical, spathulate leaves, the blades varying from oblanceolate to obovate, and 1 or few peduncles 3 to 10 inches high with single large white or pale-blue campanulate flowers.

## 134042 to 134049. Triticum aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received September 18, 1939.

Wheat grown at the Experiment Station, Cowra, New South Wales.

134042. Bungulla.

134043. Calloux.

134044, Eureka.

134045. Fedweb.

134046. Puora.

134047. Regalia.

134048. Seafoam.

**134049.** Seaspray.

### 134050 and 134051.

From Puerto Rico. Seeds presented by W. K. Bailey, Acting Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received September 12, 1939.

134050. Aeria attenuata O. F. Cook. Phoenicaceae.

Palma de coyor.

The tallest of the Puerto Rico palms, reaching a height of 60 to 100 feet. Its pinnate foliage resembles that of the royal palm, but is shorter; the trunk never exceeds 6 to 8 inches in diameter. This palm, which is also known as the *coyure*, is found only on limestone hills and usually feeds upon nothing but the humus collected in the cracks of these rocks. The large bunches of orange-red berries, the size of a small cherry, are very attractive and are fed to chickens and hogs.

For previous introduction see 111878.

134051. Curima colophylla O. F. Cook. Phoenicaceae.

Palm.

A spiny palm, endemic to the limestone hills of northern Puerto Rico, a region of about 70 inches of rainfall. The trunk grows 20 to 30 feet tall, with a diameter of 5 or 6 inches. The pinnae of the leaves are broad and truncate, as in *Tilmia*, but are evenly set along the rachis instead of being clustered. The fruits, borne in large clusters, are round and red like cherries, with a red acid pulp surrounding the round black seed.

For previous introduction see 117598.

#### 134052. Trifolium montanum L. Fabaceae.

Clover.

From Belgium. Seeds presented by the Director of the Botanic Garden, Brussels. Received September 13, 1939.

For previous introduction see 125681.

# 134053 to 134062. ORYZA SATIVA L. Poaceae.

Rice.

From Japan. Seeds presented by the Director of the Imperial University, Tokyo. Received September 18, 1939.

134053. Hiderisirazu.

134058. Sensyo.

134054. Kaneko.

134059. Suzumesirazu.

134055. Kurokwa.

134060. Tamasari.

134056. *Kurumiwase*. 134057. *Mogamiuruti*.

134061. Tikanari No. 2. 134062. Urasan No. 1.

#### 134063 to 134065.

From New Zealand. Seeds presented by the New Zealand Department of Agriculture, Wellington, through the American Consul General, Wellington. Received September 12, 1939.

104000 70

134063. Dactylis glomerata L. Poaceae.

Orchard grass.

Certified New Zealand Cocksfoot.

For previous introduction see 133327. 134064. LOLIUM PERENNE L. Poaceae.

Perennial ryegrass.

Certified New Zealand perennial ryegrass.

For previous introduction see 133478.

134065. Trifolium repens L. Fabaceae.

White clover.

Certified New Zealand white clover.

For previous introduction see 133472.

# 134066 to 134072. Oryza sativa L. Poaceae.

Rice.

From India. Seeds presented by the Rice Research Station, Larkana, Sind. Received September 18, 1939.

134066. Bangalo.

134070. Sonahri.

134067. Japai No. 77.

134071. Torh.

134068, Lari.

134072. 34-276-51.

134069. Sada-Gulab.

# 134073 and 134074. Eucalyptus spp. Myrtaceae.

From Australia. Seeds presented by R. G. Kappler, Secretary, Commonwealth Forestry Bureau, Canberra, through Woodbridge Metcalf, Extension Forester, College of Agriculture, Berkeley, Calif. Numbered in September 1939.

134073. EUCALYPTUS NIPHOPHILA Maiden and Blakely.

A small crooked alpine tree or shrub 3 to 20 feet high, with several whiplike glaucous stems from a large woody rootstock. The bark is usually smooth and white. The mature leaves are alternate, petiolate, lanceolate to lanceolate falcate, thick, leathery, shining, 1 to 3 inches long. The inflorescence is in short axillary umbels of 3 to 10 flowers. Native to alpine regions of New South Wales and Victoria, where it is subjected to several degrees of frost.

#### 134074. EUCALYPTUS DE BEUZEVILLEI Maiden.

A medium-sized or large tree up to 60 feet high, more or less glaucous, with more or less rough bark, flaky at the base. The mature leaves are lanceolate, slightly falcate, fragrant, thick, slightly shining, about 5 inches long. Native to alpine regions of New South Wales where it is subject to frost in the winter season.

# 134075 to 134086. ORYZA SATIVA L. Poaceae.

Rice.

From Indo-China. Seeds presented by the Agricultural Research Station, Saigon. Received September 19, 1939.

134075. Babrao Pur. 134076. Badach.

134077. Bamonh. 134078. Batum Long. 134079. Batum Rond.

134080. Bavot.

134081. Chum Ray.

134082. Den Dau.

134083. Do Vo.

134084. Lua Rang.

134085. Lua Se. 134086. Take.

134087. Fragaria sp. Rosaceae.

Strawberry.

From England. Plants purchased from the East Malling Research Station, East Malling, Maidstone, Kent. Received September 19, 1939.

Royal Sovereign.

134088 to 134090. SACCHARUM. Poaceae.

Sugarcane.

From Mauritius. Cuttings presented by G. C. Stevenson, Reduit. Received September 19, 1939.

134088. Branchue.

134090. Rat Gros Ventre.

134089. Gros Genoux.

134091. Arundinaria amabilis McClure. Poaceae. Tonkin bamboo.

From Louisiana. Plants presented by E. A. McIlhenny, Avery Island. Received September 20, 1939.

A bamboo with erect cylindrical culms, usually 20 feet high, rarely 40 feet, with linear-lanceolate leaves about 1 foot long; of garden origin.

For previous introduction see 110509.

134092 to 134094. Mangifera indica L. Anacardiaceae. Mango

From India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received September 20, 1939.

Collected August 3, 1939, at Baijnath, Kangra District, Punjab, at 3,000 feet altitude; of interest for cold tolerance as the temperature at Baijnath falls well below freezing.

134092. No. 4458. *Piundi*. Fruit reniform, 3 inches in diameter, yellow, somewhat fibrous, flavor good, but with considerable turpentine flavor in the skin.

134093. No. 4459.  $\it Misi.$  Fruit round, 21/4 inches in diameter, yellow, somewhat fibrous, flavor good.

134094. No. 4460. Duda. Fruit reniform, 3 inches in diameter, skin green, blotched yellow, somewhat fibrous, flavor good.

134095 to 134098. SACCHARUM. Poaceae.

Sugarcane.

From Argentina. Cuttings presented by Dr. W. E. Cross, Director, Estación Experimental Agrícola, Tucumán. Received September 21, 1939.

134095. Tucumán No. 1199.

134097. Tucumán No. 1376.

134096. Tucumán No. 1316.

134098. Tucumán No. 2583.

134099. × HIPPEASTRUM AMBIGUUM Herbert. Amaryllidaceae.

From Costa Rica. Bulbs purchased from Austin Smith, Zarcero. Received September 25, 1939.

A variety with white flowers with pink stripes that vary in number.

## 134100 to 134113. Oryza sativa L. Poaceae.

Rice.

From Italy. Seeds presented by the Stazione Spermentale Di Risicoltura, Vercelli. Received September 19, 1939.

134100. Agostano.

134101. Americano 1600.

134102. Ardizzone.

134103. Gancio P. 6.

134104. Greggio.

134105. Hirpe 136.

134106. Mantovax Vialone 10.

134107. Mantovax Vialone 11.

134108. Maratelli.

134109. Nero Vialone.

134110. Oldenico. 134111. Precoce Gesia.

134112. Senator Novelli.

134113. 13.

# 134114 to 134139.

From Afghanistan. Seeds collected by W. V. Harlan, collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received September 22, 1939.

134114 to 134138. Triticum Aestivum L. Poaceae.

Common wheat.

134114 to 134126. Irrigated wheat, obtained in the bazar at Kabul June 26, 1939.

134114, No. 2.

134115. No. 32.

134116, No. 33.

134117. No. 34.

134118. No. 35.

134119, No. 36.

134121, No. 38.

134122. No. 39. 134123, No. 40,

134124, No. 41.

134125, No. 42,

134126. No. 43.

134120. No. 37.

134127. No. 56. Collected in the pass toward Istafiff July 7, 1939.

134128 to 134131. Irrigated wheat collected in Kabul July 7, 1939.

134128. No. 57.

134130. No. 59.

134129. No. 58.

134131. No. 60.

134132 to 134137. Irrigated wheat obtained at Kabul July 13, 1939.

134132. No. 61.

134135. No. 64.

134133, No. 62,

134136, No. 65.

134134, No. 63,

134137. No. 66.

134138. No. 67. Dry-land wheat obtained in the Logar Valley, near Kabul, July 13, 1939.

134139. Zea mays L. Poaceae.

Corn.

No. 4. Obtained in the Kabul bazar.

### 134140 and 134141. Oryza sativa L. Poaceae.

Rice.

Seeds presented by the Agricultural Experiment Station, Government General of Chosen, Suigen, Chosen. Received September 27, 1939.

134140. Kaneko.

134141. Oiran.

# 134142 to 134144. Oryza sativa L. Poaceae.

Rice.

From Surinam. Seeds presented by the Director, Agricultural Experiment Station, Paramaribo. Received September 27, 1939.

134142. Brisin Missi.

134144. Witte Wanica.

134143. Varii Lava.

## 134145 to 134149. Oryza sativa L. Poaceae.

Rice.

From India. Seeds presented by the Paddy Specialist, Agricultural Research Institute, Lawley Road, P. O. Coimbatore. Received September 27, 1939.

134145. ADT 12.

134148. ADT 9.

134146. Kasi Pichodi.

134149. Yarra Kondangi or Y. K. G.

134147, No. 5109.

# 134150 and 134151. Amygdalus Persica L. Amygdalaceae. Peach.

From California. Seedlings growing at the United States Plant Introduction Garden, Chico. Numbered in September 1939.

134150. Selection (E-4-9) from P. I. 43569.

134151. Selection (D-9-3) from P. I. 87637.

# 134152 to 134164. Oryza sativa L. Poaceae.

Rice.

From Brazil. Seeds presented by the Secção de Genetica, Instituto Agronómico do Estado, Campinas, São Paulo. Received September 27, 1939.

134152. Agulha No. 55.

134153. Agulha-Branco Medio No. 83.

134154. Catêto No. 22.

134155. Catetão No. 24.

134156, Catêto Dourado No. 23.

134157. Catetão Dourado No. 82.

134158. Dourado Agulha No. 3.

134159. Dourado Peludo No. 1.

134160. Jaguary No. 8.

134161. Jaguary Dourado Punta Escura No. 77.

134162, Jaguary Longo No. 79.

134163. Paraguayo No. 30.

134164. Parahyba No. 12.

## 134165 to 134167. Oryza sativa L. Poaceae.

Rice.

From Argentina. Seeds presented by the Estación Esperimental Agrícola, Tucumán. Received September 27, 1939.

134165. Largo No. 1.

134166. Secano Bolita No. 1.

134167. Secano Bolita No. 2.

#### 134168. Atalantia citroides Pierre. Rutaceae.

From Washington, D. C. Plants growing in the United States Department of Agriculture exhibition greenhouse. Numbered in September 1939.

A small tropical tree, usually spiny, native to Indo-China. The orangelike fruits are about 3 inches in diameter.

For previous introduction see 74237.

# 134169 and 134170. Prunus cerasifera Ehrh. Amygdalaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in September 1939.

Originally received as scions from C. F. Rudloff, Kaiser Wilhelm Institut f. Züchtungsforsching, Müncheberg, Germany, March 11, 1930. From trees originally collected in Asia Minor.

134169. No. 30. From Istanbul.

134170. No. 31. From Istanbul.

#### 134171 and 134172.

From Maryland. Trees growing at the United States Plant Introduction Garden, Glenn Dale. Numbered in September 1939.

134171. Prunus nigra Ait. Amygdalaceae.

Canada plum.

Received August 21, 1934, from H. R. Wright, Auckland, New Zealand.

134172. Pyrus sp. Malaceae.

Pear.

A pear of unknown origin whose fruit characters bear a strong resemblance to those of the common pear, *Pyrus communis*.

#### 134173 to 134217.

From France, Italy, Egypt, and India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received September 21, 1939.

134173. Albizzia Chinensis (Osbeck) Merr. Mimosaceae.

No. 4443. From Lahore, Punjab, July 31, 1939. A large rapidly growing tree, native to the subtropical regions of India.

For previous introduction see 99688.

134174. Barringtonia acutangula (L.) Gaertn. Lecythidaceae.

No. 4442. From Lahore, Punjab, August 1, 1939. A handsome evergreen tree with orange-red flowers.

134175. Brassica oleracea var. botrytis L. Brassicaceae. Cauliflower.

No. 4451. *Phulgobi*, meaning "flower cabbage." From Lahore, Punjab, August 2, 1939. A very fine variety with snow-white heads 12 inches across.

134176 to 134178. Capsicum frutescens L. Solanaceae. Redpepper.

134176. No. 4406. Peperone Giallo. From Naples, Italy, July 14, 1939; bought in the market. Fruit bullnosed, 5 inches long, bright yellow, tender, sweet, well-flavored.

134177. No. 4407. Peperone Giallo. From Genoa, Italy, July 13, 1939; purchased in a seed store; probably like No. 4406 [134176], which is a fine sweet pepper.

134178. No. 4409. Mirch. From Bombay, July 25, 1939. Seeds from dried fruits bought in the market. Fruits red, 3½ by 1 inch, hot.

134179. CICER ARIETINUM L. Fabaceae.

Chickpea.

No. 4416. *Challa*. Bought in the market at Bombay, July 27, 1939, but said to be from Algeria. A superior strain with larger seeds than most of the Indian races. The seeds are tasty when prepared as lentils, and their flavor is fine for frying fish, vegetable slices, etc.

134180 to 134189. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

134180. No. 4408. From Port Said, Egypt, July 17, 1939. From fruit slices bought in the street. Texture good, flavor and sugar indifferent; flesh red. Nos. 134181 to 134185 were purchased in Lahore, Punjab, July 31, 1939.

134181. No. 4430. Tarbuza. July 31, 1939. Of unknown origin, certainly not locally grown; fruit subglobose, 10 inches in diameter; rind ¾ inch thick, pea green with narrow dark stripes; flesh rose, good texture, but insipid.

134182. No. 4434. July 31, 1939. Fruit subglobose, 8 inches in diameter; rind green, mottled and veined darker. % inch thick; flesh rose, of good texture, insipid. Fruit had obviously been stored a considerable time; origin unknown.

134183. No. 4435. Tarbuza. Said to have come from Quetta. Fruit globose, 12 inches in diameter, rind grass green; flesh red, overripe and inedible.

134184. No. 4436. Of unknown origin and probably long in storage. Fruit globose, 10 inches in diameter, rind ½ inch thick, dark green with well-indented ribs; flesh rose, insipid, fair texture.

134185. No. 4437. Said to have come from Quetta. Fruit globose, 10 inches in diameter; rind grass green, striped darker.

#### 134173 to 134217—Continued

- 134186. No. 4446. August 1, 1939. Said to be from Quetta. Fruit 11 by 7 inches, rind pale green, ¾ inch thick; flesh rose, overripe.
- 134187. No. 4447. August 1, 1939. Said to be a large local variety.
- 134188. No. 4448. August 1, 1939. Said to have come from Quetta. Fruit subglobose, 10 inches in diameter; rind % inch thick, pale green with broad stripes of darker green; flesh rose, good texture, insipid.
- 134189. No. 4452. *Tabusa Jhangi*. August 2, 1939. Said to be a small sweet sort grown at Jhang. Possibly useful in developing a small-fruited variety.
- 134190 to 134200. Cucumis melo L. Cucurbitaceae. Muskmelon.
  - 134190. No. 4404. Nanté. From Paris, France, July 9, 1939, bought in a fruit market. Fruit 8 by 5 inches, deeply ribbed. Rind green yellow, coarsely and sparsely netted; flesh thick, orange, juicy, fragrant, but of little flavor.
  - 134191. No. 4405. *Melon d'Hièyers*. From Paris, France, July 10, 1939; bought in the market. Fruit globose, 5 inches in diameter, faintly indented ribs; rind orange, ribs green, faint net; flesh 1 inch thick, pale orange, rather insipid.
  - 134192. No. 4410. *Kharbuza*. From Bombay, India. July 25, 1939. Fruit pumpkin-shaped, 12 by 6 inches, smooth and unribbed; rind golden brown, blotched paler; flesh firm, 1½ inches thick, orange at center, paler toward the rind, very fragrant but rather flat. An excellent keeper.
  - 134193. No. 4426. Sarda. Purchased at Lahore, Punjab, July 30, 1939, but said to have come from Chaman, Baluchistan. Fruit unribbed, elongate, 13 by 5 inches; rind yellow with irregular green blotches, heavy netting; flesh 1½ inches thick, whitish, crisp, fairly sweet. This is a type of melon that keeps for months.
    - Nos. 134194 to 134200 were collected at Lahore, Punjab, August 2, 1939.
  - 134194. No. 4449. Put Kharbuza. This melon is the only sort that grows in the monsoon. Fruit said to be elongate; flesh insipid, but may have use for breeding where damp-heat tolerance is required.
  - 134195. No. 4450. *Put Kharbuza*. Like No. 4449 [P. I. 134194]; fruits also said to be elongate.
  - 134196. No. 4453. Vanga. Fruit small, subglobose, 2 inches in diameter. Grown chiefly in Sind.
  - 134197. No. 4454. Tar Lucknowi. Fruit 2 to 3 feet long, crook-necked, wrinkled and ridged.
  - 134198. No. 4455. Tar Desi. Said to be a long, green, much-ridged fruit which is used in the same way as No. 4454 [P. I. 134197].
  - **134199.** No. 4456. *Tar Lahori*. Fruit said to be green and to become 2 to 3 feet long. Used the same way as No. 4454 [P. I. 134198].
- 134200. No. 4457. *Tar Ferozpuri*. Fruits 3 feet long, white, heavily ridged. 134201. Cucurbita moschata Duchesne. Cucurbitaceae. Cushaw.
- No. 4425. *Kadu*. From Lahore, Punjab, July 30, 1939. Fruit top-shaped, 15 by 10 inches, weighing 25 pounds, heavily and deeply ribbed. Rind golden brown with bloom, spotted darker and blotched paler; flesh 3¼ inches thick, yellow, sweet, fiberless. Last year's crop, but still in perfect condition.
- 134202. Daucus carota L. Apiaceae. Carrot.
- No. 4444. Kala Gajar. From Lahore, Punjab, August 1, 1939. Said to have black roots.
- 134203. Diospyraceae.
- No. 4440. From Lahore, Punjab, August 1, 1939. An attractive small tree. 134204. Flacourtia indica (Burm. f.) Merr. Flacourtiaceae. Ramontchi.
- No. 4445. From Lahore, Punjab, August 1, 1939. A spiny evergreen shrub up to 20 feet high, with crenate leaves, small white flowers, and smooth dark-purple fruits with sweet juicy pulp.
  - For previous introduction see 101572.

### 134173 to 134217—Continued

134205 and 134206. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

From Paris, France, July 9, 1939. Bought in the bird market where it was sold as birdseed.

134205. No. 4401.

134206, No. 4402.

134207 to 134209. Lycopersicon esculentum Mill. Solanaceae. Tomato.

134207. No. 4417. From Bombay, July 27, 1939. Fruit flattened, 2½ inches long, red.

134208. No. 4432. Bombay, July 28, 1939. Fruit globose, 1½ inches in diameter, red, adapted to relatively high temperatures.

134209. No. 4433. From Lahore, Punjab, July 31, 1939, but said to have come from Peshawar. Fruit pear-shaped, 1¾ inches long, red; probably able to grow at relatively high temperature.

134210. Phaseolus lunatus L. Fabaceae.

Lima bean.

No. 4415. Bought in the market at Bombay, July 27, 1939, but said to have come from Madagascar.

134211 to 134214. Phaseolus vulgaris L. Fabaceae. Common bean.

A collection of imported dried beans, bought in the market of Bombay, July 26, 1939.

134211. No. 4411. Said to have come from Hungary.

134212. No. 4412. Said to have come from Japan.

134213. No. 4413. Said to have come from Belgium.

134214. No. 4414. Said to have come from the Danube Valley.

134215. Pistacia integerrima Stewart. Anacardiaceae.

Pistache.

No. 4441. From Lahore, Punjab, August 1, 1939. A large tree up to 60 feet high, native to the warm slopes of the Himalayas in northern India up to 5,000 feet altitude. The aromatic pinnate leaves are made up of 4 or 5 pairs of lanceolate leaflets with an oblique base. The small inconspicuous flowers are in racemose clusters and are followed by the bright green drupes which are ½ inch across. The tree yields a valuable timber and is a common roadside tree.

For previous introduction see 127868.

134216. Prunus armeniaca L. Amygdalaceae. No. 4403.

Apricot.

134217. Pterospermum acerifolium (L.) Willd. Sterculiaceae.

No. 4438. From Lahore, Punjab, August 1, 1939. A large attractive tree with large white sweet-scented flowers.

For previous introduction see 116532.

# 134218 to 134230. Phaseolus vulgaris L. Fabaceae. Common bean.

From Australia. Seeds presented by Dr. H. Wenholz, Bureau of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received September 14, 1939.

134218, Black Prince.

134219. Black Wonder.

134220. Brown Beauty.

134221. Early Giant.

134222. Epicure.

134223. General McCoy.

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134225. Masterpiece.

134226. New Discovery.

134227. Pale Dun.

134228. Startler Wax.

134229. Surprise.

134230. Tweed Wonder.

134224. Hawkesbury Wonder.

134231. Greigia sphacelata (Ruiz and Pav.) Regel. Bromeliaceae.

From Chile. Seeds presented through Lyman B. Smith, Gray Herbarium of Harvard University, Cambridge, Mass. Received September 20, 1939.

From Valdivia, Valdivia Province. *Chupon*. A bromeliad up to 3 feet high with spiny leaves. The rose-colored flowers, in dense axillary heads, make this a very showy plant. The very seedy fruit is eaten by the natives.

For previous introduction see 35956.

#### 134232 to 134244.

From Australia. Seeds presented by Dr. A. McTaggart, Senior Research Officer, Division of Plant Industry, Council for Scientific and Industrial Research, Canberra. Received September 20, 1939.

134232. Andropogon pertusus (L.) Willd. Poaceae.

Grass.

A perennial grass with hairy nodes. It is leafy and productive and spreads by its strong rhizomes. Native to East Africa, where it is found in the Aberdares Mountains up to 9,000 feet altitude.

For previous introduction see 133040.

134233. Bromus albidus Bieb. Poaceae.

Bromegrass.

For previous introduction see 98276.

134234 and 134235. CHLORIS GAYANA Kunth. Poaceae.

Rhodes grass.

For previous introduction see 75308.

134236 and 134237. Medicago sativa L. Fabaceae.

Alfalfa.

134236. Originally received from Czechoslovakia.

134237. Originally received from Algeria.

134238. MEDICAGO.

Medicago sativa X M. falcata. Originally received from New Zealand.

134239 to 134243. Glycine Max (L.) Merrill. Fabaceae.

Soybean.

134239. From Lawes, Queensland, Australia (original seed).

134240 and 134241. Originally from Southern Rhodesia.

134242 and 134243. Originally from Capetown, South Africa.

14244. Trifolium stellatum L. Fabaceae.

Clover.

An annual upright clover about 1 foot high, native to the Mediterranean region.

For previous introduction see 75530.

## 134245 and 134246.

From the Union of Soviet Socialist Republics. Seeds presented by the Parc National, Askania-Nova. Received September 27, 1939.

134245. Prunus avium L. Amygdalaceae.

Mazzard.

134246. PRUNUS MAHALEB L.

Mahaleb cherry.

134247. Crossandra infundibuliformis (L.) Nees. Acanthaceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in September 1939.

Presented by Col. R. H. Montgomery, Coconut Grove. An evergreen shrub 1 to 3 feet high with opposite, ovate-acuminate leaves and showy beautiful carrotred (Ridgway) flowers about 2 inches in diameter, in dense 4-sided spikes. It is suitable for growing in beds or pots. Native to India.

#### 134248 to 134283.

From Afghanistan. Seeds collected by Wilbur V. Harlan, collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received September 22, 1939.

134248. AGROPYRON SQUARROSUM (Roth) Link. Poaceae.

Grass.

No. 70. From Logar Valley, near Kabul, July 13, 1939.

For previous introduction see 109438.

134249. ALTHAEA ROSEA (L.) Cav. Malvaceae.

Hollyhock.

No. 84.

For previous introduction see 122454.

134250. Andropogon ischaemum L. Poaceae.

Grass.

No. 73. From a dry wash above the Logar Valley, July 13, 1939.

For previous introduction see 119617.

134251. Avena sterilis L. Poaceae.

Animated oats.

No. 55. Wild oats.

For previous introduction see 125132.

134252. Brassica sp. Brassicaceae.

No. 14. June 16, 1939, at 6,000 feet altitude on Pag Man Road, near Kabul.

134253. Bromus madritensis L. Poaceae.

Madrid bromegrass.

No. 74. Collected in a very dry wash above Logar Valley, near Kabul, July 13, 1939.

For previous introduction see 89822.

134254. Cassia absus L. Caesalpiniaceae.

No. 86. An erect annual tropical legume about 2 feet high, with small redyellow flowers. Native to Egypt and India.

For previous introduction see 103606.

134255. Elymus caput-medusae L. Poaceae.

Grass.

Collected July 13, 1939, in a dry wash above the Logar Valley. An annual grass, native to Europe.

For previous introduction see 111288.

134256. Festuca elation L. Poaceae.

Meadow fescue.

Six-rowed barley.

No. 80. From Kabul.

For previous introduction see 127681.

134257 to 134263. Hordeum spp. Poaceae.

134257. Hordeum distichon var. Palmella Harlan. Two-rowed barley.

No. 52. From Kabul.

For previous introduction see 129504.

134258 to 134263. Hordeum vulgare var. Pallidum Seringe.

From Kabul.

134258, No. 5.

134261. No. 48.

134259. No. 46.

134262. No. 51.

134260. No. 47.

134263. No. 68.

134264. Malva neglecta Wallr. Malvaceae.

No. 83. Peniraq-Kharbazi. From Kabul. An annual or sometimes a perennial mallow with prostrate or seldom erect stems and bright-rose to white flowers. Allied to Malva sylvestris.

#### 134248 to 134283—Continued

134265. MELICA CILIATA L. Poaceae.

Grass.

No. 71. From Kabul.

For previous introduction see 119658.

134266. Oryzopsis coerulescens (Desf.) Hack. Poaceae.

Grass.

No. 72. From a dry wash above the Logar Valley, July 13, 1939.

For previous introduction see 119661.

134267 and 134268. PANICUM MILIACEUM L. Poaceae.

Broomcorn millet.

Purchased in the bazar at Kabul.

For previous introduction see 122690.

134267. No. 1.

134268. No. 6.

134269. Phaseolus aureus Roxb. Fabaceae.

Mung bean.

No. 3. Purchased in the bazar at Kabul. For previous introduction see 125835.

134270. PIPER NIGRUM L. Piperaceae.

Black pepper.

No. 24. From the bazar at Kabul.

For previous introduction see 35460.

134271. PISUM SATIVUM L. Fabaceae.

Pea.

No. 10. From Kabul.

134272, POLYPOGON MARITIMUS Willd, Poaceae.

Grass.

No. 75. From a dry wash above the Logar Valley, July 13, 1939. A low annual grass with laxly ascending stems not over 1 foot high. Native to the Mediterranean region.

For previous introduction see 61441.

134273 to 134276. Prunus armeniaca L. Amygdalaceae.

Apricot.

134273 and 134274. Early apricots, purchased in the Kabul market, but probably grown at Khandahar.

134273. No. 31.

134274, No. 50.

134275. No. 78. From Kabul, July 14, 1939.

134276. No. 79. An assorted collection from Kabul, July 1939.

134277 to 134279. SECALE CEREALE L. Poaceae.

Rye.

From Kabul.

134277. No. 44.

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134278. No., 45.

134280. Solanum sp. Solanaceae.

No. 82. Sag-angurak-anab-ain-saklab. From Kabul.

134281. Trifolium sp. Fabaceae.

Clover.

No. 49. June 30, 1939. Maidon, on road to Sari-chash-ma at 7,000 feet altitude. A pink clover.

134282. VICIA ERVILIA (L.) Willd. Fabaceae.

Vetch.

No. 11. From Kabul.

134283. VITIS VINIFERA L. Vitaceae.

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No. 81. July 15, 1939. Early grapes, probably from Khandahar.

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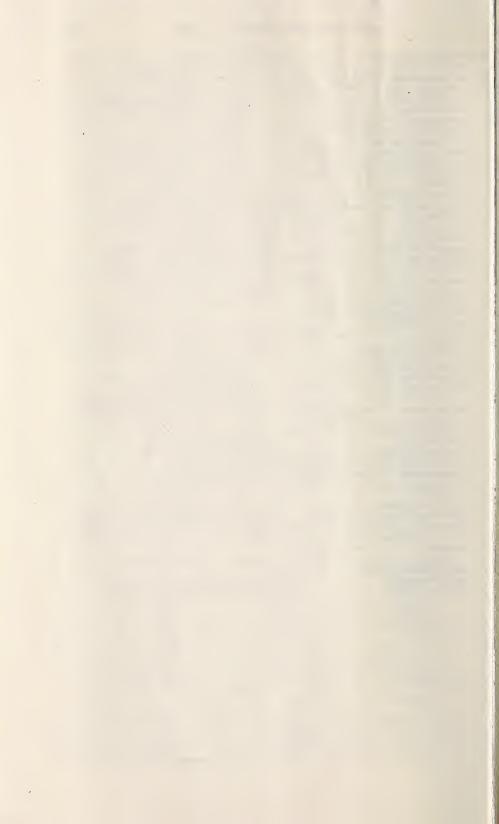
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# Plant Inventory No. 141

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. July 1950



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# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, OCTOBER 1 TO DECEMBER 31, 1939 (Nos. 134284 to 134735)

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This inventory, No. 141, lists plant material (Nos. 134284 to 134735) received by the Division of Plant Exploration and Introduction during the period from October 1 to December 31, 1939. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

Paul G. Russell,

Botanist.

Plant Industry Station, Beltsville, Md.

#### INVENTORY

134284 to 134295. Cinchona spp. Rubiaceae.

From New Jersey. Seeds presented by Merck & Co., Inc., Rahway. Received October 25, 1939.

 134284. No. 3.
 134290. No. 30.

 134285. No. 7.
 134291. No. 31.

 134286. No. 13.
 134292. No. 33.

 134287. No. 21.
 134293. No. 35.

 134288. No. 24.
 134294. No. 40.

 134289. No. 28.
 134295. No. 45.

134296. Elliottia racemosa Muhl. Ericaceae.

From Georgia. Seeds presented by William A. Knight, Biltmore Forest, Biltmore, N. C. Received October 21, 1939.

A shrub or small tree with slender upright branches, small, oblong or ellipticoblong leaves, and loose racemes of fragrant white flowers with petals about ¾ inch long. Native to the southeastern United States.

For previous introduction see 114525.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

134297. Crocus sativus L. Iridaceae.

From India. Bulbs purchased from G. Ghose & Co., Townend, Darjeeling. Received October 28, 1939.

A form with very dark-purple flowers. Introduced as Crocus kashmeriana; considered a form of the above.

For previous introduction see 112110.

134298. Amygdalus sp. Amygdalaceae.

From Afghanistan. Seeds collected by Wilbur V. Harlan, collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received September 22, 1939. Numbered in October 1939.

Collected June 23, 1939, on a dry hillside above the lake on the Khalsijabbar road to Jalalabad.

134299. Prunus cerasus L. Amygdalaceae.

Sour cherry.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received October 26, 1939.

No. 4475. Alubalu. From Kabul, August 13, 1939. A somewhat flattened, dark-red cherry about 5% inch in diameter.

134300 and 134301. Hibiscus cannabinus L. Malvaceae.

Ambari hemp.

From India. Seeds presented by the Senior Marketing Officer, Civil Lines, Delhi, through B. P. Pal, Imperial Economic Botanist, New Delhi. Received October 27, 1939.

For previous introduction see 133728.

134302 to 134304. Amygdalus persica L. Amygdalaceae. Peach.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered November 1, 1939.

134302. Selection (D-25-25) from P. I. 100633.

134303. Selection from P. I. 87637.

134304, C-27059. Bokhara peach.

134305. Centaurea rothrockii Greenm. Asteraceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 26, 1939.

Originally collected as seeds in Colorado, Chiapas, Mexico, in 1936 by J. H. Kempton, Bureau of Plant Industry, United States Department of Agriculture.

An annual with sparingly branched stems 1 to 3 feet high, lanceolate to oblong-lanceolate, sessile and often clasping leaves up to 5 inches long and large flower heads with conspicuous, usually purple, rays much exceeding the lemon-yellow disk flowers. Native to Arizona and Mexico.

#### 134306 to 134311.

From Mexico. Seeds collected by Peter Heinz, Brownsville, Tex. Received October 2, 1939.

134306. Angelonia angustifolia Benth. Scrophulariaceae.

From a swamp in Tuzapan, Puebla. A glabrous herbaceous perennial up to 1 foot high with narrow-lanceolate toothed leaves and showy violet or purple flowers in terminal racemes. Native to Mexico.

134307. Castela texana (Torr. and Gray) Rose. Simaroubaceae.

A dense shrub 3 to 8 feet high, with stiff whitish branches, simple leaves about ½ inch long, small bright-red or purplish flowers, followed by small red fruits. Native to southwestern Texas and Mexico.

## 134306 to 134311—Continued

134308. Cestrum sp. Solanaceae.

A tall shrub, very fragrant at night, with numerous, very conspicuous, large bunches of white waxy berries.

134309. Heliconia sp. Musaceae.

A plant with bright-blue seeds, collected at 3,000 feet altitude at Tuzapan, Puebla, 100 miles south of Tuxpan, Veracruz, Mexico.

134310. Malpighia sp. Malpighiaceae.

134311. Thryallis sp. Malpighiaceae.

Small yellow flowers.

# 134312. Zamia sp. Cycadaceae.

From Ecuador. Seeds collected in Guayaquil by Oscar Haught and presented by E. P. Killip, Associate Curator, Division of Plants, Smithsonian Institution, Washington, D. C. Received October 13, 1939.

A handsome cycad which sometimes becomes 5 feet high with about 20 pinnate leaves, some of them nearly 4 feet long, with spines along the margins. The pendent, cylindrical cone has numerous seeds; these are very showy, with a bright-red outer coat which is soft, fleshy, and ill-smelling. Native to Ecuador.

# 134313 to 134349. Triticum aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by the University of Sydney, Sydney, New South Wales. Received October 12, 1939.

134313. AB.	5/18-1-1-2.	134332. AB.	31/7-1-1-2.
134314. AB.	7/9-2-4-1.	134333. AB.	31/1-1-1-3.
134315. AB.	21/10-1-1-2.	134334. AB.	31/3-2-1-4.
134316. AB.	21/6-1-2-1.	134335. AB.	31/4-1-1-1.
134317. AB.	21/2-1-2-2.	134336. AB.	32/2-1-1-2.
134318. AB.	21/1-1-1-2.	134337. AB.	32/3-1-1-1.
134319. AB.	25/7-1-3-3.	134338. AB.	37/2-5-4.
134320. AB.	26/5-3-3-1.	134339. AB.	37/2-1-2.
134321. AB.	26/4-1-1-4.	134340. AB.	37/5-3-3.
134322. AB.	26/1-5-1-3.	134341. AD.	2/3-1-1-5.
134323. AB.	26/1-3-1-2.	134342. AD.	17/2-2-4.
134324. AB.	27/2-2-3-2.	134343. AD.	20/9-5-3.
134325. AB.	27/2-2-1-4.	134344. AD.	20/6-3-4.
134326. AB.	27/2-1-1-3.	134345. AD.	20/6-2-3.
134327. AB.	28/1-1-1-5.	134346. AD.	20/5-3-3.
134328. AB.	29/2-1-1-2.	134347. AD.	20/1-4-3.
134329. AB.	29/1-2-1-5.	134348. AD.	21/1-3-5.
134330. AB.	30/2-1-1-1,	134349. AG.	2/9-5-2-2.
134331. AB.	31/7-2-1-2.		

## 134350 to 134353.

From Turkey. Bulbs purchased from Hanna Boutros, Mersine. Received October 2, 1939.

134350. Iris sisyrinchium L. Iridaceae.

Moraea iris.

An iris 6 inches to a foot high, native to southern Europe and northern Africa. It has 2 linear leaves and several flowers with erect, lanceolate, pale-lilac standards and spatulate lilac falls with a yellow spot.

For previous introduction see 77655.

# 134350 to 134353—Continued

134351. IRIS Sp.

134352. Iris bakeriana Foster.

An Armenian iris with 3 or 4 subulate, hollow, glaucous-green leaves about 6 to 9 inches long at flowering time, finally about 1 foot long, and a single fragrant flower 3 inches long with a short peduncle buried at flowering. The outer segments have a long obovate-elliptical claw separated by a constriction from the small reflexed ovate blade. The blade, in the upper half and on its edges an intense pure violet, is marked in the lower part with small violet spots on a creamy-white ground and has an inconspicuous yellow streak not raised into a ridge, the latter prolonged down the claw which is marked by oblique, parallel, lilac streaks on a pale ground. The inner segments are shorter, erect, oblanceolate and plain lilac. Allied to Iris reticulata.

134353. Hyacinthus orientalis L. Liliaceae.

Common hyacinth.

Apricot.

For previous introduction see 14790.

134354. Prunus armeniaca L. Amygdalaceae.

From California. Seeds presented by George R. Dorman, Fresno. Received October 3, 1939.

An apricot with an edible pit. Seeds originally from Iowa.

134355. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Ecuador. Seeds presented by G. M. Dyott, Hacienda Tumbo Grande, Guayaquil. Received October 4, 1939.

A wild tomato, collected August 27, 1939, at Km. 14, along the Guayaquil & Salinas Railway.

#### 134356 to 134363.

From the Philippine Islands. Seeds presented by the Bureau of Plant Industry, Manila. Received October 10, 1939.

134356. Calamus sp. Phoenicaceae.

Palm.

Sumulid.

134357. CALAMUS HAENKEANUS Mart.

Palm.

Ditaan. .

134358. Diospyros discolor Willd. Diospyraceae.

Mabolo.

Camagon. A medium-sized tree with shining leaves 5 to 10 inches long, pubescent beneath. The velvety, dull-reddish, thin-skinned fruits, 3 inches long and nearly 4 inches in diameter, have firm, rather dry flesh of rather indefinite flavor, and 4 to 8 large seeds. Native to the Philippine Islands.

For previous introduction see 133621.

134359. LIVISTONA ROTUNDIFOLIA (Lam.) Mart. Phoenicaceae.

Palm.

Anahau. An erect fan-leaved palm with a trunk ultimately about 50 feet high and 18 inches in diameter. The roundish leaves, with 60 to 80 segments, are 3 to 5 feet across.

For previous introduction see 108020.

134360. Oncosperma Horridum (Griffith) Scheff. Phoenicaceae. Palm.

Anibong. A very ornamental palm which becomes 80 feet high and grows, usually, in swampy forests. The trunk is covered with spines, and the few spreading leaves, 14 to 16 feet long, bear very narrow, acuminate spreading coriaceous leaflets 2 to 3 feet long. The purplish-black fruit is borne on pendulous spadix branches 2 to 3 feet long. Native to the East Indies.

For previous introduction see 51776.

134361. Ormosia calavensis Azaola. Fabaceae.

Bahai. A large tropical tree with unequally pinnate leaves consisting of 7 or 9 ovate leaflets. The violet-colored flowers are followed by small woody pods containing 2 or 3 coral-pink seeds. Native to the Philippines.

# 134356 to 134363—Continued

For previous introduction see 101447.

134362. Pinanga insignis Beccari. Phoenicaceae.

Palm.

Sarauag. A rather small Philippine palm with a slender, smooth trunk about 6 inches in diameter, graceful feathery leaves, and oval reddish fruits 2 inches in diameter.

For previous introduction see 104354.

134363. TERMINALIA PELLUCIDA Presl. Combretaceae.

Dalinsi. A medium-sized evergreen tree with a trunk about 2 feet thick, extremely burly, heavy, hard wood, and leathery ovate leaves usually 4 inches or more in length. Native to the Philippine Islands.

# 134364. Prunus avium L. Amygdalaceae.

Mazzard.

From Rumania. Seeds presented by the Director, University Botanic Garden, Cernauti. Received October 5, 1939.

Locally grown, subspontaneous seeds.

# 134365 and 134366. PRUNUS MAHALEB L. Amygdalaceae.

Mahaleb cherry.

From the Netherlands. Seeds presented by the Director, Jardin Botanique de L'Universite Technique, Delft. Received October 5, 1939.

134365. Seeds from an old tree near the city of Assen, Netherlands.

134366. Seeds collected in the municipal parks in The Hague in August 1939.

# 134367 and 134368. Phaseolus vulgaris L. Fabaceae. Common bean.

From Australia. Seeds presented by Arthur Yates & Co. Pty., Ltd., Sydney, New South Wales. Received October 6, 1939.

134367. Emperor William.

134368, Golden Cluster.

# 134369 to 134374. ORYZA SATIVA L. Poaceae.

Rice.

From Peru. Seeds presented by the Lambayeque Experiment Station, Lambayeque. Received October 12, 1939.

134369, Charnock.

134372, Kumara,

134370. Dhairal.

134373.  $P \times S$  (8).

134371, Kataktara.

134374. Surjamukhi,

## 134375 to 134399.

From England. Scions presented by Sir Arthur Hill, Director, Royal Botanic Gardens, Kew, Surrey. Received October 14, 1939.

134375 to 134396. Berberis spp. Berberidaceae.

Barberry.

134375. Berberis bergmanniae C. Schneid.

A dense, bushy, evergreen barberry up to 6 feet high, with obovate to oval, spiny, sinuately serrate leaves up to 2 inches long, yellow flowers in crowded fascicles, followed by black oval fruits covered with blue-white bloom. Native to western China.

134376. Berberis bergmanniae var. acanthophylla C. Schneid.

An evergreen bush up to 6 feet high, with leathery spiny leaves 2 inches long, and black berries. Native to western China.

For previous introduction see 70966.

134377. Berberis Chillanensis (C. Schneid.) Sprague.

A deciduous barberry 5 to 15 feet high, with entire, narrowly obovate, short leaves, numerous yellow to pale-orange flowers followed by black fruits covered with purple bloom. Allied to *Berberis montana*. Native to the Andes of Chile and Argentina.

## 134375 to 134399—Continued

134378. Berberis comberi Sprague and Sandwith.

An evergreen barberry up to 4 feet high, occasionally forming masses 12 feet across, with stout, stiff, hollylike, ovate-orbicular to oval leaves armed with several large spiny teeth, and usually solitary, fragrant orange-yellow flowers. Native to the Argentine Andes at about 3,000 feet altitude.

134379. Berberis consimilis C. Schneid.

A shrub with spiny-dentate, oval-oblong leaves 2 cm. long, and yellow flowers followed by purple ellipsoid fruits; of unknown origin.

For previous introduction see 66683.

134380. Berberis delavayi C. Schneid.

A barberry up to 5 feet high, with leathery, ovate to oblong-ovate, spiny, dentate leaves about 2 inches long and fascicles of small yellow flowers. Native to Yunnan Province, China at altitudes of 5,000 to 7,500 feet. Allied to *Berberis hookeri*.

134381. Berberis dubia C. Schneid.

A Chinese shrub with ovate leaves, paler beneath, and with flowers in short racemes.

For previous introduction see 49927.

134382. Berberis Hakeoides (Hook. f.) C. Schneid.

An evergreen barberry up to 12 feet high, with suborbicular, spiny-toothed leaves, rounded or subcordate at the base, and dense subglobose clusters of flowers followed by bluish-black fruits. Native to Chile.

134383. Berberis Hypokerina Airy-Shaw.

A small, bushy, evergreen barberry, forming spreading clumps of stems 2 to 3 feet high with oblong-elliptic, hollylike leaves which have a silvery-white undersurface. Closely related to *Berberis insignis*. Native to Upper Burma.

134384. Berberis insignis Hook. f. and Thoms.

A handsome, erect bush with very few spines and with large, shining, hollylike evergreen leaves 3 to 7 inches long. The golden-yellow flowers are borne in clusters of about 15 and are followed by ovoid black berries. Native to the eastern Himalayas.

134385. Berberis integerrima Bunge.

A Siberian barberry which forms a shrub up to 6 feet high with grayish-green leaves, dense racemes of small flowers and black fruits.

For previous introduction see 58107.

134386. Berberis Kawakamii Hayata.

An erect, much-branched barberry with whorled, leathery, obovate to lanceolate, spiny leaves up to 2 inches long, yellow flowers 10 to 15 in a fascicle, followed by black ovoid berries. Native to Taiwan at altitudes of 7,500 to 9,000 feet.

134387. Berberis kumaonensis C. Schneid.

134388. Berberis lecomtei C. Schneid.

A shrub up to 7 feet high, with slender, yellowish-brown spines ½ inch long, thin lanceolate leaves, and small yellow flowers. Native to southwestern China.

For previous introduction see 79003.

134389. Berberis Potanini Maxim.

A barberry with very spiny, hard, glistening foliage, bearing a multitude of coral-red berries. The bushes grow from 3 to 5 feet high. Native to China.

For previous introduction see 40681.

## 134375 to 134399—Continued

134390. BERBERIS LEUCOCARPA W. W. Smith.

A barberry 6 to 8 feet high with fascicled, obovate to elliptic, leathery leaves 2 to 3 inches long, racemes of about 20 flowers followed by white fruits. Native to Yunnan Province, China.

134391. Berberis linearifolia Phil.

A handsome evergreen barberry of loose, erect habit, 4 to 8 feet high, with entire, linear-oblong to elliptic leaves ¾ to 1¾ inches long, dark-green, shining above, and corymbs of 3 to 7 orange to crimson flowers followed by dark-blue-black fruits. Native to Chile.

134392. X Berberis Lologensis Sandwith.

An evergreen shrub described as a hybrid of  $Berberis\ darwinii\ and\ B.$  linearifolia.

For previous introduction see 114676

134393. Berberis Mekongensis W. W. Smith.

A deciduous barberry about 6 feet high, with almost sessile, whorled, obovate, spiny-dentate leaves about 1 inch long, and dense racemes of ovoid fruits. Allied to *Berberis brachypoda* and *B. dasystachya*. Native to Yunnan Province, China.

134394. Berberis montana C. Gay.

A spiny deciduous barberry up to 15 feet high with obovate to oblance olate leaves  $\frac{1}{2}$  to  $\frac{1}{2}$  inches long, in clusters of 2 to 7, and yellow or pale-orange flowers, followed by small, blackish fruits. Native to the Andes of Chile and Argentina.

134395. Berberis Ruscifolia Pers.

A shrub with spiny leaves and yellow flowers; native to Argentina.

For previous introduction see 33926.

134396. Berberis usteriana (C. Schneid.) R. N. Parker.

134397. MAHONIA FORTUNEI (Lindl.) Fedde. Berberidaceae.

An evergreen shrub 5 to 6 feet high with erect, unbranching stems, leaves 6 to 8 inches long with usually 7 linear-lanceolate leaflets about 3 inches long, and densely crowded yellow flowers in racemes 2 to 3 inches long. Native to China.

134398. Berberis Napaulensis (DC.) Spreng. Berberidaceae. Barberry.

An attractive shrub which grows to a good size with stiff, bright-green spiny leaves, yellow flowers and maroon-colored berries. Native to eastern Asia.

For previous introduction see 73148.

134399. X MAHONIA HETEROPHYLLA C. Schneid. Berberidaceae.

An evergreen shrub 3 to 6 feet high with pinnate leaves 6 to 12 inches long, usually with 5 or 7 lanceolate or narrow, oblong, shining green leaflets. A hybrid of *Mahonia aquifolium* and *fortunei*.

134400 and 134401. Amygdalus persica L. Amygdalaceae. Peach.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered October 18, 1939.

134400. Selection (D. R. 16-T 17) from P. I. 80089.

134401. Selection (D. R. 16-T 18) from P. I. 80089.

134402. Chloris gayana Kunth. Poaceae.

Rhodes grass.

From the Union of South Africa. Seeds presented by H. J. Every, Assistant Director of Native Agriculture, Pietermaritzburg, Natal. Received October 12, 1939.

For previous introduction see 134235.

# 134403 and 134404. Crotalaria spp. Fabaceae.

From Brazil. Seeds presented by Professor F. C. Hoehne, Director of the State Department of Botany, São Paulo. Received October 19, 1939.

134403. CROTALARIA BRACHYSTACHYS Benth.

An erect shrub about 4 feet high with ternate leaves. Native to Brazil. 134404. Crotalaria paulina Schrank.

A tall shrub native to São Paulo, where it grows on poor soil in very dry localities.

#### 134405 and 134406.

From Palestine. Bulbs purchased from the American Colony Store, Jerusalem. Received October 21, 1939.

134405. Crocus Gaillardoth (Boiss, and Blanche) Maw. Iridaceae.

A crocus with filiform, later circinnate-recurved, leaves appearing with the flowers. The perianth tube is slender, pale lilac at the outer face, white at the inner, twice as long as the limb which is about 1 inch in length. Native to the eastern Mediterranean region.

134406. Tulipa sharonensis Dinsm. Liliaceae.

Tulip.

A stemless tulip about 2 inches across with usually 4 narrow-linear to lanceolate, wavy, circinnate leaves 4 to 6 inches long, overtopping the solitary crimson campanulate flower. Similar to *Tulipa montana*. Native to sandy localities in the coastal plain of Palestine.

# 134407. Cynodon dactylon (L.) Pers. Poaceae. Bermuda grass.

From the Union of South Africa. Roots presented by John Phillips, Director, Botanical Research Station, Milner Park, Johannesburg. Received October 21, 1939.

Royal Cape. A relatively frost-hardy strain which will endure 15° F. It is a rapid spreader and presents an excellent non-nap surface for golf greens.

# 134408. Calamus siphonospathus Mart. Phoenicaceae. Palm.

From the Philippine Islands. Seeds presented by the Director, Bureau of Forestry, Manila. Received November 7, 1939.

# 134409 to 134412. Oryza sativa L. Poaceae.

Rice.

From India. Seeds presented by B. B. Dane, Officer in Charge, Rice Research Scheme, Central Provinces, Raipur. Received November 8, 1939.

134409. Dilpasand, No. 1.

134411. Sultugurmatia, No. 3.

134410. Nungi (E. B. No. 17), No. 2. 134412. Surmatia, No. 4.

#### 134413 and 134414. Hibiscus. Malvaceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered November 9, 1939.

134413. Toreador. A seedling grown at the Garden from P. I. 55064. The plant is of very vigorous, upright habit and fairly easy to propagate from cuttings. The flower is handsome, 6 inches in diameter, pale orange yellow with a deeper than carmine eye.

134414. Leslie. The flower is salver-shaped, 6 inches in diameter, and the full, well-rounded petals are venetian pink faintly flushed along the margin with chamois, fading into white at the base. The stigmas are scarlet.

### 134415. Sedum sp. Crassulaceae.

From Mexico. Plants collected by Cornelius H. Muller, Bureau of Plant Industry, United States Department of Agriculture. Received November 7, 1939. Collected in Chihuahua, Mexico, October 1939.

134416. Arenga wighth Griff. Phoenicaceae.

Palm.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered November 10, 1939.

A monoecious palm forming dense clumps with gray trunks 3 to 30 feet high and 1 foot in diameter; the leaves, 12 to 28 feet long, dark green above and white beneath, are composed of linear-ensiform, auricled leaflets 1 to 3½ feet long; the pendulous spadices are nearly 4 feet long and the globose fruits are 1 inch in diameter. Native to the Deccan Peninsula at altitudes of 500 to 3,000 feet.

134417 and 134418. Lycopersicon Hirsutum Humb. and Bonpl. Solanaceae. Tomato.

From Ecuador. Seeds presented by G. M. Dyott, through A. T. Nester, American Consul, Guayaquil. Received November 10, 1939.

Wild tomato seed from the Hacienda Tambo Grande, Km. 38, Ferrocarril a la Costa, Guayaguil, October 1939.

134417. Fruit greenish yellow with no purple tint, but soft and apparently ripe. 134418. Fruit green with purple lines and flush.

134419. Saccharum. Poaceae.

Sugarcane.

From Australia. Cuttings presented by Garage A. Roger, Noumea, New Caledonia, through C. Sullivan, Ltd., Sydney. Received November 10, 1939.

134420 to 134438.

From New Zealand. Plants purchased from Arthur Yates & Co., Ltd., Auckland. Received November 13, 1939.

134420 to 134426. Amygdalus persica L. Amygdalaceae.

Peach.

134420. Delicious.

134424. Pink Double Flowering.

134421. Golden Beauty.

134425. Scarlet Double Flowering. 134426. White Double Flowering.

134422, Nahuta,

134423, Paragon.

Nectarine. 134427 and 134428. AMYGDALUS PERSICA VAR. NECTARINA Ait.

134427. New Boy.

134428. Twuford Surprise.

134429 to 134432. Malus sylvestris Mill. Malaceae.

134431. Mobb's Royal.

134429. Albany Beauty.

134430, Kidd's Orange Red.

134432. Paulin's Beauty.

134433. Prunus armeniaca L. Amygdalaceae. Roxburgh Red.

Apricot.

Apple.

134434 to 134437. PRUNUS Spp.

134434 and 134435. PRUNUS DOMESTICA L.

Plum.

134434. Golden Prune.

134435. Jenkins Seedling Prune.

134436, PRUNUS.

Christmas Red Plum.

134437. Prunus Salicina Lindl.

Japanese plum.

Satsuma Hybrid.

134438. Rheum rhaponticum L. Polygonaceae. Champion Seedless.

Common rhubarb.

877549-50-2

# 134439 and 134440. Prunus spp. Amygdalaceae.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanical Institute, Ashkabad. Received November 8, 1939.

134439. PRUNUS AVIUM L.

Mazzard.

134440. PRUNUS MAHALEB L.

Mahaleb cherry.

134441. LILIUM sp. Liliaceae.

Lily.

From Kentucky. Seeds presented by Prof. Frank T. McFarland, University of Kentucky, Lexington. Received November 16, 1939.

A wild lily collected on Black Mountain, Ky., at about 4,000 feet altitude, October 1939. The stalks were from 5 to 7 feet tall with from 8 to 15 seed pods on each stalk; the bulbs are 2 to 3 inches in diameter. Flowers not seen.

134442. Triticum aestivum L. Poaceae.

Common wheat.

From India. Seeds presented by Dr. Maryan Singh, Punjab. Received November 16, 1939.

#### 134443 to 134455.

From the Netherlands. Plants purchased from Felix & Dykhus, Boskoop. Received November 20, 1939.

134443 to 134445. ASTER spp. Asteraceae.

134443 and 134444. X ASTER FRIKARTI Silva Tarouca and C. Schneid.

Said to be a globular plant 2 to 3 feet high with very large sky-blue flowers having orange-yellow centers. It flowers from August to November.

For previous introduction see 97988.

134445. ASTER THOMSONI C. B. Clarke.

A laxly branched perennial aster with slender, erect, flexuous hairy stems up to 3 feet high; broad-ovate, coarsely toothed leaves 2 to 4 inches long, almost clasping at the base; and solitary flower heads about 2 inches across with numerous reddish-purple rays. Native to the Himalayan region at altitudes of 7,000 to 10,000 feet.

134446 and  $134447. \times$  Deutzia carnea (Lemoine) Rehder. Hydrangeaceae.

A hybrid (*Deutzia rosea* var. *grandiflora*×*sieboldiana*) with ovate to oblongovate leaves up to 2 inches long and loose upright panicles of flowers, pink outside and nearly 1 inch across.

134448 and 134449. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

For previous introduction see 132367.

134450. Deutzia scabra var. candidissima Rehder.

For previous introduction see 132313.

134451. X DEUTZIA LEMOINEI Lemoine.

An upright shrub up to 8 feet high with lanceolate leaves  $1\frac{1}{2}$  to 4 inches long, and pure-white flowers  $\frac{5}{8}$  inch across in erect panicles or corymbs up to 3 inches long.

134452. Deutzia scabra Thunb.

Fuzzy deutzia.

Var. Crenata.

134453 to 134455. X PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae. Lemoine mockorange.

134453. Var. Madame Lemoine.

134455, Var. Nuée.

134454. Var. Mer de Glace.

## 134456. Solanum Tuberosum L. Solanaceae.

Potato.

From the Philippine Islands. Tubers presented by Dr. Hilarion S. Silayan, Director of Plant Industry, Bureau of Plant Industry, Manila. Received November 21, 1939.

Baguio Selection No. 1.

#### 134457 to 134466.

From the Netherlands. Bulbs purchased from C. G. van Tubergen, Haarlem. Received November 21, 1939.

134457. Bravoa geminiflora Lex. Amaryllidaceae.

A Mexican amaryllid with slender stems 1 to 2 feet high, erect, smooth, linear leaves, mostly basal, and paired, orange-colored or reddish flowers on a slender, terminal raceme.

134458 to 134460. Haemanthus spp. Amaryllidaceae.

134458. X HAEMANTHUS ANDROMEDA Laplace.

A very handsome hybrid ( $Haemanthus\ katherinae \times magnificus$ ) with light-green leaves 18 inches long by 4 inches wide and a large rounded umbel of small reddish-orange flowers.

134459. HAEMANTHUS NATALENSIS Pappe.

A haemanthus with 8 or 9 membranous, bright-green leaves more than 1 foot long, the lower ones spotted on the back with red brown. The small flowers, in a very dense globular mass 3 to 4 inches in diameter surrounded by several large deep-purple bracts, are obscured by the long scarlet filaments and bright-yellow anthers. Native to South Africa.

For previous introduction see 130722.

134460. HAEMANTHUS.

King Albert.

134461. HIPPEASTRUM. Amaryllidaceae.

Var. Ackermanni. A hybrid with characters that suggest Hippeastrum aulicum.

134462. HIPPEASTRUM PROCERUM (Duchartre) Lem.

A Brazilian hippeastrum with numerous falcate, sword-shaped leaves 2 to 3 feet long and 4 to 12 lilac flowers in an umbel.

134463. Hymenocallis. Amaryllidaceae.

Var. Daphne.

134464. LITTONIA MODESTA Hook, f. Melanthiaceae.

Keiti. A tuberous-rooted climbing vine, resembling Gloriosa.

For previous introduction see 133411.

134465. Sandersonia aurantiaca Hook. Melanthiaceae.

A South African tuberous plant with simple, erect, terete, leafy stems up to  $1\frac{1}{2}$  feet high, clasping, lanceolate, narrow acuminate, subdistichous leaves 2 to 4 inches long and pendulous, showy, orange, globose-campanulate flowers about 1 inch long and solitary in the leaf axils.

134466. Ferraria undulata L. Iridaceae.

A South African plant about 1 foot high that grows like the blackberry-lily, with basal ensiform leaves more than 1 foot long. The starry, dull, olive-green, velvety, blotched-purple flowers last but a day.

# 134467 to 134475. Rubus spp. Rosaceae.

From South America. Seeds presented by Dr. T. H. Goodspeed, University of California Botanical Garden Expedition to the Andes. Received November 17, 1939.

134467. Rubus sp.

No. 10033. U. C. B. G. 39/1063. December 5, 1938. From Peru, Departamento Cajamarca, Province Hualgayoc, southeast of Chota about 10 km. on Bambamarca trail at 2,700 m. altitude. A shrub averaging 2.5 m.; canes medium spiny, flowers usually rose when young, later white; fruit said to be eaten but not prized.

# 134467 to 134475—Continued

134468. Rubus sp.

No. 9915. U. C. B. G. 39/1052. November 9, 1938. From Peru, Departamento Huanuco, Carpish, at 2,850 m. altitude at the edge of forest in clay subsoil. A perennial herb over 1 m. high; flowers dark-rose; sepals with dark-purple hairs on outside; fruits dull black, not of good flavor.

134469. Rubus sp.

No. 10649. U. C. B. G. 39/2010. February 15, 1939. From Peru, Departamento Apurimac, Province Abancay, Upper Rio Marino Valley, along stream at 2,600 m. altitude. Shrub 3 m. high; flowers white with green stamens; fruit black, of average sweetness. The old stems are very dark brown, hirsute, unarmed.

134470. Rubus sp.

No. 10622. U. C. B. G. 39/2011. February 12, 1939. From Peru, Departamento Apurimac, Province Abancay, Ampuy, in forest, near stream, moist humus in gravelly soil, at 3,200 m. altitude. A shrub up to 2.5 m. high; fruit not ripe, red turning black; flowers not seen; stems beset, even when very old, with capitate hairs which are not glutinous.

134471. Rubus sp.

No. 10965. U. C. B. G. 39/2012. March 18, 1939. From Peru, Departamento Junin, Province Tarma, between Palca and Carpapata, in shrubland, red clay soil, among boulders at 2,900 m. altitude. Shrub about 2 m. high; fruit of average sweetness and flavor; flowers not seen.

134472. Rubus sp.

No. 10278. U. C. B. G. 39/2086. January 8, 1939. From Peru, Departamento Huancavelica, Salcabamba, in gravelly shrubland at 3,250 m. altitude. A shrub with weak stems 2 m. long; stamens with anthers and corolla peachblossom pink; styles red; fruit 4 to 20 druplets on a single fruit, black when ripe, sour, not agreeable; seeds large, elliptical, coarsely reticulate. Even old stems remain pubescent.

134473. Rubus sp.

No. 10289. U. C. B. G. 39/2087. January 8, 1939. From Peru, Departamento Huanuco, Quebrada, south of Salcabamba, in open shrub wood in loam at 3,300 m. altitude. A shrub up to  $1\frac{1}{2}$  m. high; flowers with rose-colored petals shorter than the calyx; fruit over 1 inch long, conical, like a large strawberry, bright red, raspberry flavor but not sweet.

134474. Rubus sp.

No. 11495. U. C. B. G. 39/2135. April 21, 1939. From Peru, Departamento Lima, Province Huarochiri, Santa Eulalia valley, in shrubland at 1,200 m. altitude. Old canes unarmed, twigs with abundant bristles; flowers white, relatively small; ripe fruits have agreeable, somewhat sweet taste.

134475. Rubus sp.

No. 25377. U. C. B. G. 39/2418. April 15, 1939. From Bolivia, Departamento La Paz, Province Yungas, near Unduavi; in underbrush along roadside in shade of large trees on slope at 3,000 m. altitude. Shrub, bush or vine 2 to 2.5 m. high with many sharp hooked thorns; fruit dark red to black.

# 134476 to 134481. Vaccinium spp. Vacciniaceae.

From England. Plants, cuttings, and seeds presented by the Director, Royal Horticultural Society, Wisley, Ripley, Surrey. Received November 21, 1939.

Unless otherwise mentioned, this material was received as plants.

134476. VACCINIUM BRACTEATUM Thunb.

An evergreen shrub 3 to 5 feet high with remotely serrulate elliptic leaves 1 to 3 inches long and leafy bracted racemes of reddish flowers followed by red fruits which are said to be edible. Native to China and Japan.

For previous introduction see 85740.

#### 134476 to 134481—Continued

134477. VACCINIUM GLAUCO-ALBUM Hook, f.

A shrub, native to the Sikkim Himalayas between 9,000 and 10,000 feet altitude. The leathery, oblong, ovate leaves, 2 to 3 inches long, are mucronate-serrate and are white beneath. The small, pink-tinged, white flowers, in racemes 3 inches long, are subtended by large white bracts which persist until the fruits are ripe.

For previous introduction see 102784.

134478. VACCINIUM FLORIBUNDUM H. B. K.

A slender shrub, native to Ecuador between 10,000 and 12,000 feet. It sometimes becomes 6 feet high, with very small elliptic to ovate-acute finely serrate leaves. The edible fruit is roundish, about  $\frac{1}{2}$  inch in diameter, glaucous blue, juicy, subacid, and contains several very small seeds. It greatly resembles some of the blueberries of the United States. Received as  $Vaccinium\ mortinia$  which is now referred to the above.

For previous introduction see 54281.

134479. VACCINIUM MOUPINENSE Franch.

A shrub 2 to 4 feet high with small obovate to oblong-obovate glossy, green leaves and racemes of rose-pink flowers followed by small deep purple or black fruits. Related to *Vaccinium nummularia*. Native to western China.

134480 and 134481. VACCINIUM PADIFOLIUM Smith.

A shrub or small tree with ovate to oval leaves 1 to  $2\frac{1}{4}$  inches long, dark green above, and racemes of dull-yellow flowers tinged with purple, followed by blueberries  $\frac{1}{3}$  or  $\frac{1}{2}$  inch across. Native to Madeira.

134480. Received as plants and cuttings.

134481. Received as seeds.

# 134482 to 134518. Triticum aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by H. Wenholz, Director of Plant Breeding, New South Wales Department of Agriculture, Sydney, New South Wa'es. Received November 21, 1939.

134482. Acme × Waratah S. 201.

134483. Aleppo 11 × Giza 4. II 38-80. 0588.

134484. Aleppo 11 × Haurani. II 38-79.

134485. Aleppo 8 × Heite. II 38-82. 0564.

134486. Aleppo 8 × Palestine 2. II 38-81.

134487. Aziziah × Heite. II 38-77. 0549.

134488. Aziziah × Haurani No. 2. II 38-78. 0552.

134489. Bobin Gaya Bobin S. 203.

134490, Eureka S. 216.

134491. Federation X Webster S. 205.

134492. Giza  $4 \times Heiti$ . II 38-74. 0540.

134493. Giza 4 × Palestine 2. II 38-73. \$537.

134494. Haurani X Senatore Capelli. II 38-83.

134495. Haurani × Aleppo 8. II 38-84.

134496. Heite × India 808. II 38-75.

134497. Heite × Pradas II 38-76.

134498.  $Hope \times Currawa \times Dundee S.$  207.

134499.  $Hope \times King S. 296.$ 

134500. Hofed I. S. 208.

134501. Kenya Gular S. 209.

## 134482 to 134518—Continued

134502. Marquille X Waratah S. 211.

134503. Minflor S. 214.

134504. Steinwedel  $\times$  T. timopheevi S. 990.

134505. Steinwedel × T. timopheevi S. 987.

134506. Steinwedel  $\times$  T. timopheevi S. 1003.

134507. Thatcher S. 71.

134508. Female No. 73.

134509. Female No. 74.

134510. Female No. 75.

134511. Female No. 76.

134512. Female No. 77.

134513. Female No. 78.

134514. Female 'No. 80.

134515. Female No. 81. 134516. Female No. 82.

134517. Female No. 83.

134518. Female No. 84.

# 134519 and 134520. Pennisetum clandestinum Hochst. Poaceae. Kikuyu grass.

From England. Seeds presented by the Director, Royal Botanic Gardens, Kew, Surrey. Received November 22, 1939.

A rapid-growing perennial stoloniferous grass, native to South Africa where it is considered valuable drought-resistant summer pasture.

134519. Kabete Eco-Type.

134520. Rongai Eco-Type.

For previous introduction see 75920.

#### 134521 to 134559.

From Mexico and Texas. Seeds collected by Cornelius H. Muller, Bureau of Plant Industry, United States Department of Agriculture. Received November 22, 1939.

134521. Bumelia sp. Sapotaceae.

No. 3716. From La Morita, 60 miles west of Casas Grandes, Chihuahua, Mexico, October 11, 1939. A shrub up to 30 feet high with small fruits % inch in diameter, dark blue to black. Found on rocky stream banks.

134522. CARICA PAPAYA L. Papayaceae.

Papaya.

No. 2634. August 13, 1939. From the market in Monterrey, Nuevo León, Mexico, but said to have been grown in Tampico, Mexico. Fruit about 12 inches long; flesh yellow and about 1½ inches thick.

134523. CEIBA ACUMINATA (S. Wats.) Rose. Bombaceae.

Pochote.

No. 3626. A close relative of the kapok tree, *Ceiba pentandra*. A large or medium-sized tree with a spiny trunk, compound leaves, and hard oblong fruits about 7 inches long which contain a whitish down used for stuffing pillows, life preservers, and for making candlewicks. Native to western and southern Mexico.

For previous introduction see 97537.

134524. CLITORIA sp. Fabaceae.

No. 2792. August 17, 1939. From La Trinidad, Nuevo León, Mexico. An erect or prostrate vine from a perennial root-stock; the light-blue flowers are in clusters.

## 134521 to 134559—Continued

134525 to 134530. Croton spp. Euphorbiaceae.

134525 and 134526. Croton fruticulosus Engelm.

134525. No. 2663. August 11, 1939. From Nuevo León, Mexico. Common on open and shady situations on the lower and middle slopes.

134526. No. 3157. September 6, 1939. From Sierra de la Madera, Cañon del Pajarito, Coahuila, Mexico. Found along arroyo banks. A small aromatic, densely-tomentose shrub 3 to 5 feet high with long-petiolate, ovate or deltoid-ovate leaves 1 to 4 inches long. Native to northern Mexico and the adjacent United States.

134527. CROTON NEOMEXICANUS Muell. Arg.

No. 3749. From desert flats west of the Chisos Mountains, Brewster County, Tex., October 19, 1939. A shrubby croton up to 4 or 5 feet high with lanceolate to elliptic leaves ½ to 2 inches long. The root bark is said to be used as a purgative. Native to northern Mexico and adjacent United States.

134528. CROTON Sp.

No. 2601. From Melon, Tex., August 8, 1939. A large annual or biennial woody herb; principal pigeon food for south and central Texas.

134529. CROTON Sp.

No. 3638. October 5, 1939. From El Rio Bonito, Sonora, Mexico. A shrub up to 3 feet high with white flower clusters.

134530. CROTON Sp.

No. 3687. October 7, 1939. From El Rio Bonito, Sonora, Mexico. A shrub 7 feet high.

134531. DIOSPYROS TEXANA Scheele. Diospyraceae.

Persimmon.

No. 3102. August 31, 1939. From Puerta de San Lazaro, Coahuila, Mexico. A large shrub or small tree, with obovate leaves, which fruits abundantly. The fruit is of pleasant flavor but only moderately fleshy.

For previous introduction see 90875.

134532. Ehretia anacua (Teran and Berland.) Johnst. Boraginaceae.

No. 3750. June 1939. From Cuero, De Witt County, Tex. Anaqua; manzanillo. A shrub or tree up to 50 feet high, native to northern Mexico and southern Texas. The thick, oblong, scabrous leaves are 1 to 4 inches long. The small, white, fragrant flowers are borne profusely and are followed by sweet, edible, yellow fruits about ¼ inch in diameter. The wood is used for tool handles and wheel spokes, and in Texas the tree is used as an ornamental.

For previous introduction see 103406.

134533. Eryngium sp. Apiaceae.

No. 3365. September 20, 1939. From hills about Los Tres Ojitos, 12 miles east of San Antonio, Chihuahua, Mexico. An herb with blue inflorescences.

134534. Forestiera neomexicana A. Gray. Oleaceae.

134535. Hibiscus cardiophyllus A. Gray. Malvaceae.

No. 3147. September 3, 1939. From the Valle de Bocatoche, Coahuila, Mexico. An herb or shrub 1 to 2 feet high with rounded-cordate, sinuate leaves and crimson flowers over 1 inch long. Native to northern Mexico and Texas.

134536. HIBISCUS DENUDATUS Benth.

No. 3336. From 31 miles southeast of Jimenez, Chihuahua, Mexico. A tufted shrubby perennial 1 to 2 feet high with thick ovate, serrulate leaves and lavender-purple flowers. Native to the southwestern United States and Mexico.

## 134521 to 134559—Continued

134537. Lonicera albiflora var. dumosa (A. Gray) Rehder. Caprifoliaceae.

No. 3307. September 14, 1939. From the Cañon de San Salvador, Sierra Mojada, Mexico. A vine to 10 feet long found sprawling over shrubs, in moist shaded arroyos of the high canyons.

134538. Monarda pringlei Fernald. Menthaceae.

No. 2874. August 20, 1939. On the trail from La Trinidad to Sierra de la Cebolla, Nuevo León, Mexico. A handsome herbaceous perennial with simple stems about 3 feet high, thin lanceolate leaves 3 to 4 inches long and terminal clusters of 12 to 15 flowers. The vermilion corollas are less than 2 inches long, with a slender long-exserted tube tapering gradually to the curved throat. Related to Monarda didyma. Native to Mexico.

134539 to 134541. NICOTIANA TABACUM L. Solanaceae. Common tobacco.

Collected October 5 and 6, 1939, about La Nopalera, El Rio Bonito, Sonora, Mexico.

134539. No. 3641. The most commonly planted type. The plants become 4 feet tall.

134540. No. 3642. A long-leafed form of No. 3641 [P. I. 134539].

134541. No. 3671. Tabaco aromatico.

134542. Penstemon campanulatus (Cav.) Willd. Scrophulariaceae.

Beardtongue.

No. 2894. August 21, 1939. From the upper west slopes of Sierra de la Cebolla, Nuevo León, Mexico. A plant, with purple flowers, which seeds abundantly.

134543. Physalis ixocarpa Brot. Solanaceae.

Tomatillo.

No. 2692. August 13, 1939. From the market in Monterrey, Nuevo León, Mexico.

For previous introduction see 91541.

134544, PSIDIUM GUAJAVA L. Myrtaceae.

Guava.

No. 2693. August 13, 1939. From the market at Monterrey, Nuevo León, Mexico. Fruit green, about 2 inches in diameter.

134545. Rhus Microphylla Engelm. Anacardiaceae.

No. 3008. August 29, 1939. From the Larrea-Flourensia Desert, Coahuila, Mexico. A densely branched shrub up to 8 feet high with small oblong to oval leaflets and red fruit. Native to northern Mexico and the adjacent United States.

134546. Rhus trilobata Nutt. Anacardiaceae.

No. 3489. September 25, 1939. From the Cañon Huahuatan, 10 miles southeast of Madera, Chihuahua, Mexico. An upright shrub 2 to 6 feet high. The leaves are composed of 3 crenately lobed leaflets and the inconspicuous yellow flowers are followed by short panicles of small bright-red fruits. Native to Canada and the northern United States.

For previous introduction see 77596.

134547 to 134550. Salvia spp. Menthaceae.

134547. SALVIA REGLA Cav.

No. 2883. August 20, 1939. From the upper slopes of the Sierra de la Cebolla, Nuevo León, Mexico. A shrub up to 6 feet high with obtuse, coarsely crenate, green leaves and scarlet flowers about 2 inches long in axils or in short racemes. Native to northern Mexico.

134548. Salvia greggii A. Gray.

No. 2600. From San Antonio, Texas. A shrub up to 3 feet high with oblong entire leaves  $\frac{1}{2}$  inch long and red or purplish-red, autumn flowers 1 inch long in racemes up to 4 inches long. Native to Mexico.

### 134521 to 134559—Continued

134549. SALVIA TEXANA (Scheel) Torr.

No. 2622. August 10, 1939. Collected 7 miles south of Sabinas Hidalgo, Nuevo León, Mexico. A perrennial herb up to 1½ feet high with sessile, lanceolate leaves and blue flowers about 1 inch long. Native to Texas.

134550. SALVIA GRAHAMI Benth.

No. 2889. August 21, 1939. From the upper west slopes of the Sierra de la Cebolla, Nuevo León, Mexico. A Mexican shrub up to 3 feet high with oval, nearly entire leaves 1 inch long and racemes of showy red flowers.

134551 and 134552. SCUTELLARIA SUFFRUTESCENS S. Wats. Menthaceae.

A much-branched woody scutellaria about 6 inches high with entire, oblong-ovate leaves less than  $\frac{1}{2}$  inch long and solitary axillary flowers having narrow-tubular corollas  $\frac{3}{4}$  inch long, greenish yellow tinged with red. Native to northern Mexico.

134551. No. 2667. August 11, 1939. From the Cañon Diente, near Monterrey, Nuevo León, Mexico.

134552. No. 2811. August 18, 1939. From La Trinidad, Nuevo León, Mexico. 134553. SMILAX sp. Smilacaceae.

No. 2967. August 24, 1939. From the trail between Portrero, Redondo, and Las Aguntas, Nuevo León, Mexico. A vine up to 30 feet long, common in moist arroyos.

134554. SARACHA PROCUMBENS (Cav.) Ruiz and Pav. Solanaceae.

No. 3385. September 20, 1939. From La Junta, Chihuahua, Mexico. A weed found growing in corn fields. The flower clusters are ivory followed by dark-blue to black edible fruits.

134555 to 134557. VITIS spp. Vitaceae.

Grape.

134555. VITIS sp.

No. 2650. August 11, 1939. From the Cañon Diente, near Monterrey, Nuevo León, Mexico. A small vine climbing over bushes, found in oak and hickory forest.

134556. VITIS Sp.

No. 3154. September 6, 1939. From the Cañon del Pajarito, Sierra de la Madera, Coahuila, Mexico. A vine 15 feet long, sprawling over shrubs in dry arroyos becoming larger in more moist habitats.

134557. VITIS sp.

No. 3486. September 24, 1939. From the Cañon Huahuatan, 10 miles southeast of Madera, Chihuahua, Mexico. A bushy or trailing vine up to 10 feet in height; common along arroyos and open pine and oak forest.

134558. ZINNIA MULTIFLORA L. Asteraceae.

No. 3350-A. September 20, 1939. From the hills about Los Tres Ojitos, 20 miles west of Carritas, Chihuahua, Mexico. Flowers red, ray florets persistent and fading but little with age; shade tolerant.

For previous introduction see 123843.

134559. PISTACIA MEXICANA H. B. K. Anacardiaceae.

No. 2970. From the trail between Portrero Redondo and Las Ajuntas, Nuevo León, Mexico. A shrub 15 feet high with purplish-red fruit.

For previous introduction see 127855.

134560. Phoenix spinosa Schum. Phoenicaceae.

From Africa. Seeds collected by Harold A. Royer, of Ames, Iowa. Received November 20, 1939.

Wild dates collected on a plateau at 4,000 feet altitude, near Jos, northern Nigeria.

For previous introduction see 118396.

134561. LILIUM PHILIPPINENSE Baker. Liliaceae. Benguet lily.

From the Philippine Islands. Seeds presented by H. S. Silayan, Director of Plant Industry, Bureau of Plant Industry, Manila. Received November 22, 1939.

A semihardy Philippine lily with a slender green stem, sometimes purple dotted, 1 or 2 feet high, 30 to 40 narrow horizontal, recurved leaves 3 to 5 inches long, and delicately fragrant, waxy, pure-white flowers 8 inches long, tinged with green near the base, with yellow anthers. This species is best suited for pot culture in cold regions.

For previous introduction see 58964.

134562 to 134574. Solanum tuberosum L. Solanaceae. Potato.

From the Netherlands. Tubers presented by the Adjutant Secretary, General Netherlands Inspection Service, Wageningen. Received December 1, 1939.

134562. Eigenheimer.

134569. Record.

134563. Erdgold.

134570. Robusta.

 $134564.\ Gladstone.$ 

134571. Thorbecke. 134572. Triumf.

134565. Gloria. 134566. Hellena.

134573, Ultimus.

134567. Iduna.

134574. Voran.

134568. Matador.

134575 to 134595. Malus spp. Malaceae.

From Canada. Scions presented by W. N. Kerr, Assistant in Horticulture, Department of Agriculture, Dominion Experimental Farms, Morden, Manitoba. Received December 1, 1939.

134575 to 134577, MALUS.

134575. Anaros.

134576. Beauty.

134577. Bedford.

134578 and 134579. MALUS SYLVESTRIS Mill.

Apple.

134578. Blushed Calville.

134579. Breakey.

134580 and 134581. MALUS.

134580. Florence.

134581. Garnet.

134582 to 134585. MALUS SYLVESTRIS Mill.

Apple.

134582. Jethro.

134584. Manitoba Spy.

134583. Manitoba.

134585. Mantet.

134586. MALUS.

Mecca.

134587 to 134590. Malus sylvestris Mill.

Apple.

134587. Mount.

134589. Watts.

134588. Pine Grove Red.

134590. Waukon.

134591 to 134595. MALUS.

134591. Hybrid Crab-Heyer No. 12.

134594. Hybrid Crab-Toba.

134592. Hybrid Crab-Rescue.

134595. Hybrid Crab-Trail.

134593. Hybrid Crab-Rosilda.

134596. Triticum durum var. fere-alexandrinum Jacub. and Nikol. Poaceae. Wheat.

From the Union of Soviet Socialist Republics. Seeds presented by G. Grossman, Chief, Bureau of Plant Industry, Leningrad. Received December 4, 1939.

Originally from Syria. A smooth-awned wheat.

For previous introduction see 115855.

134597. Phoenix sylvestris (L.) Roxb. Phoenicaceae.

Indian date palm.

From Hawaii. Seeds presented by L. W. Bryan, Department of Forestry, Hilo, through the Fairchild Garden, Coconut Grove, Fla. Received in November 1939. Numbered in December 1939.

For previous introduction see 124801.

134598. Olea sp. Oleaceae.

Olive.

From India. Seeds presented by Captain A. E. G. Davy, Assistant Political Agent, Fort Sandeman, Zhob, Baluchistan. Received November 29, 1939.

Wild olives which grow under very dry conditions and great range of annual temperature.

#### 134599 and 134600.

From Germany. Seeds presented by Dr. Willmar Schwabe, Director of the Botanical Garden, Leipzig. Received November 29, 1939.

134599. Prunus avium L. Amygdalaceae.

Sweet cherry.

134600. PRUNUS MAHALEB L.

Mahaleb cherry.

134601 and 134602. Avena sativa L. Poaceae.

Oats.

From Scotland. Seeds presented by William Robb, Scottish Society for Research in Plant Breeding, Craigs House, Corstorphine, Edinburgh. Received December 9, 1939.

134601. No. 289-5-A-1-C-2-A.

134602. No. 289-5-A-1-C-2-C.

134603. Diospyros sp. Diospyraceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Received December 26, 1934. Numbered in December 1939.

#### 134604 and 134605.

From England. Seeds purchased from Gartons, Ltd., Warrington. Received December 12, 1939.

134604. Avena sativa L. Poaceae.

Oats.

Royal Scot, a new white oat.

134605. Secale cereale L. Poaceae.

Rve.

Re-Selected Giant Large-Grained Winter rye.

134606. Pyrus communis L. Malaceae.

Common pear.

From Iowa. Scions presented by H. L. Lantz, Agricultural Experiment Station, Ames. Received December 13, 1939.

Tioma pear. Originally from Manchuria.

#### 134607 to 134666.

From Afghanistan. Seeds collected by W. V. Harlan, collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received November 25, 1939.

134607. AEGILOPS Sp. Poaceae.

September 2, 1939. Collected south of Khanabad at 4,000 feet altitude.

134607 to 134666—Continued

134608. Aegilops sp.

September 10, 1939. From dry hills south of Tashkurghan at 3,000 feet altitude. Mixed sample.

134609. AGROPYRON Sp. Poaceae.

September 10, 1939. From dry hills south of Tashkurghan at 3,000 feet altitude.

134610. AGROPYRON Sp.

September 2, 1939. From a dry gulch south of Khanabad at 4,000 feet altitude.

134611. Allium sp. Liliaceae.

July 27, 1939. From a rocky canyon above Sari Chasma at 8,000 feet altitude. 134612. Alopecurus sp. Poaceae.

July 25, 1939. From Sari Chasma in a wet field at 7,000 feet altitude.

134613. Amygdalus communis L. Amygdalaceae.

Almond.

134614. Andropogon sp. Poaceae.

From Sari Chasma.

134615. ASTRAGALUS Sp. Fabaceae.

July 27, 1939. From the hills above Sari Chasma at 8,500 feet altitude.

134616. Avena sp. Poaceae.

From an irrigated field for hay at Sari Chasma at 7,000 feet altitude.

134617. Bellevalia sp. Liliaceae.

134618 to 134621. Bromus spp. Poaceae.

Bromegrass.

134618. Bromus sp.

September 2, 1939. From a dry gulch south of Khanabad at 4,000 feet altitude.

134619. Bromus sp.

From Bandi Amir, in dry-land barley at 9,000 feet altitude.

134620. Вкомиз sp.

July 27, 1939. From hills above Sari Chasma at 9,000 feet altitude.

134621. Bromus sp.

September 5, 1939. From dry hills north of Maimana at over 1,000 feet altitude.

134622 and 134623. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

134622. September 9, 1939. From Mazar-i-Sherib at 1,000 feet altitude. A melon with pink to yellow flesh.

134623. September 9, 1939. From Tashkurghan at 1,000 feet altitude. A melon with red flesh.

134624. Cucumis melo L. Cucurbitaceae.

Muskmelon.

September 7, 1939. From Sari-pul at 2,000 feet altitude. A long, spotted melon.

134625 and 134626. ELYMUS spp. Poaceae.

Wild-rye.

July 27, 1939. From the hills above Sari Chasma between 8,000 and 9,000 feet altitude.

134625. ELYMUS Sp.

134626. ELYMUS Sp.

# 134607 to 134666—Continued

134627. Festuca sp. Poaceae.

July 25, 1939. From Sari Chasma at 7,000 feet altitude, in a medium wet situation.

134628. Festuca sp.

July 27, 1939. From a dry hillside, between 7,000 and 10,000 feet altitude.

134629. Gossypium. Malvaceae.

Cotton.

September 10, 1939. From Tashkurghan at 1,000 feet altitude.

134630 to 134638. Новреим spp. Poaceae.

Barley.

134630. HORDEUM BULBOSUM L.

Wild barley from south of Khanabad. September 1939.

134631. HORDEUM DISTICHON L.

From south of Khanabad, September 1939, at 4,000 feet altitude. Two-rowed wild barley.

134632. HORDEUM VULGARE L.

From the Nil Pass (alkali flat) at 10,000 feet altitude.

134633. HORDEUM VULGARE L.

From Sari Chasma at 8,000 feet altitude. Six-rowed barley, blue, very short. Collected in July 1939.

134634. HORDEUM VULGARE L.

July 25, 1939. From Sari Chasma at 7,000 feet altitude. A mixed sample of barley (threshed).

134635. HORDEUM VULGARE L.

From the bazar at Acksheh at 1,000 feet altitude. Threshed barley.

134636. HORDEUM VULGARE L.

From Bandi-amir at 9,000 feet altitude.

134637. HORDEUM MURINUM L.

September 5, 1939. Wild barley from dry hills north of Maimana, at 1,000 feet altitude.

134638. Hordeum gussoneanum Parl.

September 2, 1939. Grass collected south of Khanabad.

134639. Koeleria sp. Poaceae.

Grass.

September 5, 1939. From dry hills north of Maimana at over 1,000 feet altitude.

134640 and 134641. LINUM USITATISSIMUM L. Linaceae.

Flax.

134640. September 5, 1939. From north of Maimana at 1,000 feet altitude. Dry-land flax.

134641. September 1939. From south of Tashkurghan at 2,000 feet altitude.

134642. Melica sp. Poaceae.

Frass

July 25, 1939. Collected along a stone wall at the edge of a field in Sari Chasma at over 8,000 feet altitude.

134643. Oryzopsis sp. Poaceae.

Grass.

July 27, 1939. From hills above Sari Chasma at 8,000 feet altitude.

134644. Phleum sp. Poaceae.

Grass.

September 10, 1939. From dry hills south of Tashkurghan at 3,000 feet altitude.

134645. Phleum sp. Poaceae.

Grass.

September 5, 1939. From dry hills north of Maimana at over 1,000 feet altitude.

**134607 to 134666**—Continued

134646. PISUM SATIVUM L. Fabaceae.

Pea.

134647 to 134649. Poa spp. Poaceae.

Grass.

134647 and 134648. POA BULBOSA L.

134647. September 3, 1939. From near Kunduz at over 2,000 feet altitude. A short-grass plant.

134648. September 2, 1939. A short grass from a dry hillside at Pul-i-humbri between 4,000 and 5,000 feet altitude.

134649. Poa sp.

July 25, 1939. From a wet field near Sari Chasma at 7,000 feet altitude.

134650. Rheum sp. Polygonaceae.

Rhubarb.

July 27, 1939. Wild rhubarb from the hills above Sari Chasma between 8,000 and 9,000 feet altitude.

134651. Rumex sp. Polygonaceae.

July 27, 1939. From Sari Chasma. A plant used as forage.

134652. Sesamum indicum L. Pedaliaceae.

· Sesame.

September 7, 1939. From an irrigated valley south of Tagau-shireen at 1,200 feet altitude.

134653. Setaria viridis (L.) Beauv. Poaceae.

Grass.

July 30, 1939. From an irrigated field above Sari Chasma at 8,000 feet altitude.

134654. SETARIA Sp.

Grass.

August 31, 1939. A foxtail grass from the Ghorband Valley at 9,000 feet altitude.

134655 and 134656. STIPA spp. Poaceae.

Grass.

July 27, 1939. From dry hillsides above Sari Chasma at 8,000 feet altitude.

134655. STIPA Sp.

134656. STIPA SD.

134657 to 134663. Triticum aestivum L. Poaceae.

Common wheat.

134657. August 31, 1939. Irrigated wheat from the Ghorband Valley at 9,000 feet altitude.

134658. August 31, 1939. Irrigated wheeat from the Ghorband Valley at 9,000 feet altitude.

134659. August 31, 1939. From the Ghorband Pass at 10,000 feet altitude; not irrigated, and grown at high altitude only.

134660. Dry-land wheat from Sang Charah, at 3,000 feet altitude.

134661. September 5, 1939. Dry-land wheat from steep hills east of Maimana at 1,500 feet altitude.

134662. September 1939. South of Khanabad at 1,000 feet altitude.

134663. August 31, 1939. From the top of the Ghorband Pass at 10,000 feet altitude.

134664. Vicia sp. Fabaceae.

Sahal. Collected July 27, 1939 in an irrigated field at Sari Chasma at 7,000 feet altitude.

134665 and 134666. VITIS VINIFERA L. Vitaceae.

European grape.

134665. September 7, 1939. Red grapes from Maimana at 1,300 feet altitude. 134666. August 16, 1939. White grapes from the Kabul bazar.

#### 134667 to 134684.

From Switzerland. Plants purchased from the Nurseries of W. Marletaz, Bex (Vaud). Received December 18, 1939.

134667. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

Henri Adenot.

134668 to 134673. Malus sylvestris Mill. Malaceae.

Apple.

134668. Pomme Cloche.

134671. Reinette Grise Vaudoise.

134669, Pomme Raisin.

134672. Surprise.

134670. Reinette de Chevroux.

134673. Tilsith.

134674 to 134680. Prunus spp. Amygdalaceae.

134674. PRUNUS AVIUM L.

Bigarreau Graffion. Sweet cherry.

134681 to 134684. Pyrus communis L. Malaceae.

134675. PRUNUS CERASUS L.

Griotte du Pays. Sour cherry.

134676 to 134680. PRUNUS AVIUM L.

Sweet cherry.

134676, Noire de Montreux.

134679. Noire de Lowertz. 134680. Prècoce de Clies.

134677. Noire de Chavannes.

134678. Noire è la Grappe.

Common pear.

134681. Bergamotte Montagne.

134683. Culotte Suisse.

134682. Beurré Vauban.

134684. Poire à Botzé.

134685 and 134686.

From Costa Rica. Seeds collected by Loren G. Polhamus, Bureau of Plant Industry, United States Department of Agriculture. Received December 19, 1939.

134685. ACANTHORHIZA sp. Phoenicaceae.

Palm.

Palma escoba. From near Cairo, November 22, 1939. Trunk 4 inches in diameter; leaf-blades fibrous, deciduous, and fan-shaped, dividing irregularly Fruits nearly round, more than 2 cm. in diameter.

134686. Geonoma sp. Phoenicaceae.

Palm.

Palmiche morado. From near Cairo, November 22, 1939, growing on a hill-side, with many basal roots exposed. A palm with long, simple, fishtail leaves, the young leaves with a bronze tinge.

134687 to 134690. Amygdalus persica L. Amygdalaceae. Peach.

From New Jersey. Plants presented by Prof. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received December 20, 1939.

134687. New Jersey 98.

134689. Pacemaker.

134688. Raritan Rose.

134690. White Hale.

134691 to 134713.

From Afghanistan. Seeds collected by Mrs. Elizabeth Bacon, White Plains, N. Y. Received December 14, 1939.

134691. Allium sp. Liliaceae.

No. 110. Bulany. From Sari Casma.

134692. Brassica Rapa L. Brassicaceae.

Turnip.

No. 69. From the Kabul bazar.

134691 to 134713—Continued

134693. CICER ARIETINUM L. Fabaceae.

Chickpea.

No. 68. From the Kabul bazar.

134694. Citrullus vulgaris Schrad. Cucurbitaceae.

Watermelon.

No. 111. From Kabul.

134695. HORDEUM VULGARE L. Poaceae.

Barley.

No. 73. From the Kabul bazar.

134696. Hordeum vulgare L.

Barley.

No. 59. Collected at Sari Casma.

134697. Jugland Regia L. Juglandaceae.

Persian walnut.

No. 81. From the Kabul bazar.

134698. Medicago sativa L. Fabaceae.

Alfalfa.

No. 74. From the Kabul bazar.

134699. Panicum Miliaceum L. Poaceae.

Broomcorn millet.

No. 77. From the Kabul bazar.

134700. PHLEUM sp. Poaceae.

Grass.

No. 109. Jarui Kuhi. From Sari Casma.

134701. RHEUM sp. Polygonaceae.

Rhubarb.

No. 61. Cukri. Wild rhubarb from Sari Casma.

134702. SECALE CEREALE L. Poaceae.

Rye.

No. 73-A. From the Kabul bazar.

134703. Trifolium sp. Fabaceae.

Clover.

No. 76. Saftal (red clover), from the Kabul bazar.

134704 to 134707. Triticum aestivum L. Poaceae.

Common wheat.

134704. No. 58. From Sari Casma.

134705. No. 72. From the bazar at Kabul.

134706. No. 73-B. From the bazar at Kabul.

134707. No. 105. Collected between 9,000 and 10,000 feet altitude. Locality not given.

134708. Vicia faba L. Fabaceae.

Broadbean.

No. 75. From the Kabul bazar.

134709 to 134711. VICIA spp.

134709. No. 70. From the Kabul bazar.

134710. No. 115. Mosag. Not cultivated. From Sari Casma.

134711, No. 62. Sahal or Soxol. From Sari Casma.

134712 and 134713. ZEA MAYS L. Poaceae.

Corn.

134712. No. 71. From the Kabul bazar.

134713. No. 104. Collected in a field near Kabul.

#### 134714 to 134717.

From England. Plants purchased from the Knap Hill Nursery, Ltd., Woking, Surrey. Received December 27, 1939.

134714. Ceanothus thyrsiflorus Esch. Rhamnaceae.

Blueblossom.

A native American shrub with blue flowers.

For previous introduction see 62567.

### 134714 to 134717—Continued

134715. DEUTZIA TAIWANENSIS (Maxim.) C. Schneid. Hydrangeaceae.

An attractive deciduous shrub with slender branches, native to the mountain of Taiwan. The white or pinkish-white flowers, with conspicuous golden-yellow stamens, are in graceful racemes.

For previous introduction see 132329.

134716. PHILADELPHUS. Hydrangeaceae.

Mockorange.

Enchantress.

134717. PHILADELPHUS INCANUS Koehne.

Gray mockorange.

A late-flowering Chinese species up to 6 feet high, with oval leaves, dull grayish beneath. The white flowers are produced 5 to 9 together on racemes about 2 inches long, at the end of short leafy shoots, and have an odor like that of hawthorn. The flowering season is from the middle of late July.

For previous introduction see 104916.

### 134718 to 134720. Avena sativa L. Poaceae.

Oats.

From Sweden. Seeds presented by the Allmanna Svenska Utsädesaktiebolaget, Svalöf. Received December 27, 1939.

134718. Eagle oats.

134719. Golden oats.

134720. Star oats.

### 134721. Choisya katherinae C. H. Mull. Rutaceae.

From Mexico. Plants collected by Cornelius H. Muller, Bureau of Plant Industry, United States Department of Agriculture. Received in December 1939.

No. 3245. From Cuatro Cienagas, Coahuila, September 10, 1930. A shrub 1 to 4 feet tall with white flowers.

### 134722 to 134732.

From China. Seeds and bulbs collected by Peter Liu, Peiping. Received December 29, 1939.

134722 to 134730. Castanea mollissima Blume. Fagaceae. Hairy chestnut.

A collection of late-ripening chestnuts, obtained in October 1939.

134722. From Pei Tao village, north of San T'un Ying.

134723. From Pa Li P'u village, southeast of San T'un Ying.

134724. From Tsui Ke Chuang, northwest of Luan Chow.

134725. From Tsui Ke Chuang, northwest of Luan Chow.

134726. From Pei Tao, north of San T'un Ying.

134727. From Pei Tao village, north of San T'un Ying.

134728. From Pa Li P'u village, southeast of San T'un Ying.

134729. From Pa Li P'u village, southeast of San T'un Ying.

134730. From Tsui Ke Chuang, northwest of Luan Chow,

For previous introduction see 113669.

134731. Pyrus sp. Malaceae.

Pear.

Seeds of a wild pear, collected in the Temple of Heaven grounds, Peiping. Fruit very small, ¼ inch in diameter, dark brown when ripe.

134732. Scilla Chinensis Benth. Liliaceae.

134733. Rubus sp. Rosaceae.

From Peru. Seeds presented by Dr. T. H. Goodspeed, University of California Botanical Garden Expedition to the Andes, University of California, Berkeley. Received December 26, 1939.

No. 39. 2499. Collected in Departamento Puno, Peru, 1939.

134734. BOUTELOUA MEGAPOTAMICA (Spreng.) Kuntze. Poaceae. Grass.

From Uruguay. Seeds presented by Dr. Bernardo Rosengurtt, Montevideo. Received December 21, 1939.

A forage grass collected at Tres Arboles, Rio Negro. An erect cespitose perennial grass with narrow, spikelike panicles. Native to Brazil and Uruguay. For previous introduction see 128167.

134735. TRIFOLIUM SUBTERRANEUM L. Fabaceae.

### Subterranean clover.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond, South Australia. Received December 28, 1939.

For previous introduction see 132222.

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Phoenix spinosa, 134560. sylvestris, 134597. Physalis ixvocarpa, 134543. Pinanga insignis, 134362. Pistacia mexicana, 134559. Pisum sativum, 134646. Plum. See Prunus domestica.

Japanese. See Prunus salicina.

Poa sp., 134649.

bulbosa, 134647, 134648. Pochote. See Ceiba acuminata. Potato. See Solanum tuberosum. Prunus, 134436. armeniaca, 134354, 134433. 134599, avium, 134364, 134439, 134674, 134676-134680. cerasus, 134299, 134675. domestica, 134434, 134435. mahaleb, 134365, 134366, 134440, 134600.

salicina, 134437. Psidium guajava, 134544, Pyrus, sp., 134731.

communis, 134606, 134681-134684.

Rheum spp., 134650, 134701. rhaponticum, 134438. Rhubarb. See Rheum sp.

common. See Rheum rhaponticum.

Rhus microphylla, 134545. trilobata, 134546.

Rice. See Oryza sativa. Rubus spp., 134467–134475, 134733. Rumex sp., 134651.

Rye. See Secale cereale. wild. See Elymus spp.

Saccharum, 134419. Salvia grahami, 134550. greggii, 134548. regla, 134547. texana, 134549. Sandersonia aurantiaca, 134465.

Saracha procumbens, 134554.

Scilla chinensis, 134732. Scutellaria suffrutescens, 134551, 134552.

Secale cereale, 134605, 134702. Sedum sp., 134415.

Sesame. See Sesamum indicum. Sesamum indicum, 134652.

Setaria sp., 134654. viridis, 134653.

Smilax sp., 134553.

Solanum tuberosum, 134456, 134562-134574.

Stipa spp., 134655, 134656. Sugarcane. See Saccharum.

Terminalia pellucida, 134363. Thryallis sp., 134311.

Tobacco, common. See Nicotiana tabacum.

Tomatillo. See Physalis ixocarpa. Tomato. See Lycopersicon spp.

Trifolium sp., 134703.subterraneum, 134735.

Triticum aestivum, 134313-134349, 134442, 134482–134518, 134657–134663, 134704–134707.

durum var. fere-alexandrinum, 134596.

Tulip. See Tulipa sharonensis. Tulipa sharonensis, 134406. Turnip. See Brassica rapa.

Vaccinium bracteatum, 134476. floribundum, 134478. glauco-album, 134477. moupinense, 134479. padifolium, 134480, 134481.

Vicia spp., 134664, 134709-134711. faba, 134708.

Vitis spp., 134555-134557. vinifera, 134665, 134666.

Walnut, Persian. See Juglans regia. Watermelon. See Citrullus vulgaris. Wheat, common. See Triticum aestivum.

Zamia sp., 134312. Zea mays, 134712–134713. Zinnia multiflora, 134558.



# Plant Inventory No. 142

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. August 1950



# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO MARCH 31, 1940 (Nos. 134736 to 136369)

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This inventory, No. 142, lists plant material (Nos. 134736 to 136369) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1940. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

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Botanist.

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<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.



### INVENTORY

### 134736 to 134743. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by Dr. R. A. Silow, Genetics Department, Cotton Research Station, Empire Cotton Growing Corp., Trinidad. Received January 4, 1940.

 134736. ATB. 1 a.
 134740. H.T. 12 a.

 134737. ATB. 1 b.
 134741. H.T. 12 b.

 134738. ATI. 2 a.
 134742. H.T. 15 a.

 134739. ATI. 2 b.
 134743. H.T. 15 b.

### 134744. CROTON sp. Euphorbiaceae.

From Mexico. Seeds collected by Cornelius H. Muller, Bureau of Plant Industry, United States Department of Agriculture. Received January 8, 1940.

No. 3248. September 10, 1939. From Sierra de la Madera, Canon del Agua, Coahuila. A shrub up to 2 feet high, found on open rocky ridges.

### 134745. TARCHONANTHUS MINOR Less. Asteraceae.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberly. Received January 8, 1940.

A resin-scented shrub up to 7 feet high, with attractive woolly flower heads. It is drought-resistant and is excellent stock feed.

### 134746. Triticum aestivum L. Poaceae. Common wheat.

From Colombia. Seeds presented by Gervasio Obregon, Departamento de Agricultura, Estación Agricola Experimental Nacional de "La Picota," Bogotá. Received January 3, 1940.

Bola. One of the best Colombian varieties; it is grown throughout the whole wheat zone of the country.

### 134747 and 134748. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

From China. Seeds collected by W. W. Moss, National Agricultural Research Bureau, Yunnan Province, and presented through L. A. Wheeler, Director of Foreign Agricultural Relations, United States Department of Agriculture. Received January 4, 1940.

134747. A large peanut of unknown origin. Its protein yield is high, but the cil content is low.

134748. A small native peanut with a high oil content, but a low yield.

### 134749. Juglands Regia L. Juglandaceae. Persian walnut.

From Czechoslovakia. Seeds presented by A. Spaldàk, Olomouc-Nova. Received January 4, 1940.

### 134750 to 134752.

From Afghanistan. Material collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 2, 1940.

#### 134750. FICUS sp. Moraceae.

Fig.

No. 4173. From Kabul, 6,000 feet altitude, November 21, 1939. Cuttings from vines on which the fruit does not develop because the summers are too cool. The plant, however, survives below-zero temperatures; some winters are said to be  $-30^{\circ}\mathrm{F}$ .

134751. GLADIOLUS sp. Iridaceae.

No. 4888. Corms collected in the Burchao Pass at 9,000 feet altitude, October 16, 1939. Found on a dry shale slope.

134752. VITIS sp. Vitaceae.

Grape.

No. 5073. From Kandahar, November 23, 1939. Apparently a cultivated plant.

### 134753 to 134755. CITRUS spp. Rutaceae.

From Cuba. Bud sticks presented by Thomas R. Towns, Holguin. Received January 8, 1940.

134753. CITRUS SINENSIS (L.) Osbeck.

Orange.

 $Washington\ Navel.$ 

134754. CITRUS SINENSIS (L.) Osbeck.

Orange.

Town's Cuban Navel. A bud sport of Washington Navel, ripening its fruits earlier than the parent variety.

134755. CITRUS AURANTIFOLIA (Christm.) Swingle.

Lime.

West Indian lime.

### 134756 to 134760. MEDICAGO TRUNCATULA Gaertn. Fabaceae.

Medic.

From Australia. Seeds presented by W. L. Waterhouse, University of Sydney, Sydney, New South Wales. Received January 5, 1940.

134756. From Swan Hill, Victoria. Grown in good soil, where there is an average of 18 inches of annual rainfall, mostly in winter.

134757. From Murray Bridge, South Australia. Grown in shallow limestone soil, where there is an average of 12 inches of annual rainfall, which falls in the winter.

134758. From Werribee, Victoria. Grown in good soil, where there is an average of 24 inches of annual rainfall, mostly in the winter.

134759. From Roseworthy, South Australia. Grown in alkaline loam, where there is an average of 17 inches of annual rainfall, mostly in the winter.

134760. From Singleton, New South Wales. Grown in good loam, where there is an average of 29 inches of rainfall evenly distributed throughout the year.

### 134761. Prunus Armeniaca L. Amygdalaceae.

Apricot.

From England. Plants purchased from J. Cheal & Sons, The Nurseries, Crawley, Sussex. Received January 12, 1940.

Blenheim.

### 134762 to 134773. Trifolium spp. Fabaceae.

Clover.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond, South Australia. Received January 9, 1940.

### 134762 to 134770. Trifolium fragiferum L.

Strawberry clover.

134762. Benbecula. 134763. Camperdown. 134764. Koondrook.

134767. Shearman's. 134768. Swan Hill.

134765. Palestine.

134769. Tarwei.

134766. Parklands.

134770. Werribee.

134771. TRIFOLIUM GLOMERATUM L.

Cluster clover. A clover that grows fairly well in sour soils, and also in soils of low phosphate content. It is useful as a planting when soils first come under cultivation.

For previous introduction see 102000.

134772 and 134773. TRIFOLIUM SUBTERRANEUM L.

Subterranean clover.

134772. Bacchus Marsh.

134773. Springhurst.

#### 134774 to 134778. MYRCIARIA spp. Myrtaceae. Jaboticaba.

From Brazil. Plants purchased from Dierberger & Companhia, São Paulo. Received January 16, 1940.

### 134774 to 134788-Continued

134774. Baranca Blanca.

134775. Paulista. 134776. Pintada. 134777. Rajada. 134778. Sabara.

### 134779 and 134780. VITIS VINIFERA L. Vitaceae. European grape.

From Afghanistan. Cuttings collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 11, 1940.

134779. No. 4972. From Akcha, at 1,500 feet altitude, October 27, 1939. Bedana or Khishmish-i-siya. A large blue-black grape of excellent flavor. It is larger than the red or white seedless variety and appears to be confined to the western part of the Turkish area of Afghanistan. Probably tender in areas of heavy frost.

134780. No. 5053. November 1, 1939. *Khishmish-i-siya*. Presented by the Hakim of Tukzar and said to be a black seedless raisin grape. It is not a heavy bearer, but it yields large bunches of berries, each ¾ inch long, black, seedless, and of splendid flavor. This superior strain will tolerate mild winters, probably to near zero.

### 134781. PALAQUIUM GUTTA (Hook.) Burck. Sapotaceae.

Guttapercha tree.

From Africa. Seeds presented by the East African Agricultural Research Station, Amani, Tanganyika Territory. Received January 16, 1940.

A tree up to 100 feet high, native to the Malay Peninsula, and a source of guttapercha. The oblanceolate, coriaceous leaves, 3 to 5 inches long, are dark green above and golden coppery beneath. The small white flowers, in clusters of 3 to 5 in the axils or on the bare parts of the branches, are followed by oblong, red, pubescent fruits nearly 1 inch long.

For previous introduction see 103748.

### 134782. Poa pratensis L. Poaceae.

Kentucky bluegrass.

From Denmark. Seeds presented by the Director, Botanic Garden, Copenhagen. Received January 3, 1940.

Collected in Greenland in 1932.

### 134783 to 134794. Oryza sativa L. Poaceae.

Rice.

From Ceylon. Seeds presented by the Department of Agriculture, Peradeniya. Received January 17, 1940.

134783. Genathumba El.

134784. Gonabaru.

134785. Halhuduwi.

134786. Indipathel.

134787. Kuru El.

134788. Nandu El.

134789. Pannithi.

134790. Polaval.

134791. Puwakmal El.

134792. Rathkaraval.

134793. Sudu El.

134794. Weraniya El.

### 134795. MELILOTUS ELEGANS Salzm. Fabaceae. Sweetclover.

From Italy. Seeds presented by Dr. Antonio Biraghi, R. Stazione di Patologia Vegetale, Rome. Received January 18, 1940.

For previous introduction see 129699.

## 134796. Phaseolus angularis (Willd.) W. F. Wight. Fabaceae. Adsuki bean.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition in the Province of Luzon. Received January 18, 1940.

No. 118. A mung bean grown by the Igorots of Sabarigan, who grow their crops on terraces with irrigation.

#### 134797 to 134800.

From Maryland. Plants purchased from the Tingle Nursery Co., Pittsville. Received January 18, 1940.

134797. CHAENOMELES. Malaceae.

Marmorata.

134798. PHILADELPHUS INCANUS Koehne. Hydrangeaceae. Gray mockorange.

A late-flowering species up to 6 feet high, with oval leaves, dull grayish beneath. The white flowers are produced 5 to 9 together on racemes about 2 inches long, at the end of short leafy shoots, and have an odor like that of hawthorn. The flowering season is from the middle of late July. Received under the varietal name sargenti, for which a place of publication has not been found.

For previous introduction see 134717.

134799. WEIGELA. Caprifoliaceae.

Stelzneri (W. hortensis  $\times$  florida).

134800. DIERVILLA. Caprifoliaceae.

Van Houtte.

#### 134801 and 134802.

From Georgia. Plants purchased from the Fruitland Nurseries, Augusta. Received January 18, 1940.

134801. PHILADELPHUS LAXUS Schrad. Hydrangeaceae.

For previous introduction see 131775.

134802. DIERVILLA. Caprifoliaceae.

Mt. Blanc.

### 134803 and 134804. HIPPEASTRUM spp. Amaryllidaceae.

From the Philippine Islands. Bulbs presented by Dr. W. Dwight Pierce. Received July 23, 1930. Numbered in January 1940.

134803. Cuban.

134804. Large Cuban.

### 134805. HIPPEASTRUM REGINAE (L.) Herbert. Amaryllidaceae.

From Peru. Bulbs presented by Dr. Cesar Vargas, Cuzco. Received September 10, 1938. Numbered January 18, 1940.

A tropical-American hippeastrum with strap-shaped leaves, 2 feet long and 2 inches wide, developed after the flowers. The 2 to 4 flowers, each with short tube and bright-red limb 4 to 5 inches long, have a whitish star in the throat.

For previous introduction see 129368.

### 134806 to 134833.

From Switzerland. Plants purchased from Baumschulen Hans Zulauf Wildi, Schinznach-Dorf. Received January 19, 1940.

134806 to 134810. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

134806. Edelrosen.

134809. Oetwiler Renette.

134807. Goldreinette v. Cazis.

134810. Stafner Rosen.

134808. Glocken.

134811.  $\times$  Prunus effusa (Host) Schneid. Amygdalaceae.

Duke cherry.

Schöne von Sceaux.

134812. Pyrus communis L. Malaceae.

Common pear.

Neue William.

### 134806 to 134833—Continued

134813 to 134818. RHEUM RHAPONTICUM L. Polygonaceae. Common rhubarb.

134813. Bottners Rotstieliger. 134816. Frühe Monsdorfer.

134814. Elmsfeuer. 134817. Kusnachter Riesen Verbesserter.

134815. Elmsjubiläum. 134818. Metzgers Verbesserter Victoria Riesen.

134819 to 134824. MALUS SYLVESTRIS Mill. Malaceae. Apple.

134819. Aargauer Jubiläums. 134822. Niederlenzer.

**134820.** Brünnerling. **134823.** Tobiässler.

134821. Herzogin Olga. 134824. Waldhöfter.

134825 to 134830. PRUNUS spp. Amygdalaceae.

134825. × Prunus effusa (Host) Schneid. Duke cherry.

Fruhe Mai.

134826 and 134827. PRUNUS AVIUM L. Sweet cherry.

134826. Mischler.

134827. Muskateller.

134828. × Prunus effusa (Host) Schneid. Duke cherry.

Rosmarin.

134829 and 134830. Prunus cerasus L. Sour cherry.

134829. Schumacher.

134830. Zweitfrühe.

134831 to 134833. Pyrus communis L. Malaceae. Common pear.

134831. Bariker.

134832. Gelbmostler.

134833. Marxen.

#### 134834 to 134836.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received January 11, 1940.

134834. CYDONIA sp. Malaceae. Quince.

No. 4934. From Maimana, October 21, 1939, at 2,000 feet altitude. Bushes usually from 8 to 10 feet high; fruits yellow, up to 4 inches long, slightly acid.

134835, Cydonia sp. Quince

No. 4988. From Kabul, November 15, 1939, at 7,000 feet altitude. Bush 10 feet high, withstands severe winters; fruit 4 inches long, lemon yellow, sweet.

134836. Pyrus sp. Malaceae. Pear.

From Gurzan, October 4, 1939, at 9,000 feet altitude. Shrubs growing among junipers on a dry slope. Fruits about 2 inches in diameter, somewhat flattened, with very pleasant flavor.

### 134837 to 134850.

From Australia. Seeds presented by Dr. Alexander McTaggart, Senior Research Officer, Plant Introduction, Canberra. Received January 10, 1940.

134837. Andropogon sericeus R. Br. Poaceae. Grass.

Australian bluegrass. A grass that grows 3 feet high on good soil and 1 foot high on very poor soil. In Australia this grass keeps green all the year round and is scarcely affected by drought or frost. It is an excellent forage grass.

For previous introduction see 126470.

### 134837 to 134850—Continued

134838 to 134841. ASTREBLA spp. Poaceae.

Grass.

Mitchell grasses are valued for their drought-resistant qualities.

134838. ASTREBLA ELYMOIDES Bailey and F. Muell.

For previous introduction see 130889.

134839. ASTREBLA LAPPACEA (Lindl.) Domin.

Curley Mitchell grass.

For previous introduction see 130890.

134840. ASTREBLA PECTINATA (Lindl.) F. Muell.

For previous introduction see 124891.

134841. ASTREBLA SQUARROSA Hubbard.

For previous introduction see 94275.

134842. ATRIPLEX SEMIBACCATA R. Br. Chenopodiaceae.

Salthush.

A vigorous, rapid-growing, much-branched Australian perennial that forms a dense mat over the ground to a depth of 1 to 2 feet. The leaves are small, about 1 inch long, and coarsely toothed along the margins. The plant has been known to flourish on the poorest soil. It has great frost resistance, palatability, heavy yield, sand-binding qualities, and the habit of spreading freely.

For previous introduction see 126475.

#### 134843. ATRIPLEX VESICARIA Howard.

An erect bushy shrub, covered throughout with a scaly tomentum. The very small, oblong-lanceolate leaves are less than an inch long. Native to southern Australia.

For previous introduction see 106699.

134844. Cynodon dactylon (L.) Pers. Poaceae.

Bermuda grass.

Couch grass.

134845. Dactylis glomerata L. Poaceae.

Orchard grass.

Akaroa cocksfoot.

134846. Danthonia semiannularis (Labill.) R. Br. Poaceae. Wallaby grass.

A perennial, fine-leaved, tussocky grass, 1 to 2 feet high, which provides feed for the greater part of the year. It is said to be a good winter grass, will stand a great amount of grazing, and its palatability both for cattle and sheep is well known.

For previous introduction see 126480.

134847. LOLIUM SUBULATUM Vis. Poaceae.

Ryegrass.

Wimmera ryegrass. An annual grass, native to Europe.

134848. PANICUM ANTIDOTALE Retz. Poaceae.

Grass.

Giant Panic grass. A tall coarse grass with flaccid leaves, having much the same habit as guinea grass.

For previous introduction see 126487.

134849. PHALARIS TUBEROSA var. STENOPTERA (Hack.) Hitchc. Poaceae.

Toowoomba Canary grass. A grass which has become naturalized in New South Wales.

For previous introduction see 22961.

134850. Rhagodia spinescens R. Br. Chenopodiaceae.

A shrub, usually low and straggling or prostrate, sometimes erect and attaining a height of several feet, the smaller branches often spiny. The oblong, ovate, or almost round leaves are  $\frac{1}{4}$  to  $\frac{1}{2}$  inch long. The species of *Rhagodia* are useful fodder plants. Native to Australia.

#### 134851 to 134962. TRITICUM spp. Poaceae.

Wheat.

From Portugal. Seeds presented by Prof. A. Camara, Director, Estação Agronómica Nacional, Edificio dos Jerónimos, Belem, Lisbon. Received January 23, 1940.

### 134851 to 134903. TRITICUM AESTIVUM L.

Common wheat.

134851, Barbarosa, No. 2790,

134852 to 134871. Erythrospermum.

134852. No. 2700.

134853. No. 2701.

134854. No. 2708.

134855. No. 2704.

134856, No. 2712.

134857. No. 2713.

134858, No. 2716.

134859, No. 2718.

134860. No. 2719.

134861, No. 2720,

134872. Erythroleucon.

134873 to 134890. Ferrugineum.

134873. No. 2743.

134874. No. 2744.

134875. No. 2749.

134876. No. 2752.

134877, No. 2753.

134878. No. 2757.

134879. No. 2758.

134880. No. 2750. 134881. No. 2761.

134891, Graecum, No. 2699.

134892. Hostianum. No. 2789.

134893 to 134899. Lutescens.

134893. No. 2676.

134894. No. 2678.

134895. No. 2679.

134896. No. 2680.

134900 to 134903. Milturum.

134900. No. 2687.

134901, No. 2688.

134904. Triticum compactum Host.

Creticum. No. 2791.

134905 to 134944. TRITICUM DURUM Desf.

134905 to 134908. Affine.

134905. No. 2843.

134906. No. 2874.

134862. No. 2723.

134863. No. 2724.

134864. No. 2725.

134865, No. 2727.

134866, No. 2729.

134867. No. 2731.

134868. No. 2733.

134869. No. 2734.

134870. No. 2736.

134871, No. 2738.

134882. No. 2772.

134883. No. 2773. 134884. No. 2775.

134885. No. 2776.

134886, No. 2779.

134887. No. 2780.

134888. No. 2782.

134889, No. 2784.

134890. No. 2787.

134897. No. 2683.

134898. No. 2684.

134899. No. 2686.

134902. No. 2698.

134903. No. 2695.

Durum wheat.

134907. No. 2850.

134908, No. 2891.

### 134851 to 134962—Continued

134909 to 134911. Africanum.

134909. No. 2910.

134910. No. 2912.

134911. No. 2915.

134912 and 134913. Alexandrinum.

134912. No. 2883.

134913. No. 2884.

134914. Apulicum. No. 2917.

134915 and 134916. Coerulescens.

134915. No. 2924.

134916. No. 2927.

134917 and 134918. Erythromelan.

134917. No. 2880.

134918. No. 2882.

134919. Fulvo-obscurum. No. 2898.

134920. Fulvo-provinciale. No. 2890.

134921. Hordeiforme. No. 2869.

134922 and 134923. Leucomelan.

134922. No. 2854.

134923. No. 2858.

134924 and 134925. Leucurum.

134924. No. 2835.

134925. No. 2837.

134926 to 134928. Libycum.

134926. No. 2928.

134927, No. 2929.

134928. No. 2930.

134929 to 134932. Melanopus.

134929. No. 2901.

134930. No. 2904.

134933 to 134936. Murciense.

134933. No. 2870.

134934. No. 2871.

134937. Niloticum. No. 2920.

134938. Obscurum. No. 2893.

134939 to 134941. Provincale.

134939. No. 2886.

134940. No. 2887.

134941. No. 2888.

134942 to 134944. Reichenbachii.

134942. No. 2860.

134943. No. 2863.

134944. No. 2865.

134931. No. 2906. 134932. No. 2909.

134935. No. 2874.

134936. No. 2875.

### 134851 to 134962-Continued

134945. TRITICUM POLONICUM L.

Martinari, No. 2932.

134946 to 134962. TRITICUM TURGIDUM L.

134946. Buccalae. No. 2823.

134947 and 134948. Gentile.

134947. No. 2927.

134948. No. 2800.

134949 to 134951. Iodurum.

134949. No. 2830.

134951. No. 2833.

134950. No. 2831.

134952 and 134953. Lusitanicum.

134952. No. 2793.

134953, No. 2795.

134954. Megalopolitanum. No. 2817.

134955 and 134956. Melanatherum.

134955. No. 2801.

134956. No. 2803.

134957. Mertensii. No. 2814.

134958. Nigrobarbatum. No. 2809.

134959. Pseudo-cervinum. No. 2834.

134960. Pseudo-mirabile. No. 2824.

134961. Rubroatrum. No. 2827.

134962. Speciosum. No. 2810.

### 134963 to 134977. LILIUM spp. Liliaceae.

Lilv.

From Japan. Seeds purchased from K. Wada, Hakoneya Nurseries, Numazu-shi. Received January 29, 1940.

134963. LILIUM LONGIFLORUM var. ALEXANDRAE (Wallace) Wilson.

134964. LILIUM AURATUM X LONGIFLORUM VAR. ALEXANDRAE.

134965. LILIUM AURATUM X JAPONICUM.

134966. LILIUM AURATUM Lindl.

Goldband lily.

For previous introduction see 91519.

134967. LILIUM AURATUM var. PLATYPHYLLUM Baker.

For previous introduction see 7849.

134968. LILIUM AURATUM var. PLATYPHYLLUM X L. Crimson Queen.

134969. LILIUM CONCOLOR var. BUSCHIANUM (Lodd.) Baker.

For previous introduction see 64774.

134970. LILIUM DISTICHUM Nakai.

134971. LILIUM HENRYI Baker.

For pravious introduction see 66089.

134972. LILIUM LEICHTLINII var. MAXIMOWICZII (Regel) Baker.

Wadai.

134973. LILIUM SPECIOSUM var. GLORIOSOIDES Baker.

For previous introduction see 124712.

Poulard wheat.

Polish wheat.

#### 134963 to 134977—Continued

134974. LILIUM SPECIOSUM var. KRAETZERI Duchartre.

For previous introduction see 11587.

134975. LILIUM SPECIOSUM Thunb.

Rubrum.

134976. LILIUM SPECIOSUM f. RUBRUM MAGNIFICUM X AURATUM.

134977. LILIUM SPECIOSUM PUNCTATUM X AURATUM.

### 134978. TAXODIUM MUCRONATUM Ten. Pinaceae.

Montezuma baldcypress.

From Mexico. Seeds presented by C. F. Edwards, Los Mochis, through the Fairchild Tropical Garden, Coconut Grove, Fla. Received January 29, 1940.

For previous introduction see 1761.

#### 134979 to 135021.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition. Received in October and November 1939. Numbered in January 1940.

134979. Alocasia macrorhiza (L.) Schott. Araceae.

No. 35. Collected along the road from Los Banos to Laguna, Luzon, October 30, 1939.

For previous introduction see 32093.

134980. Amomum sp. Zingiberaceae.

No. 30. From San Pablo, Luzon, October 19, 1939. A handsome species that grows in clumps, becoming 2 feet high. Flowers bright red.

134981. Amorphophallus campanulatus (Roxb.) Blume. Araceae.

No. 34. From the economic garden of the agricultural school, Laguna, Luzon, October 30, 1939. The corm of this plant grows as large as a cabbage and is used as food in most parts of India.

For previous introduction see 80996.

134982. Antidesma bunius (L.) Spreng. Euphorbiaceae.

Banauc

No. 17. *Bignai*. A small evergreen tree, up to 30 feet high, native to the Malay Peninsula. The leaves are dark green, and the small dark-red, pleasant-flavored fruits are borne in racemes, like the currant. The tree is widely distributed throughout the Tropics.

For previous introduction see 102363.

134983. ARTOCARPUS BLANCOI (Elmer) Merr. Moraceae.

No. 21. From the Mount Makiling National Park, Laguna, Luzon. A strictly wild species, endemic to the Philippines. Sometimes confused with the true breadfruit, it is not good except when cooked as a vegetable.

For previous introduction see 100647.

134984. CALAMUS ORNATUS Blume. Phoenicaceae.

Rattan.

No. 28. Tagalog name *limuran*. Collected in the Mount Makiling National Park, Laguna, Luzon, October 28, 1939. A very large, climbing species, sometimes producing stems 300 feet long. The elongated leaf rachis or flagellum is 25 feet long, but the quality of the rattan is inferior.

For previous introduction see 112266.

134985. CARYOTA CUMINGII Lodd. Phoenicaceae.

Palm.

No. 39. Pugahan. A palm with a tall, stout, spineless, ringed trunk, about 20 feet high, crowned with a few spreading bipinnate leaves. The small globular fruits are purple. Native to the Philippine Islands.

For previous introduction see 106143.

134986. CERIOPS ROXBURGHIANA Arnott. Rhizophoraceae.

No. 25. From Puerto Real, Luzon.

134987. Costus sp. Zingiberaceae.

No. 70. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A handsome red-flowered species growing 6 to 8 feet tall, with heads of deep-red flowers 6 to 8 inches long and 4 inches across.

134988. Daemonorops ochrolepis Beccari. Phoenicaceae.

Rattan.

No. 29. Ditan. From the Mount Makiling National Park, Luzon, October 29, 1939. A rattan with very decorative light-yellow fruits borne in long clusters.

134989. EUONYMUS JAVANICUS Blume. Celastraceae.

No. 36. From Mount Makiling National Park, Luzon, October 31, 1939. A very handsome small tree with pink fruits that hang in clusters and exhibit orange arils and almost black seeds.

134990. FICUS CAUDATIFOLIA Warb. Moraceae.

Fig.

No. 69. From the Volcano Mayon, Luzon, November 9, 1939. An epiphytic fig that finally develops a self-supporting trunk 25 feet high.

134991. FICUS MEGACARPA Merr.

Fig.

No. 85. From Mount Makiling National Park, Laguna, Luzon, November 17, 1939. A woody climbing vine with slender reddish-brown branchlets and ovate leaves 2 inches long. The pear-shaped green fruits, with white spots, are borne singly or in pairs on the main trunk. Native to the Philippines.

For previous introduction see 90720.

134992. FICUS MINAHASSAE (Teysm. and De Vr.) Miquel.

Fig.

No. 83. From Mount Makiling National Park, Laguna, Luzon, November 16, 1939. One of the most strikingly curious of the figs, which bears its clusters of red fruits on pendulous fruiting branches, sometimes more than 10 feet long.

For previous introduction see 95369.

134993. FICUS NOTA (Blanco) Merr.

Fig.

No. 92. From near Magat Forestry Station, Bayombong, Nueva Vizcaya, Luzon, November 21, 1939. An edible tropical fig with fruits nearly 2 inches across, borne in great clusters on a tree of medium size.

For previous introduction see 95370.

### 134994. Freycinetia maxima Merr. Pandanaceae.

No. 38. Collected October 22, 1939, between Laguna and Infanta, Luzon. A handsome scandent shrub with sparingly branched stems 1 inch thick, smooth, yellowish-gray bark, spiny, dark-green leaves  $1\frac{1}{2}$  to 3 feet long, very showy red floral bracts, and large, scarlet, aggregate fruits. Endemic in Luzon at low and medium altitudes.

134995. (Undetermined.)

No. 66. Collected in virgin forest of Cadwallader-Gibson Concession, Tandoc, Luzon, November 12, 1939. An epiphytic aroid with large leaves and a large white spathe 14 inches long, much larger than that of a calla.

### 134996. FREYCINETIA MULTIFLORA Merr. Pandanaceae.

No. 71. Collected on the Bulusan Volcano, Sorgoson, Luzon, November 8, 1939. An attractive scandent shrub with rigid, widely branching stems about  $\frac{1}{2}$  inch thick, linear or narrow-lanceolate leaves 8 to 16 inches long, showy salmonpink floral bracts, and orange aggregate fruits. Endemic in Luzon up to 2,700 feet altitude.

### 134997. FREYCINETIA sp.

No. 11. Collected en route from Laguna to Infanta, Luzon. A vine with very handsome foliage and scarlet fruits.

134998. FREYCINETIA Sp.

No. 72. From Tandoc, Camarine, Luzon, November 12, 1939. Similar to F. multiflora, but with fruits having fine protuberances.

134999. GARDENIA PSEUDOPSIDIUM (Blanco) Vill. Rubiaceae.

No. 10. Kasipas. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A small tree 9 to 12 feet high, native to the Phillipine Islands. The opposite leaves are lanceolate and acuminate, and the solitary, axillary white flowers are followed by round fruits resembling guavas, but not edible.

For previous introduction see 100649.

135000. LEEA MANILLENSIS Walp. Vitaceae.

No. 98. A species with bright-red flowers in corymbs, followed by red fruits.

135001. LIVISTONA ROBINSONIANA Beccari. Phoenicaceae.

No. 84. From the Mount Makiling National Park, Laguna, Luzon, November 1, 1939.

135002. NAUCLEA ORIENTALIS L. Rubiaceae.

No. 45. Bangkal. From Tandoc, Luzon, November 13, 1939. A large tree capable of living where salt spray reaches it.

For previous introduction see 30961.

135003. Oncosperma gracilipes Beccari. Phoenicaceae.

Palm.

No. 90. A slender feather palm, up to 30 feet high, with numerous long sharp spines on the trunk. The leaves, without the sheath, are about 6 feet long, with smooth, straight, ensiform leaflets, the intermediate ones being about 2 feet long. The spadix, with few, clustered floriferous branches, bears globose fruits about  $\frac{1}{2}$  inch in diameter. Endemic to the Philippines.

135004 to 135008. PANDANUS spp. Pandanaceae.

135004 and 135005. PANDANUS COPELANDI Merr.

A tall, shrubby, highly decorative plant, with leaves up to 8 feet long and 3 to 4 inches wide and pineapplelike spiny fruits 9 inches long.

135004. No. 20. From near Louisiana Village, Luzon, October 20, 1939.

135005. No. 78. Collected along the road between Legaspe and Sorsogon, Luzon, November 9, 1939.

135006. PANDANUS SD.

No. 22. From Puerto Real, Tayabas, Luzon, November 7, 1939. A brilliant red-fruited species growing near the shore. Fruit 18 inches through, with fruitlets protruding. Leaves narrow and spiny.

135007. PANDANUS sp.

No. 93. Collected along the Baler-Bongabon road, November 20, 1939. A species with slender leaves 4 feet long, having spiny margins. Fruit not more than 3 inches across and light-red color.

135008. PANDANUS sp.

No. 95. From the Campus Forestry School, Mount Makiling National Park, November 25, 1939. A small graceful plant with narrow spiny leaves and scarlet fruits, not more than 3 inches long, in clusters of four.

135009. PARARTOCARPUS WOODII Merr. Moraceae.

No. 19. From Mount Makiling National Park, Laguna, Luzon, October 24, 1939.

135010. PINANGA INSIGNIS Beccari. Phoenicaceae.

Palm.

No. 20. From Mount Makiling, Luzon, October 24, 1939. A rather small Philippine palm, with a slender smooth trunk about 6 inches in diameter, graceful feathery leaves, and oval reddish fruits 2 inches in length.

For previous introduction see 105354.

135011. PINANGA PHILIPPINENSIS Beccari.

Palm.

No. 30. From the Mount Makiling National Park, Laguna, Luzon, October 29, 1939. A Philippine palm with smooth, slender, greenish stems up to 25 feet high, thin, ascending pinnate leaves 3 to 5 feet long, and pendulous panicles of red fruits. It grows in exposed forest ridges and ravines at altitudes of 2,000 to 5,000 feet.

135012. PITHECELLOBIUM sp. Mimosaceae.

No. 50. From Mount Makiling National Park, Laguna, Luzon, October 20, 1939. A small attractive tree growing in the open.

135013. PITTOSPORUM PENTANDRUM (Blanco) Merr. Pittosporaceae.

No. 90. From Bongabong, Northern Ecija, Luzon, November 21, 1939. A tree sometimes 60 feet high, but sometimes shrubby, with small white fragrant flowers and handsome straplike leaves with wavy margins. The fruits are in showy clusters of pretty orange berries.

For previous introduction see 20492.

135014. POTHODIUM LOBBIANUM Schott. Araceae.

135015. RHIZOPHORA MUCRONATA Lam. Rhizophoraceae.

No. 25. A large evergreen shrub or tree, with oblong-elliptic, shiny leaves up to 6 inches long, and clusters of 3 to 7 white to cream-colored flowers. It forms mangrove swamps on Old World tropical shores.

135016. STRONGYLODON MACROBOTRYS A. Gray. Fabaceae.

No. 26. Tayabak, or "jade vine." From the Mount Makiling National Park, Laguna, Luzon, October 27, 1939. A slender-stemmed vine that bears large hanging clusters of blue-green flowers, each 2 inches long.

135017. TABERNAEMONTANA PANDUCAQUI Poir. Apocynaceae.

No. 88. From the roadside between San Miguel de Mayuno and Cabanatuan, Luzon. A small shrub 3 to 12 feet high, with small glossy leaves and small jasmine-like flowers nearly an inch across. Native to New Guinea.

135018. TERMINALIA NITENS Presl. Combretaceae.

No. 42. From Mount Makiling National Park, Laguna, Luzon, November 5, 1939. A forest tree, native from the lower to the alpine forests in the Philippines. It is a good timber tree, and the bark is used as straw-colored dye.

For previous introduction see 100657.

135019. Tetrastigma sp. Vitaceae.

No. 10. Collected between Laguna and Infanta, Luzon. A vine with clusters of handsome pink fruits.

135020. UVARIA SCANDENS C. B. Robinson. Annonaceae.

No. 97. From near Bongabong, November 20, 1939.

135021. VITEX PARVIFLORA Juss. Verbenaceae.

No. 27. Molave. From Mount Makiling National Park, Laguna, Luzon, October 28, 1939. An important timber tree, with clusters of blue flowers; found growing near the coast in dry rocky soils.

For previous introduction see 101451.

135022. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From Colombia. Seeds presented by Jaime Villegas D., California. Received January 22, 1940.

#### 135023 and 135024.

From Manchuria. Bulbs presented by B. V. Skvortzov, Harbin. Received January 30, 1940.

### 135023 to 135024—Continued

135023. LILIUM CALLOSUM Sieb, and Zucc. Liliaceae.

Lily.

No. 97. Collected in meadows along the Ashihe River in northern Harbin. A martagon lily with slender stems 1 to  $2\frac{1}{2}$  feet high, scattered strap-shaped or linear leaves usually 1 to 3 inches long, and dull-red or orange-red solitary nodding flowers or racemes of 2 to 9. Native to eastern Asia and Taiwan.

For previous introduction see 131059.

135024. SCILLA THUNBERGII Miyabe and Kudo. Liliaceae.

No. 94. A scilla with 2 or 3 fleshy leaves 6 to 12 inches long and 1 to 3 erect scapes with many small rose-purple flowers borne in racemes. Native to Japan.

For previous introduction see 131904.

### 135025. CEANOTHUS VEITCHIANUS Hook. Rhamnaceae.

From California. Plants purchased from the California Nursery Co., Niles. Received January 30, 1940.

An evergreen shrub about 10 feet high with deep-blue flowers. Said to be a hybrid of *Ceanothus rigidus* and *C. thyrsiflorus*.

### 135026 to 135028.

From the Philippine Islands. Plants collected by the Archbold-Fairchild Expedition. Received January 31, 1940.

135026. DENDROCALAMUS MERRILLIANUS Elmer. Poaceae. Bamboo.

No. 111. Bayog. From Laguna, Makiling National Park, Luzon, December 11, 1939. A small clump bamboo not more than 30 to 40 feet high, with culms up to 3 inches in diameter, which have very thick walls.

For previous introduction see 124969.

135027. SCHIZOSTACHYUM LUMAMPAO (Blanco) Merr. Poaceae. Bamboo.

No. 134. Boho. From Angeles, Luzon, December 23, 1939. This thin-walled bamboo is the species chiefly utilized in making building matting, known as "sawale." It is also used for making baskets, fences, fish corrals, fishing poles, flutes, and for many other purposes. It is reported to have been investigated as a paper-making material.

For previous introduction see 124971.

135028. SCHIZOSTACHYUM SD.

No. 135. From the nursery of Mount Makiling National Park, Laguna, Luzon, December 23, 1939.

#### 135029 to 135033.

From England. Plants purchased from H. Merryweather & Sons, Ltd., The Nurseries, Southwell, Notts. Received February 1, 1940.

135029 and 135030. MALUS SYLVESTRIS Mill. Malvaceae.

Apple.

135029. John Waterer.

135030. Northern Greening.

135031 and 135032. PRUNUS spp. Amygdalaceae.

Plum.

135031. Black Bullace.

135032. Red Pershore.

135033. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Early Red Champagne.

### 135034 to 135090.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 3, 1940.

Unless otherwise mentioned, all of this material was collected in Afghanistan.

### 135034 to 135090—Continued

135034 to 135086. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

135034. No. 4510. Gandum. From Dasht-i-sufed, at 6,000 feet altitude, August 24, 1939. Spring-sown, irrigated.

135035. No. 4517. Gandum.

135036. No. 4518. Gandum-i-sufed.

135037. No. 4528. Gandum. From Hajar, at 8,000 feet altitude, August 28, 1939. Spring-sown.

135038 and 135039. From Aoi Khurak, at 9,000 feet altitude, August 28, 1939. Spring-sown.

135038. No. 4553. Irrigated.

135039. No. 4557. Gandum Lalim. Not irrigated.

135040 and 135041. Gandum. From Sarasia, at 9,000 feet altitude, August 29, 1939. Spring-sown.

135040. No. 4563. Irrigated.

135041. No. 4564. Unirrigated.

135042 and 135043. From Shanbashak Pass, at 9,300 feet altitude, August 31, 1939. Spring-sown, unirrigated.

135042. No. 4573.

135043. No. Siya Khusha.

135044 and 135045. From Binimang-icharaolia, at 8,000 feet altitude, September 1, 1939. Spring-sown, unirrigated.

135044. No. 4580. Surkhcha.

135045. No. 4581. Sufedcha.

135046. No. 4598. Kazilsarak. From Chabaraolia, September 5, 1939. Springsown, unirrigated. Said to have husk.

135047 and 135048. From Kala Sarkari, September 7, 1939. Spring-sown.

135047. No. 4614. Sufedak-i-aoi.

135048. No. 4617. Unirrigated.

135049. No. 4649. Karakollok or Khoshosiya. From Chigzar, at 9,000 feet altitude, September 1939. Spring-sown, unirrigated.

135050 to 135053. From Tukzar, September 15, 1939. Spring-sown, unirrigated.

135050. No. 4693.

135052. No. 4695.

135051. No. 4694.

135053. No. 4714.

135054 to 135056. From Zehnadir, September 25, 1939, at 8,000 feet altitude.

135054. No. 4745. Sufedak, Aoi, or Tirnisi. Said to be a fall-sown, irrigated, slow-growing variety that matures in 12 months.

135055. No. 4746. Surklak-i-bahari. Spring-sown, unirrigated.

135056. No. 4749. Sufedakiso-i-bahari. Spring-sown, unirrigated.

135057 and 135058. From Sujak, September 27, 1939, at 8,000 feet altitude. Spring-sown, unirrigated.

135057. No. 4751.

135058. No. 4752.

135059 to 135072. From Alinj, October 1, 1939, at 10,000 feet altitude. Springsown.

135059. No. 4672. Irrigated; beardless, with white tomentose husks.

135060. No. 4763. Unirrigated; long heads with purple-black husk.

135061. No. 4764. Irrigated.

### 135034 to 135090—Continued

135062. No. 4765. Unirrigated.

135063. No. 4766. Unirrigated.

135064. No. 4767. Irrigated.

135065. No. 4768. Unirrigated.

135066. No. 4769. Irrigated.

135067. No. 4770. Irrigated.

135068. No. 4771. Irrigated.

135069. No. 4772. Unirrigated.

135070. No. 4773. Irrigated; heavy heads irregularly placed, 3 inches long, white husk.

135071. No. 4774. Irrigated; white, long heads.

135072. No. 4775. Irrigated; heads 3½ inches long, red, tomentose.

135073 to 135076. From Mak, October 3, 1939, at 8,500 feet altitude. Springsown, irrigated.

135073. No. 4776.

135074. No. 4780.

135075. No. 4782. Said to have long heads and red husk.

135076. No. 4784.

135077 to 135079. From Dukanshah, October 4, 1939, at 7,500 feet altitude Spring-sown, unirrigated.

135077. No. 4788. Heavy yield.

135078. No. 4791.

135079. No. 4792.

135080 and 135081. From Gurzan, October 5, 1939. Spring-sown.

135080. No. 4806. Unirrigated, 9,000 feet altitude.

135081. No. 4807. Irrigated, 8,500 feet altitude.

135082 and 135083. From Shorak, at 7,500 feet altitude, October 8, 1939. Spring-sown, unirrigated.

135082. No. 4831.

135083. No. 4833.

135084. No. 4891. From Khoshbai, at 7,500 feet altitude, October 16, 1939. Spring-sown, unirrigated.

135085. No. 4917. From Khwajaebichagalak, October 19, 1939, at 7,000 feet altitude. Spring-sown, unirrigated.

135086. No. 5100. From Quetta, Baluchistan, November 28, 1939. Said to be fall-sown and irrigated.

135087 to 135090. ZEA MAYS L. Poaceae.

Corn.

135087. No. 4716. Jaudar. From Tukzar, October 15, 1939. Said to grow 6 feet tall, to have 3 or 4 ears on a stalk, and to ripen in 90 days.

135088. No. 4468. From Peshawar, North-West Frontier Province, India, September 7, 1939. Stalks 5 to 6 feet high; ears 7 inches long; said to mature in 60 days and to require much rain.

135089 and 135090. From Quetta, Baluchistan, November 27, 1939.

135089. No. 5093.

135090. No. 5147. Probably a quick-maturing sort.

### 135091. PSIDIUM GUAJAVA L. Myratceae.

Guava.

From the British West Indies. Seeds presented by the Department of Science and

### 135091—Continued

Agriculture, Barbados, through David Fairchild, Coconut Grove, Florida. Received December 14, 1939. Numbered in February 1940.

French guava. The fruits of this guava are larger and have a better flavor when raw than the common guava, although it is not so good for making jelly.

For previous introduction see 134544.

### 135092 to 135118.

From California. Plants purchased from the Clarke Nursery, San Jose. Received February 6, 1940.

135092 to 135107. Chaenomeles. Malaceae.

Flowering quince.

135092. No. 304. Flowers deep vermilion-red.

135093. No. 309. Superba. Flowers between brick and orange.

135094. No. 310. Rosemary. Flowers deep rose.

135095. No. 314. Sunset Glow. Large pink flowers.

135096. No. 317. Deep rose-colored flowers.

135097. No. 319. Deep rosy-red flowers.

135098. No. 321. Japonica. Flowers bright ruddy orange.

135099. No. 323. Flowers light rose.

135100. No. 325. Flowers soft salmon or coral, an unusual color.

135101. No. 326. Flowers rosy scarlet.

135102. No. 327. Flowers rose and red; exceptionally free bloomer.

135103. No. 328. Enchantress. Flowers shell pink.

135104. No. 330. Flowers large, orange.

135105. No. 335. Mount Everest.

135106. No. 338. Apple-blossom coloring.

135107. No. 340. Flowers tomato red.

135108 and 135109. CEANOTHUS. Rhamnaceae.

135108. Autumnal Blue.

135109. Delight.

135110. CHAENOMELES. Malaceae.

Flowering quince.

Crimson and Gold.

135111 to 135116. CHAENOMELES LAGENARIA (Loisel.) Koidz. Malaceae. Japanese quince.

135111. Apple blossom.

135114. Foliis Rubris.

135112. Bonfire.

135115. Japanese Scarlet.

135113. Double Vermilion.

135116. Versicolor.

135117 and 135118. X CHAENOMELES SUPERBA (Frahm) Rehder. Malaceae.

135117. Atrococcinea.

135118. Coral Glow.

### 135119 to 135124.

From New Zealand. Seeds purchased from Arthur Yates & Co., Ltd., Auckland. Received January 22, 1940.

135119. Brassica Napus L. Brassicaceae.

Rape.

Mustard Spinach.

For previous introduction see 55381.

### 135119 to 135124—Continued

135120. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

Ice Cream.

135121 to 135123. Cucumis sativus L. Cucurbitaceae.

Cucumber.

135121. African Horn.

135122. App'e Shape.

135123. Yates Crystal Apple.

135124. Tetragonia expansa Murray. Aizoaceae. New Zealand spinach. For previous introduction see 118351.

135125 to 135130. Panicum spp. Poaceae.

Grass.

From the Union of South Africa. Seeds presented by the Prinshof Grass-Breeding Station, Pretoria. Received January 25, 1940.

135125 to 135129. PANICUM spp.

135125. Makarikari Strain C. 79.

135128. Makarikari Strain 11-4.

135126. Makarikari Strain C. 80.

135129. Makarikari Strain 11-12.

135127. Makarikari Strain 10-5.

135130. PANICUM COLORATUM L.

### 135131. Lotus uliginosus Schkur. Fabaceae.

From New Zealand. Seeds presented by A. Bruce Levy, Grassland Division, Plant Research Bureau, Palmerston North. Received January 29, 1940.

(A1, 41.) A herbaceous perennial pasture plant that grows in wet swampy ground. For previous introduction see 91983.

### 135132 to 135261. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

From Afghanistan and India. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 10, 1940.

Unless otherwise stated, this material was collected in Afghanistan.

135132. Received without notes.

135133. No. 4461. From Peshawar, North-West Frontier Province, India, August 6, 1939. Fruit 15 by 6 inches; rind pea green, ½ inch thick; flesh rose, good texture, fair flavor.

135134 to 135136. Received without notes.

135137. No. 4495. From Kabul, August 16, 1939. Fruit subglobose, 8 inches in diameter; rind green white, obscurely reticulated with darker green, ½ to 1 inch thick; flesh clear pink, of good quality.

135138. No. 4503. From Charikar, August 22, 1939, at 5,000 feet altitude. Fruit globose, 10 inches in diameter; rind 1 inch thick, pea green, mottled and clouded darker; flesh bright rose, of good quality.

135139. No. 4587. From Terak, September 2, 1989. A mixed sample of melons grown without irrigation. Probably as near an unselected, nearly wild strain as can be found. Fruits globose, 6 to 8 inches across, very seedy; flesh faintly colored pink, lacks sweetness, but has excellent texture.

135140. No. 4606. From Kala Sarkari, September 6, 1939. Fruit subglobose, 10 inches in diameter; rind ¾ inch thick; flesh rose, of good quality.

135141. No. 4626. Tarbuza. From Kala Sarkari, September 8, 1939. A mixed sample. The fruits here are of a different quality, but may have been picked green.

135142 to 135146. From Tukzar, September 13 and 14, 1939.

135142. No. 4665. Fruits about 9 by 5 inches, pale green with broken reticulations of darker green; rind ½ inch thick; bright-pink flesh of good texture and high quality.

- 135143. No. 4667. Fruit subglobose, 9 inches in diameter, pale green with broken reticulations darker; rind ½ inch thick; flesh pale pink, quality excellent.
- 135144. No. 4672. Fruit 18 by 8 inches, very dark green with cloudings of paler green in broken stripe; rind 1 inch thick; flesh a beautiful pink, somewhat stringy, but of fine flavor.
- 135145. No. 4680. Fruit globose, 8 inches in diameter, pale green with broken reticulations of darker green; rind 3/8 inch thick; flesh bright pink, of good texture and flavor.
- 135146. No. 4681. Fruit globose, 7 inches in diameter, dark green; rind  $\frac{1}{2}$  inch thick; flesh deep pink, good texture and quality.
- 135147 to 135149. From Garzan, October 4, 1939, but fruit said to have come from Laorlash.
  - 135147. No. 4786. Fruit globose, 8 inches in diameter, white green with irregular ribbon stripes of pea green; rind  $\frac{3}{8}$  inch thick; flesh bright pink, of fine quality.
  - **135148.** No. 4787. Fruit 12 by 6 inches, blotched stripes of very dark green and paler green; rind ½ inch thick; flesh pink, of good quality.
  - 135149. No. 4790. Fruit subglobose, 8 inches in diameter, grass green, reticulated sparingly with darker green; rind ½ inch thick; flesh dull pink, of fine quality.
- 135150. No. 4810. From Laorlash, October 7, 1939, and said to have been grown without irrigation. Fruit globose 8 inches in diameter, pea green with darker reticulations; rind ½ inch thick; flesh bright pink, of good quality.
- 135151 to 135184. From Sharak, October 7 and 8, 1939, at 7,500 feet altitude. Grown without irrigation.
  - (35151. No. 4811. Fruit irregular in size, pear-shaped, 17 by 12 inches, irregular rib stripes of black green and pea green; rind ½ inch thick; flesh bright pink, good quality, few seeds.
  - 135152. No. 4812. Fruit subglobose, 12 inches in diameter, sea green with narrow broken-rib stripes of black green; rind ½ inch thick; flesh attractively mixed yellow and pink, of good quality.
  - 135153. No. 4813. Fruit 14 by 18 inches, black green; rind  $\frac{3}{8}$  inch thick; flesh attractively mixed yellow and pale pink, of good quality.
  - 135154. No. 4814. Fruit subglobose, 10 inches in diameter, black green; rind  $\frac{3}{4}$  inch thick; flesh pink, of good quality.
  - 135155. No. 4815. Fruit subglobose, 12 inches in diameter, sea green with narrow reticulated stripes of darker green; rind ½ inch thick; flesh bright pink, very sweet, seedy.
  - 135156. No. 4816. Fruit subglobose, 12 inches in diameter, grass green, reticulated darker and with line stripes of darker green; rind ½ inch thick; flesh yellow, of good quality.
  - 135157. No. 4819. Fruit subglobose, 10 inches in diameter, grass green, reticulated darker and with line stripes of darker green; rind ½ inch thick; flesh apricot, of good quality.
  - 135158. No. 4820. Fruit 15 by  $6\frac{1}{2}$  inches, grass green with narrow stripes of darker green; rind  $\frac{1}{2}$  inch thick; flesh rose and very sweet.
  - 135159. No. 4822. Fruit subglobose, 9 inches in diameter, yellow green; rind  $\frac{3}{6}$  inch thick; flesh bright pink, good quality.
  - 135160. No. 4823. Fruit 12 inches in diameter, pale green with scattered fine dots and netting of darker green; rind ½ inch thick.
  - 135161. No. 4824. Fruit subglobose, 11 inches in diameter, black green with narrow irregular stripes of pale green; rind 3/4 inch thick; flesh rose, firm, slightly stringy, good flavor, sweet.
  - 135162. No. 4826. Fruit 8 by 5½ inches, grass green with irregular, broad, blotched stripes of paler green; rind ¼ inch thick; flesh rose, of good quality.

- 135163. No. 4827. Fruit sea green, hard shell, subglobose, 10 inches in diameter; rind ½ inch thick; flesh pale pink, of good quality.
- 135164. No. 4828. Fruit 12 inches in diameter, pea green; rind 1inch thick; flesh bright pink, very sweet, good texture, few seeds.
- 135165. No. 4829. Fruit globose, 10 inches in diameter, pale green, handsomely striped with irregular dark green; rind ¾ inch thick; flesh rose, of fair quality.
- 135166. No. 4835. Fruit 12 by 10 inches, sea green reticulated with darker green; rind ½ inch thick; flesh rose, firm, good flavor; a good keeper.
- 135167. No. 4838. Fruit 12 by 13 inches, pea green, reticulated with darker green; rind 1½ inches thick; flesh bright pink, of first quality.
- 135168. No. 4839. Fruit 14 by 7 inches, grass green with narrow, irregular, blotched stripes of paler green; rind ½ inch thick; flesh yellow, of good quality.
- 135169. No. 4840. Fruit 13 by 7 inches, grass green with irregular blotched stripes of pea green; rind ½ inch thick; flesh rose, sweet but somewhat stringy.
- 135170. No. 4841. Fruit subglobose, pale green; rind 3% inch thick, hard shell; flesh bright pink, first class.
- 135171. No. 4842. Fruit 14 by 10 inches, alternate stripes of black and grass green; rind 2 inches thick; flesh bright pink, of good quality.
- 135172. No. 4843. Fruit 14 by 10 inches, with alternate stripes of black and grass green; rind 2 inches thick; flesh bright pink, of good quality.
- 135173. No. 4844. Fruit in cross section often triangular, subglobose, 10 inches in diameter, grass green clouded paler; rind ½ inch thick; flesh yellow, of fair quality; curious seeds.
- 135174. No. 4845. Fruit globose, 8 inches in diameter, yellow green; rind 3/8 inch thick, hard shell; flesh bright pink, excellent quality.
- 135175. No. 4846. Fruit subglobose, 14 inches in diameter, sea green, reticulated; rind 34 inch thick; flesh pink, good quality.
- 135176. No. 4847. Fruit 14 inches in diameter, grass green with narrow irregular stripes of black; rind ½ inch thick; flesh bright pink, of good quality.
- 135177. No. 4848. Fruit globose, 10 inches in diameter, sea green with narrow irregular stripes of black green; rind ½ inch thick; flesh apricot pink, very sweet.
- 135178. No. 4849. Fruit tapering to end, subglobose, 12 inches in diameter, pea green with darker broken reticulations; rind ½ inch thick; flesh bright pink, of fine quality.
- 135179. No. 4950. Fruit globose, grass green, reticulated with darker green and with narrow black ribs; rind ½ inch thick; flesh pink, of good quality.
- 135180. No. 4851. Fruit subglobose, 10 inches in diameter, green black with faint cloudings of paler green; rind ½ inch thick; flesh yellow, tinged apricot, of excellent quality.
- 135181. No. 4852. Fruit globose, 11 inches in diameter with indented ribs; rind ½ inch thick; flesh rose, of good quality.
- 135182. No. 4853. Fruit subglobose, 10 inches in diameter, alternately striped pea and black green; rind ½ inch thick; flesh rose, of fair quality.
- 135183. No. 4854. Fruit pale green, 10 inches in diameter; flesh pale pink, of good quality.
- 135184. No. 4855. Fruit subglobose, 11 inches in diameter, pale green with dotting and reticulation of darker green; rind ½ inch thick; flesh pale rose, of good texture but low in sugar.

- 135185 to 135193. From Bandar, October 9 and 10, 1939, at 7,500 feet altitude. Grown without irrigation.
  - 135185. No. 4856. Fruit 12 by 7 inches, grass green clouded with paler green; rind  $\frac{1}{2}$  inch thick; flesh yellow, of fine quality.
  - 135186. No. 4857. Fruit subglobose, 12 inches in diameter, sea green with traces of vermiculated darker green; rind ½ inch thick; flesh light pink, of good quality.
  - 135187. No. 4858. Fruit 10 by 8 inches, grass green, vermiculated with darker green; rind ½ inch thick; flesh pink, of good quality.
  - 135188. No. 4860. Fruit 6 by  $4\frac{1}{2}$  inches, grass green with narrow stripes of paler green; rind  $\frac{1}{4}$  inch thick; flesh rose, of fine quality.
  - 135189. No. 4861. Fruit the elongate sort, 8 inches long, pale green with coarse reticulations; flesh pink; said to be an excellent melon.
  - 135190. No. 4862. Fruit up to 15 inches in diameter, pale green; rind 1 inch thick; flesh firm, bright pink, of good quality with few seeds. Fruits weigh 25 pounds each; some fruits nearly seedless.
  - 135191. No. 4863. Fruit 12 by 7 inches, very dark green with few cloudings of paler green; rind 3% inch thick; flesh bright pink, of fine quality.
  - 135192. No. 4864. Fruit 12 by 8 inches tapering to the stem end, somewhat pale green; rind  $\frac{1}{2}$  inch thick; flesh bright pink, almost seedless (only 42 seeds in the melon).
  - 135193. No. 4865. Fruit 12 by 10 inches, grass green and very dark green in irregular stripes of equal width; rind ½ inch thick; flesh yellow, tinted a beautiful pink around the seeds; of good texture but low in sugar.
- 135194 to 135205. From Khwajarbichajalak, October 17 and 18, 1939, at 7,000 feet altitude. Fruit grown without irrigation.
  - 135194. No. 4893. Fruit subglobose, 8 inches in diameter, green white with chain stripes of darker green; rind ½ inch thick; flesh yellow, of fine quality.
  - 135195. No. 4894. Fruit very pale green, subglobose, 10 inches in diameter; rind 34 inch thick; flesh deep pink, of good quality.
  - 135196. No. 4897. Fruit globose, 8 inches in diameter, very dark green spotted with pale green; rind ¼ inch thick; flesh rose, of good quality.
  - 135197. No. 4896. Fruit subglobose, pale green, 10 inches in diameter; rind \(^3\)% inch thick; flesh rich deep pink, of fine quality, with few seeds.
  - 135198. No. 4895. Fruit greenish white, subglobose, 12 inches in diameter; rind ½ inch thick; flesh pink, of good quality.
  - 135199. No. 4901. Fruit very dark green, subglobose, 10 inches in diameter; rind ½ inch thick; flesh yellow, tinted apricot, of good quality.
  - 135200. No. 4907. Fruit globose, 10 inches in diameter, pea green; rind  $\frac{1}{2}$  inch thick; flesh yellow, of good quality.
  - 135201. No. 4908. Fruit 12 by 7 inches, pea green with broken reticulations; rind ½ inch thick; flesh yellow, of good quality.
  - 135202. No. 4912. Fruit globose, 10 inches in diameter, pea green, reticulated with darker green; rind ½ inch thick; flesh bright pink, of fine quality.
  - 135203. No. 4913. Fruit globose, 12 inches in diameter, pale green with a spreading chain stripe of very dark green; rind ¼ inch thick; flesh bright pink, of excellent quality.
  - 135204. No. 4914. Fruit pale green reticulated, subglobose, 10 inches in diameter; rind 1 inch thick; flesh pink, of good quality.
  - 135205. No. 4916. Fruit subelongate, 10 inches in diameter, green white; rind ½ inch thick; flesh deep pink, of excellent quality.

- 135206 to 135208. From Maimana, October 21 and 22, 1939, at 3,000 feet altitude.
  - 135206. No. 4923. Fruit subglobose, 12 inches in diameter, pea green with traces of reticulations; rind  $\frac{3}{4}$  inch thick; flesh pink, of good quality.
  - 135207. No. 4924. Fruit 12 by 7 inches, pea green; rind \(^3\)\(^8\) inch thick; flesh pink, of good quality.
  - 135208. No. 4925. Fruit globose, 1 foot in diameter, alternate stripes of very dark green and pea green; rind ¾ inch thick; flesh bright rose, of good quality.
- 135209 to 135240. From Akcha, October 25 to 27, 1939, at 1,500 feet altitude.
  - 135209. No. 4937. Fruit 22 by 11 inches, pea green, faintly reticulated; rind ½ inch thick; flesh pink, of fine quality.
  - 135210. No. 4938. Fruit globose, 14 inches in diameter, sea green with vermiculations; rind 3/4 inch thick; flesh bright pink, of fine quality.
  - 135211. No. 4939. Fruit subglobose, 14 inches in diameter, grass green with darker veining; rind 1 inch thick; flesh rose, of good quality.
  - 135212. No. 4940. Fruit subglobose, 14 inches in diameter, alternate stripes of sea green and grass green; rind  $\frac{3}{4}$  inch thick; flesh rose, of good quality.
  - 135213. No. 4941. Fruit 16 by 12 inches, alternately striped sea and grass green; rind ¾ inch thick; flesh rose, of good quality.
  - 135214. No. 4942. Fruit globose, 14 inches in diameter, sea green with vermiculations of darker green; rind 3/4 inch thick; flesh rose, of good quality.
  - 135215. No. 4943. Fruit 14 by 11 inches, alternately striped sea and grass green; rind ½ inch thick; flesh deep pink, of fine quality.
  - 135216. No. 4944. Fruit globose, 13 inches in diameter, blotch stripes pea green and grass green; rind ½ inch thick; flesh rose, of good quality.
  - 135217. No. 4945. Fruit globose, 11 inches in diameter, blotch stripes of sea green and grass green; rind ¾ inch thick; flesh bright pink, of fine quality.
  - 135218. No. 4946. Fruit subglobose, 12 inches in diameter; sea green with broken vermiculations and narrow stripes of darker green; rind 1 inch thick; flesh pink, of good quality.
  - 135219. No. 4948. Fruit 17 by 8 inches, pea green with broken vermiculations of darker green; rind ½ inch thick; flesh pink, of good quality.
  - 135220. No. 4949. Fruit 18 by 8 inches, sea green with broken vermiculations of darker green; rind ½ inch thick; flesh pink, of good quality.
  - 135221. No. 4950. Fruit 15 by 8 inches, pea green clouded with darker green; rind ½ inch thick; flesh pink, of good quality.
  - 135222. No. 4951. Fruit 15 by 8 inches, pea green, faintly marked with darker green; rind ½ inch thick; flesh pale pink, of good quality.
  - 135223. No. 4952. Fruit globose, 13 inches in diameter, pea green; rind 3/4 inch thick; flesh pink, of good quality.
  - 135224. No. 4953. Fruit subglobose, 12 inches in diameter, pea green with faint reticulations; rind 34 inch thick; flesh deep rose, of good quality.
  - 135225. No. 4955. Fruit subglobose, 12 inches in diameter, very dark green; rind ¾ inch thick; flesh deep rose, of good quality.
  - 135226. No. 4956. Fruit globose, 12 inches in diameter, very dark green; rind 34 inch thick; flesh deep rose, of good quality.
  - 135227. No. 4957. Fruit 15 by 10 inches, striped grass green and sea green; rind ¾ inch thick; flesh rose, of good quality.
  - 135228. No. 4958. Fruit 17 by 10 inches, broken-blotch stripes of grass green and sea green; rind  $\frac{3}{4}$  inch thick; flesh apricot, of good quality.
  - 135229. No. 4959. Fruit 15 by 9 inches, striped pea green and grass green; rind ½ inch thick; flesh pink, of fine quality.

- 135230. No. 4960. Fruit 18 by 8 inches, very dark green with deep stripes of pale green; rind 1 inch thick; flesh pink, of fine quality.
- 135231. No. 4961. Fruit 17 by 8 inches, very dark green, clouded with paler green; rind ¾ inch thick; flesh pink with yellow streaks, of fine quality.
- 135232. No. 4962. Fruit 18 by 8 inches, very dark green with deep stripes of paler green; rind 1 inch thick; flesh bright pink with streaks of yellow, of fine quality.
- 135233. No. 4963. Fruit 18 by 9 inches, very dark green, clouded with paler green; rind ¾ inch thick; flesh rose, of good quality.
- 135234. No. 4964. Fruit 15 by 10 inches, grass green; rind  $\frac{7}{8}$  inch thick; flesh rose, of good quality.
- 135235. No. 4966. Fruit 16 by 9 inches, grass green reticulated with darker green; rind  $\frac{3}{4}$  inch thick; flesh pink, of fine quality.
- 135236. No. 4967. Fruit subglobose, 12 inches in diameter, grass green, clouded and reticulated with darker green; rind ¾ inch thick; flesh rose, of good quality.
- 135237. No. 4968. Fruit 14 by 10 inches, grass green; rind  $\frac{1}{2}$  inch thick; flesh pink, of good quality.
- 135238. No. 4969. Fruit subglobose, 12 inches in diameter, pea green, marbled darker green; rind 34 inch thick; flesh rose, of good quality.
- 135239. No. 4973. Fruit 23 by 17 inches, grass green with irregular deep stripes of paler green; rind ½ inch thick; flesh rose, of good quality.
- 135240. No. 4975. Fruit globose, 18 inches in diameter, alternate stripes of pea green and very dark green; rind ¾ inch thick; flesh first yellow, then pink, of good quality, not coarse.
- 135241 to 135246. From Balkh, October 29 to 31, 1939, between 1,200 and 1,500 feet altitude.
  - 135241. No. 4978. Fruit subglobose, 10 inches in diameter, alternately striped with pale green and grass green; rind ¾ inch thick; flesh apricot, of good quality.
  - 135242. No. 4983. Fruit 20 by 9 inches, pale green with broken vermiculations of darker green; rind ¾ inch thick; flesh orange pink, of good quality.
  - 135243. No. 4984. Fruit 16 by 8 inches, pale green with darker vermiculations; rind ¾ inch thick; flesh pink, of good quality.
  - 135244. No. 4989. Fruit subglobose,  $3\frac{1}{3}$  inches in diameter, pale green with broken stripes of darker green; flesh greenish, sour, bitter. A wild variety used as medicine.
  - 135245. No. 4991. Fruit 14 by 7 inches, pea green, reticulated with darker green and with irregular narrow stripes of paler green; rind ¾ inch thick; flesh pink, of good quality.
  - 135246. No. 4992. Fruit globose, 10 inches in diameter, pea green, reticulated with darker green; rind ¾ inch thick; flesh pink, of good quality; hollow heart, a rare condition in Afghan melons.
- 135247. No. 4997. From Mazarisharif, November 1, 1939. Fruit globose, 10 inches in diameter, green white with traces of darker green vermiculations; rind ¾ inch thick; flesh rose, of fine quality.
- 135248. No. 5014. From Tashkurchan, at 1,500 feet altitude, November 3, 1939. Fruit 14 by 7 inches, dark green with paler green, blotched stripes; rind ½ inch thick; flesh rose, of good quality.
- 135249 and 135250. From Puli Komri, November 5 and 7, 1939.
  - 135249. No. 5019. Fruit 13 by 9 inches, very dark green with narrow stripes of grass green; rind ½ inch thick; flesh bright pink, of good quality.

135250. No. 5027. Fruit subglobose, 11 inches in diameter, very dark green; rind  $\frac{1}{2}$  inch thick; flesh bright pink, of excellent quality.

135251 to 135254. From Dashi, November 9, 1939.

135251. No. 5029. Fruit globose, 10 inches in diameter, very dark green; rind ½ inch thick; flesh rose, of good quality.

135252. No. 5030. Fruit tapering elongate, 18 by 9 inches, coarsely reticulated and with irregular stripes of darker green; rind 1/4 inch thick; flesh rose, very sweet.

135253. No. 5031. Fruit 15 by 10 inches, pea green with heavy coarse reticulations; rind ¾ inch thick; flesh rose, of good quality.

135254. No. 5032. Fruit subglobose, 12 inches in diameter, very pale green with irregular line stripes of darker green; rind 3/4 inch thick; flesh pink, of very good quality.

135255 to 135257. From Kabul, November 12 and 20, 1939.

135255. No. 5036. Fruit globose, 11 inches in diameter, pale greenish white with irregular stripes of dark green; rind \(^3\)\(\_6\) inch thick; flesh pink, firm, fairly sweet; a good keeper.

135256. No. 5038. Fruit 8 by 9 inches, green white; rind ½ inch thick; flesh pink, of good quality; a good keeper.

135257. No. 5068. Fruit elongate, 15 by 8 inches, pale green; rind  $\frac{3}{4}$  inch thick; flesh pink, of good quality.

135258 and 135259. From Khalat, November 22, 1939.

135258. No. 5071. Fruit subglobose, pea green, 15 inches in diameter; rind 3/4 inch thick; flesh rose, good texture and flavor, very sweet.

135259. No. 5072. Fruit subglobose, pea green, 12 inches in diameter; rind 1 inch thick; flesh rose, of good texture and flavor, very sweet.

135260. No. 5076. From Spin Baldak, November 24, 1939. Fruit globose,  $3\frac{1}{2}$  inches in diameter, lemon yellow, more or less marbled with green; flesh whitish, bitter. The plant grows in the desert, is 6 feet across, and bears 20 to 30 fruits.

135261. No. 5083. From Kalat-i-ghilzai, November 22, 1939. Fruit pear-shaped, 13 inches high, grass green; flesh rose, of good quality.

135262. Juglans honorei Dode. Juglandaceae.

From California. Tree growing in the United States Plant Introduction Garden, Chico. Numbered February 12, 1940.

A wild walnut, native to the highlands of South America, which closely resembles the black walnut of the United States.

For previous introduction see 108822.

135263. DIERVILLA. Caprifoliaceae.

From Virginia. Plants purchased from Greenbrier Farms, Inc., Norfolk. Received February 17, 1940.

Bris de Mai.

135264. Amygdalus persica L. Amygdalaceae.

Peach

Walnut.

From New York. Scions presented by James F. A. Brannan, West River Road, Fulton. Received February 12, 1940.

A seedling peach.

#### 135265 to 135267.

From Brazil. Seeds presented by Jorge Ramos de Otero, Division of Agrostology, Ministerio da Agricultura, Deodoro. Received January 25, 1940.

135265. Desmodium Asperum (Poir.) Desv. Fabaceae.

A tropical American perennial legume, with virgate stems 3 to 5 feet high and racemes of small, purple flowers.

135266. Desmodium discolor Vogel (Meibomia discolor Kuntze).

A shrubby, erect, hairy plant from southern Brazil, with oval membranous leaflets and large panicles of light-blue flowers. Cultivated in Brazil for forage and silage; it is cut while young, as it becomes woody with age.

For previous introduction see 133429.

135267. Desmodium leiocarpum (Spreng.) Don (Meibomia leiocarpa (Spreng.) Kuntze).

In northern Argentina and southern Brazil this native leguminous plant is eaten readily by stock. It becomes 6 feet or more in height, more or less branched, with trifoliolate leaves 2 inches or more long.

For previous introduction see 64217.

### 135268 to 135403.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 12, 1940.

135268. BENINCASA HISPIDA (Thunb.) Cogn. Cucurbitaceae. Wax gourd.

135269 to 135343. Cucumis melo L. Cucurbitaceae. Muskmelon.

- 135269 and 135270. Collected in Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Grown under irrigation. *Kharbuz* is the vernacular name for melon in Afghanistan.
  - 135269. No. 4507. Fruit semiglobose, 10 inches in length, green yellow with blotches of green black; rind smooth; flesh greenish, 1½ inches thick, and sweet.
  - 135270. No. 4508. Fruit globose, 6 inches in diameter; rind golden yellow, hard and smooth; flesh white, 1½ inches thick, and sweet. Excellent keeper.
- 135271 and 135272. Collected in Kamard, August 24, 1939, at 6,000 feet altitude. Grown under irrigation.
  - 135271. No. 4511. Fruit football-shaped, 10 inches in length; rind yellow with little net; flesh greenish, 1½ inches thick, and sweet.
  - 135272. No. 4513. Fruit semiglobose, 8 inches in length; rind pale yellow, ribbed, greenish netted; flesh white, 1½ inches thick and sweet.
- 135273. No. 4514. From Kamard, August 25, 1939. Grown under irrigation. Fruit green yellow, 8 by 5 inches, netted; flesh white,  $1\frac{1}{2}$  inches thick.
- 135274 and 135275. Collected at Dari Yusuf, August 30, 1939.
  - 135274. No. 4569. Fruit yellow, dotted with pale yellow and green, faint net, 10 by 6 inches; flesh white, 1½ inches thick.
  - 135275. Fruit football-shaped, 10 inches in length; elongate blotches of dark and pale green, faint net; flesh 1¼ inches thick, white, crisp, and sweet.
- 135276 and 135277. Collected at Binimang, September 1, 1939.
  - 135276. No. 4578. Fruit football-shaped, 10 inches in length; rind lemon yellow; flesh white, 1¼ inches thick, soft, juicy, and sweet. Grown under irrigation.
  - 135277. No. 4586. Fruit subglobose, 8 inches in length; rind yellow, unnetted; flesh salmon color,  $1\frac{1}{2}$  inches thick, soft, juicy, and sweet. Said to be grown without water.
- 135278. No. 4588. From Terak, September 2, 1939. Fruit elongate, 10 by 6 inches; rind heavily netted, blotched yellow and orange; flesh white, 134 inches thick, and sweet. Said to be grown without water.
- 135279 to 135303. Collected in Kala Sarkari, September 1939.
  - 135279. Fruit football-shaped, 7 inches in length; trace of net on rind, blotched grass green and orange, with broad unindented ribs of pale green; flesh white, 1½ inches thick, and sweet.

### 135268 to 135403—Continued

- 135280. No. 4600. Fruit pale yellow; rind dotted heavily with green, heavily netted; flesh green,  $1\frac{1}{2}$  inches thick, fine quality.
- 135281. No. 4603. Fruit subglobose, 8 inches in length; rind attractively and bizarrely striped with irregular stripes of black green reticulated with white; flesh white, 2 inches thick, and sweet.
- 135282. No. 4604. Fruit subglobose, 8 inches in length; rind white cream, smooth, except for narrow, faintly indented ribs; flesh white, 13/4 inches thick, and sweet.
- 135283. No. 4605. Fruit subglobose, 6 inches in length; rind firm, heavily netted, blotched green and yellow; flesh white, crisp, sweet, and 1¾ inches thick.
- 135284. No. 4607. Fruit globose, tapering to blossom, 10 inches in length; rind ribbed, coarse netted, blotched yellow, orange, and green; flesh white, 2 inches thick, and sweet.
- 135285. No. 4608. Fruit flattened, 6 by 4 inches; rind strongly netted, conspicuously ribbed with grass green rib stripes, not indented, rest of surface pale green, dotted finely with yellow; flesh green, 2 inches thick, and fine flavored. Rare.
- 135286. No. 4609. Fruit globose, 8 inches in length; rind smooth, pa'e green, reticulated white; flesh white, 1¾ inches thick, and sweet.
- 135287. No. 4610. Fruit elongate football-shaped, 12 inches in length; rind heavily netted, pale yellow, mottled green; flesh 1¾ to 2 inches thick, white, crisp, and sweet.
- 135288. No 4611. Fruit flattened, 8 by 6 inches, heavily netted, yellow with ribs of green, ribs not indented; flesh green, 2 inches thick, and sweet.
- 135289. No. 4612. Fruit elongate, 12 inches in length; rind coarse sparse net, pale yellow green, heavily and finely dotted pea green and with large elongate blotches of black green; flesh white, 2 inches thick, crisp, and sweet.
- 135290. No. 4513. Fruit globose, 8 inches in length; rind black green mottled paler, traces of net; flesh greenish, 2 inches thick, fine quality.
- 135291. No. 4622. Fruit globose, 8 inches in length; rind pale yellow, dotted finely with green, with broad bands of pale green, heavily netted; flesh green white, 2 inches thick, fine quality.
- 135292. No. 4626. Fruit subglobose, tapered to blossom, 10 inches in length; rind smooth, yellow, dotted green; flesh cream, 2 inches thick, and sweet.
- 135293. No. 4628. Fruit globose, spherical-triangular in cross section 10 inches in length; rind unnetted, yellow white with irregular blotching of green; flesh cream, 2 inches thick, and sweet.
- 135294. No. 4630. Fruit subglobose, 8 inches in length; rind coarse-netted, ground finely dotted with yellow and pale green, blotched with black green; flesh cream, 2 inches thick, and sweet.
- 135295. No. 4631. Fruit football-shaped, 14 inches in length; rind yellow and orange with faintly indented ribs of greenish white; flesh white, 1½ inches thick, and sweet.
- 135296. No. 4632. Fruit elongated, 6 by 4 inches; rind heavily netted, mottled with yellow and green; flesh green,  $1\frac{3}{4}$  inches thick, fine quality.
- 135297. No. 4633. Fruit 6 by 4 inches; rind netted, orange and yellow; flesh cream,  $1\frac{3}{4}$  inches thick, and sweet.
- 135298. No. 4634. Fruit globose, 6 inches in length; rind white, dotted with green, with broad, slightly indented ribs of greenish white; flesh white, 1¾ inches thick, and sweet.
- 135299. No. 4635. Fruit 12 by 8 inches; rind gold and smooth; flesh white, 2 inches thick, and sweet.

### 135268 to 135403—Continued

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- 135300. No. 4637. Fruit subglobose, 8 inches in length; rind gold, smooth, and firm; flesh white, 1½ inches thick, and sweet. Said to be a Bokhara sort.
- 135301. No. 4638. Fruit subglobose, 7 inches in length; rind yellow, more or less dotted with green and with broad, unindented rib stripes of dark green, traces of net; flesh greenish white, 1¾ inches thick, and sweet.
- 135302. No. 4641. Fruit football-shaped, 10 inches in length; rind heavily wrinkled and furrowed, lemon color, more or less finely dotted with green, very firm; flesh white, 2 inches thick, and sweet. Good keeper.
- 135303. No. 4646. Fruit flattened, 4 inches by  $2\frac{1}{2}$  inches; rind yellow, attractively mottled and splotched with brown; aromatic.
- 135304 to 135306. Collected in Akupruk, September 11, 1939.
  - 135304. No. 4662. Fruit football-shaped, 15 inches in length; rind yellow, more or less clouded with green, slightly indented narrow ribs of green white, faint net; flesh white, 2 inches thick, and sweet. Not irrigated.
  - 135305. No. 4663. Fruit football-shaped, 15 inches in length; rind heavily netted, blotched pea and black green; flesh white, 2 inches thick, firm, crisp, and sweet.
  - 135306. No. 4664. Fruit elongate, 15 by 8 inches; rind greenish white, heavily netted; flesh white, 2 inches thick, and sweet.
- 135307 to 135329. Collected in Tukzar, September 13 and 14, 1939.
  - 135307. No. 4670. Fruit subglobose, 7 inches in length; rind smooth, with unmarked indented ribs, pale yellow with long blotches of orange; flesh white, 2 inches thick, fine-grained, and sweet.
  - 135308. No. 4671. Fruit football-shaped, 11 inches in length; rind heavily netted, pale yellow, dotted and blotched with green; flesh greenish white, 2 inches thick, crisp, and sweet.
  - 135309. No. 4673. Fruit globose, 15 inches in diameter; rind yellow, firm, somewhat uneven; flesh white, 2 inches thick, and fine flavor. Good keeper.
  - 135310. No. 4674. Fruit flattened, 8 by 6 inches; rind pale green, dotted with darker green, heavily netted with unnetted rib lines; flesh green, 2 inches thick, and sweet.
  - 135311. No. 4675. Fruit flattened, 7 by 5 inches; rind smooth, pale yellow green, dotted with green; flesh greenish white, 134 inches thick, and sweet.
  - 135312. No. 4676. Fruit tapered, 14 by 7 inches; rind heavily netted, irregular bands of black, green, and yellow; flesh greenish white, 1½ inches thick, crisp, and sweet.
  - 135313. No. 4677. Fruit 16 by 7 inches; rind lemon with traces of broad black-green stripes, traces of netting; flesh white, 2 inches thick, crisp, and sweet.
  - 135314. No. 4678. Fruit globose, 10 inches in diameter; rind pale green, dotted with darker green, heavily indented ribs; flesh cream white,  $2\frac{1}{2}$  inches thick, very sweet.
  - 135315. No. 4679. Fruit tapered, 15 by 7 inches; rind orange, with broken black-green stripes, coarse-netted; flesh white, 2 inches thick, crisp, and sweet.
  - 135316. No. 4682. Fruit subglobose, 8 inches in length; rind yellow white, grass-green blotches, sunken but unmarked ribs; flesh white, 1½ inches thick, and sweet.
  - 135317. No. 4683. Fruit subglobose, 1 foot in length; rind indented, unmarked ribs, elongate, irregular, blotched stripes of green and lemon; flesh white, 2 inches thick, and sweet.

### 135268 to 135403—Continued

- 135318. No. 4684. Fruit subglobose, 10 inches in length; rind greenish white dotted with darker green, indented ribs, heavy net; flesh white, 21/4 inches thick, and sweet.
- 135319. No. 4685. Fruit elongate football-shaped, 14 inches in length; rind heavily netted, pale yellow, obscured by blotches of black, green, and orange; flesh white, crisp, 2 inches thick, and sweet.
- 135320. No. 4686. Fruit 10 by 5 inches; rind smooth, grass green, spotted with yellow; flesh cream white, 1¾ inches thick, and sweet.
- 135321. No. 4687. Fruit subglobose, 12 inches in length; rind nearly smooth, pale lemon, heavily dotted with green; flesh white, 21/4 inches thick, and sweet.
- 135322. No. 4688. Fruit football-shaped, 1 foot in length; rind netted, pale green to lemon, dotted and blotched with dark green; flesh white, 2 inches thick, crisp, and sweet.
- 135323. No. 4689. Fruit flattened, 10 by 8 inches; rind furrowed, unnetted, lemon with raised blotches of orange; flesh greenish white, 1½ inches thick, and very sweet. Good keeper.
- 135324. No. 4690. Fruit top-shaped, 14 inches in length; rind orange, more or less dotted with green, smooth; flesh greenish white, 2½ inches thick, and sweet.
- 135325, No. 4698. Fruit subglobose, 7 inches in length; rind lemon with slightly indented ribs of green, smooth; flesh creamy white, 2 inches thick, and sweet.
- 135326. No. 4701. Fruit somewhat top-shaped, 14 inches in length; rind lemon, smooth; flesh cream white, 2 inches thick, and sweet.
- 135327. No. 4702. Fruit 10 by 5 inches; rind greenish white, finely dotted with green, smooth; flesh white, 13/4 inches thick, and sweet.
- 135328. No. 4706. Fruit top-shaped, 10 inches in length; rind yellow, dotted with green, broad indented ribs of green; flesh cream, 2 inches thick, and sweet.
- 135329. No. 4711. Said to have fruits 3 to 4 feet long.
- 135330. No. 4754. Bought in the market in Sufak. Fruits football-shaped, 1 foot in length; rind heavily netted, blotched with green and yellow; flesh cream white, 2 inches thick, crisp, and sweet. An excellent keeper.
- 135331 to 135335. Collected in Shorak, October 7 and 8, 1939. Grown without irrigation.
  - 135331. No. 4821. Fruit football-shaped, 1 foot in length; rind gold, blotched with green; flesh white,  $1\frac{1}{2}$  inches thick, and sweet.
  - 135332. No. 4825. Fruit football-shaped, 10 inches in length; rind grass green, heavily netted; flesh green, 2 inches thick, crisp, and sweet.
  - 135333. No. 4830. Fruit football-shaped, 10 inches in length; rind gold, sparingly netted; flesh green, 2 inches thick, excellent flavored.
  - 135334. No. 4836. Fruit football-shaped, 1 foot in length; rind mixed gold and black green, furrowed; flesh 2 inches thick, mellow and very sweet. Good keeper.
  - 135335. No. 4837. Fruit subglobose, 8 inches in length; rind gold, blotched with green; flesh creamy white, 2 inches thick, very sweet.
- 135336 and 135337. Collected in Bandar, October 9 and 10, 1939.
  - 135336. No. 4859. Grown without cultivation. Fruits not seen. Dry seed purchases. Probably several varieties.
  - 135337. No. 4869. Grown without irrigation. Fruit globose, 6 inches in in diameter, poorly grown; rind pale green, smooth; flesh white.
- 135338. No. 4870. From Shorak, October 9, 1939, at 7,500 feet altitude. Fruit

- football-shaped, 10 inches in length; rind lemon, finely dotted green, coarsely netted; flesh green,  $1\frac{3}{4}$  inches thick, crisp, and good quality.
- 135339. No. 4904. From Khwajaebrchajalak, October 17, 1939, at 7,000 feet altitude. Grown without irrigation. Fruit 10 by 6 inches; rind gold, smooth to slightly netted; flesh white, 2 inches thick, sweet, and rich. Good keeper.
- 135340. No. 4919. From Almar, October 19, 1939, at 3,000 feet altitude. Fruit subglobose, pointed at both ends, 10 inches in length; rind blotched green and gold brown, heavily netted; flesh green, 2 inches thick, firm, crisp, and sweet.
- 135341. No. 4927. From Maimana, October 21, 1939, at 3,000 feet altitude. Fruit football-shaped, 10 inches in length; rind green, heavily netted; flesh whitish, 2 inches thick, crisp, and sweet.
- 135342. No. 4932. From Andkhin, October 22, 1939, at 2,000 feet altitude. Fruit 12 by  $7\frac{1}{2}$  inches; rind smooth, gold splashed with dark green; flesh cream,  $2\frac{1}{2}$  inches thick, very sweet. Good keeper.
- 135343. No. 5033. From the foot of Shiba Pass, November 10, 1939. Fruit probably obtained from valley below. Fruit elongate, rounded, 12 by 7 inches; rind gold, coarsely netted; flesh white, 21/4 inches thick, very sweet. Apparently has good keeping qualities.
- 135344 to 135346. CUCUMIS SATIVUS L. Cucurbitaceae. Cucumber.
  - 135344. No. 4623. Badrang. From Kala Sarkari, September 8, 1939. Fruit 7 by 4 inches; rind russet; reticulated.
  - 135345. No. 4723. Badrang. From Tukzar, September 15, 1939. Fruit 1 foot by 5 inches; rind russet; reticulated by cracking.
  - 135346. No. 4980. Badrang. From Akcha, September 29, 1939. Fruit 1 foot by 4 inches; rind pale russet; not conspicuously netted.
- 135347 to 135349. Cucumis melo L. Cucurbitaceae. Muskmelon.
  - 135347. No. 4935. From Andkhin, September 24, 1939. Apparently naturalized in a field, plant usually 3 to 4 feet across; prolific. Fruit egg-shaped, 2½ inches in diameter; rind striped in 2 shades of green; tomentose; good keeper.
  - 135348. No. 4976. From Balkh, October 29, 1939, at 1,500 feet altitude. Naturalized in field. Fruit ovoid, 4 inches long; rind pale green with broken stripes of dark green, hispid.
  - 135349. No. 4994. From Balkh, October 31, 1939, naturalized. Fruit subglobose, 2 inches in length; rind yellow green with traces of narrow striping of grass green.
- 135350 to 135359. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.
  - 135350. No. 4710. From Tukzar, September 15, 1939. Fruit pear-shaped, 18 inches long; rind handsome salmon pink with narrow rib lines of green; flesh yellow,  $3\frac{1}{2}$  inches thick, insipid.
  - 135351. No. 4900. From Khwajaebrchajalak, September 17, 1939, at 7,000 feet altitude. Fruit slightly flattened, 14 inches in length; rind salmon pink; flesh yellow, 2 inches thick, fair quality.
  - 135352. No. 4911. From Khwajaebrchajalak, October 17, 1939, at 7,000 feet altitude. Fruit slightly flattened, 15 inches in length; rind obscurely ribbed, gray green; flesh yellow, 2½ inches thick, fair quality.
  - 135353. No. 4921. From Alma. October 19, 1939, at 3,000 feet altitude Fruit subglobose, slightly flattened, 18 inches in length; weight about 50 pounds; rind grayish green; flesh yellow, 3 inches thick, not very sweet.
  - 135354. No. 5010. From Haibak, November 3, 1939. Fruit flattened, 10 by 5 inches, with large navel 3 inches across; rind grayish green with narrow stripes and blotches of paler green; flesh orange, 1½ to 2 inches thick, fairly sweet.

- 135355. No. 5016. From Pulikomri, November 4, 1939. Fruit 24 by 10 inches; rind smooth, unribbed, handsome salmon pink with green belly; flesh 2½ inches thick, of good texture, and sweet.
- 135356 to 135359. Collected in Kabul, November 1939.
  - 135356. No. 5037. Fruit flattened, 11 by 7 inches; rind orange red with obscure rib lines of cream, smooth; flesh orange, not very sweet, but of good texture.
  - 135357. No. 5048. Fruit 20 by 10 inches; rind creamy white, smooth; flesh yellow, 3 inches thick, insipid.
  - 135358. No. 5049. Fruit globose, 11 inches in diameter; rind creamy white, with indented ribs; flesh yellow, 2 inches thick, insipid.
  - 135359. No. 5054. Fruit elongate, 24 by 10 inches, rind orange red with narrow-ribbed stripes and splashes of cream; flesh orange yellow; 13/4 inches thick, insipid.
- 135360 to 135376. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw.
  - 135360. No. 4618. Kadu. From Kala Sarkari, November 7, 1939. Fruit slightly flattened, 1 foot across; rind orange red, blotched with green, irregular indented ribs, almost white; flesh yellow, 2½ inches thick.
  - 135361. No. 4636. Pilau Kadu. From Kala Sarkari, November 8, 1939. Fruit elongated, 16 inches in length; rind orange red, blotched with layers of small, paler, orange-red blotches, deep ribs; flesh yellow, 1½ inches thick, sweet, fiberless; neck half solid.
  - 135362 to 135364. Collected in Tukzar, September 14 and 15, 1939.
    - 135362. No. 4699. Fruit pear-shaped, 10 inches in length; rind orange, spotted with yellow; flesh yellow, 1 inch thick, insipid.
    - 135363. No. 4718. Mekaekidu. Fruit rounded elongate, 12 inches in length; rind ash gray, marbled with pink; flesh yellowish orange, 2 inches thick, insipid.
    - 135364. No. 4722. Fruit elongate, 10 inches in length; rind irregular with indented ribs, pink buff, mottled more or less with green; flesh of bowl yellow, 1 inch thick, insipid.
  - 135365 to 135368. Collected in Khwajaebrchajalak, October 17, 1939, at 7,000 feet altitude.
    - 135365. No. 4902. Fruit somewhat flattened, 8 inches in length; rind orange red; flesh bright orange, 1½ inches thick, of fair quality.
    - 135366. No. 4903. Haluakadu. Fruit pear-shaped, 10 inches in length; rind ribbed, pink buff, spotted with a paler pink buff; orange, 1½ inches thick, sweet, and of good texture.
    - 135367. No. 4905. Fruit flattened, 6 by 10 inches; rind deeply ribbed, hand-somely splashed and dotted with grass green and yellow buff; flesh orange, 3 inches thick, of fair quality.
    - 135368. No. 4909. Fruit somewhat flattened, 8 inches in length; rind black green; flesh orange,  $1\frac{1}{2}$  inches thick, rather insipid.
  - 135369. No. 4926. From Maimana, October 21, 1939. Altitude 3,000 feet. Fruit pear-shaped, 14 inches in length; rind conspicuously ribbed, gold brown, speckled with paler gold brown; flesh gold, 1½ to 2½ inches thick, sweet, and tender.
  - 135370. No. 4929. From Karakul, October 22, 1939. Fruit 24 by 10 inches; rind battleship gray, shiny, faintly ribbed; flesh bright orange, of good quality, but not very sweet.
  - 135371. No. 4947. From Akcha, October 26, 1939, at 1,500 feet altitude. Fruit globose with an exceptionally long neck (13 inches), 22 inches in length; rind gold buff with splashes of paler gold, faintly ribbed; flesh orange, sweet, and tender; seed cavity heart-shaped, 5 by 8 inches; an excellent variety.

- 135372. No. 4987. From Balkh, October 30, 1939, at 1,500 feet altitude. Fruit flattened, 10 by 12 inches; rind deeply ribbed, gold buff, with bloom; flesh orange, 1 to 2 inches thick, sweet, and of good texture.
- 135373. No. 5018. From Pulikomri, November 4, 1939. Fruit 14 by 9 inches; rind black green with blotches of Chinese red; flesh orange yellow, 2 to  $2\frac{1}{4}$  inches thick, fair quality.
- 135374 to 135376. Collected in Kabul, November 1939.
  - 135374. No. 5035. Fruit globose, 9 inches in diameter; rind pale yellow, faint and irregular rib indentations; flesh 1½ inches thick, insipid; eaten immature.
  - 135375. No. 5050. Fruit subglobose, 12 inches in length; rind with heavily indented ribs, heavily and coarsely netted, salmon; flesh orange,  $2\frac{1}{2}$  inches thick, good texture, and sweet.
  - 135376. No. 5058. Tamasha Kadu. Fruit globose,  $3\frac{1}{2}$  inches in diameter; rind orange yellow, nearly covered with excrescences; ornamental.
- 135377 to 135403. CUCURBITA PEPO L. Cucurbitaceae. Pumpkin.
  - 135377. No. 4582. Kadu. From Binimang-i-Charaolia, September 1, 1939, at 8,000 feet altitude. Fruit 10 by 6 inches; rind with alternate irregular stripes of green and yellow; flesh 1¼ inches thick, yellow, insipid.
  - 135378. No. 4639. Tamasha Kadu. From Kala Sarkari, September 8, 1939. Fruit globose,  $3\frac{1}{2}$  inches in diameter; rind orange with trace of rib stripes of darker orange; ornamental.
  - 135379 to 135381. Collected in Tukzar, September 15 and 16, 1939.
    - 135379. No. 4668. Fruit subglobose, 4 inches in length; rind gold, very warty; ornamental.
    - 135380. No. 4719. Fruit subglobose, 8 inches in length; rind very hard, grass green, marbled with lighter green; flesh very firm, yellow, 1½ inches thick, rather insipid. Probably better eaten as a summer squash.
    - 135381. No. 4721. Fruit subglobose, 10 inches in length; rind hard, black green, mottled with lighter green, broad irregular ribbons of lemon, green netted; flesh yellow, 2 inches thick, fairly sweet.
  - 135382. No. 4725. From Katakala. Fruit flattened, 16 by 14 inches; rind orange pink, with broken blotches of green and white; flesh yellow,  $2\frac{1}{2}$  inches thick, insipid.
  - 135383 to 135385. Collected in Sharak, October 7 and 8, 1939. Grown without irrigation.
    - 135383. No. 4817. Altitude 7,000 feet. Fruit pumpkin-shaped, 13 by 7 inches; creamy buff; flesh yellow, 2 inches thick, very firm, rather sweet.
    - 135384. No. 4818. Altitude 7,500 feet. Fruit pumpkin-shaped, 13 by 7 inches; rind with irregular broad broken stripes of grass green and orange yellow; flesh yellow, 2¼ inches thick, firm, rather sweet.
    - 135385. No. 4834. Altitude 7,500 feet. Fruit somewhat flattened, subglobose, 6 to 8 inches long; rind orange, with more or less traces of broken broad green ribs; flesh yellow, 1½ inches thick, fairly sweet, no fiber.
  - 135386. No. 4899. Karakadu. From Khwajaebrchajalak, October 17, 1939, at 7,000 feet altitude. Grown without irrigation. Fruit globose, 8 inches in diameter; rind mottled orange and green; flesh greenish yellow, 1 inch thick, of good quality.
  - 135387. No. 4930. From Karakul, October 22, 1939. Fruit globose, 10 inches in diameter; rind white, faintly ribbed; flesh pale orange, 2 inches thick, insipid.
  - 135388. No. 5023. Tamashakadu. From Pulikomri, November 6, 1939, at 4,000 feet altitude. Fruit flattened, 3 by  $2\frac{1}{2}$  inches; rind orange, netted with green, with slightly indented narrow rib lines of green; ornamental.

135389 to 135403. Collected in Kabul, November 15 to 20, 1939.

135389. No. 5045. Fruit like our summer scalloped squash, but of much less depth and bright orange, not white. Edges scalloped; size 7 by 2 inches, with broad wings and small belly.

135390. No. 5046. Fruit globose, 5 inches in diameter; rind very hard, yellow, heavily orange-veined; flesh yellow, ¾ inch thick, crisp, rather insipid Probably eaten in immature state.

135391. No. 5047. Fruit elongate,  $6\frac{1}{2}$  by  $4\frac{1}{2}$  inches; rind orange, with rib bands and blotches of yellow; hard-shelled; flesh yellow,  $\frac{3}{4}$  inch thick, firm, crisp, insipid.

135392. No. 5051. Fruit cylindrical, 6 by 3 inches; rind orange, heavily warted; ornamental.

135393. No. 5052. Fruit ovoid, 5 inches long; rind smooth, orange; ornamental.

135394. No. 5055. Fruit flattened, 5 by  $1\frac{3}{4}$  inches; rind orange, with indented ribs; faintly scalloped edges.

135395. No. 5056. Fruit turban-shaped,  $5\frac{1}{2}$  by  $2\frac{1}{2}$  inches, heavily scalloped; rind creamy white.

135396. No. 5057. Fruit somewhat flattened, 10 by 9 inches; rind pea green, heavily indented ribs; flesh orange, 2 to 3 inches thick, fairly good.

135397. No. 5059. Fruit elongate, 11 inches in length; rind nearly smooth, hard, yellow; flesh yellow, 1¼ inches thick, insipid.

135398. No. 5060. Fruit club-shaped, 13 inches long; rind black green with narrow stripes of yellow; fiesh yellow, 1 inch thick, insipid.

135399. No. 5061. Fruit club-shaped, 12 inches in length; rind yellow with conspicuously raised ribs; flesh yellow, 1 inch thick, insipid.

135400. No. 5064. Fruit subglobose, 5 inches in length; rind creamy white, with or without indented ribs; flesh yellow, ¾ inch thick, insipid.

135401. No. 5065. Fruit slightly pear-shaped, 4 inches in diameter; rind dark green spotted with yellow, more or less warty; ornamental.

135402. No. 5066. Fruit quince-shaped, 4 inches in diameter; rind creamy white, with irregular indented ribs.

135403. No. 5067. Fruit globose, 2½ inches in diameter; rind orange, and smooth; ornamental.

# 135404 to 135407. CANNABIS SATIVA L. Moraceae. Hemp.

From the Union of Soviet Socialist Republics. Seeds presented by the Institute of Plant Industry, Leningrad. Received February 5, 1940.

135404. No. 1979. Novgorod Severskaya.

135405. No. 1990. Severskaya Kavkas.

135406. No. 102J/DJC/. Barnauljskaya.

135407. No. 1981. Solotonoshskaya.

# 135408. DIERVILLA CORAEENSIS (Thunb.) DC. Caprifoliaceae. Korean weigela

From Massachusetts. Seeds presented by F. W. Schumacher, Boston. Received February 7, 1940.

An ornamental Japanese shrub 6 to 10 feet high, with oval long-pointed leaves 3 to 5 inches long and flowers that are at first pale pink, later changing to carmine. For previous introduction see 73275.

135409. PHILADELPHUS INCANUS var. SARGENTIANUS Koehne. Hydrangeaceae.

From Massachusetts. Seeds purchased from F. W. Schumacher, Boston. Received February 7, 1940.

A variety with yellowish or brownish branches and leaves with the lower surfaces pilose.

For previous introduction see 78942.

# 135410 to 135421. SACCHARUM. Poaceae.

Sugarcane.

From Hawaii. Cuttings presented by Dr. H. L. Lyon, Director, Experiment Station of the Hawaiian Sugar-Planters' Association, Honolulu. Received February 12, 1940.

135410, Molokai, No. 4360.

135411. Molokai. No. 4503.

135412. Molokai. No. 4575.

135413. Molokai. No. 4730.

135414. Molokai. No. 4826.

135415. Molokai. No. 4861.

135416. Molokai. No. 4972.

135417. Molokai. No. 5099.

**135418.** *Molokai*. No. 5193. **135419.** *Molokai*. No. 5498.

135420. Molokai. No. 5549.

135421. Molokai. No. 5698.

#### 135422 to 135455.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition. Received in December 1939 and January 1940. Numbered in January 1940.

135422. Aralia bipinnata Blanco. Araliaceae.

Palm.

No. 107. From Mount Data, Luzon, December 8, 1939, at 1,000 meters altitude. An attractive, small spiny tree resembling *Aralia spinosa*, with handsome terminal panicles of brown berries. Native to the Philippine Islands.

135423. ARECA CATECHU L. Phoenicaceae.

Betel palm.

No. 33. From Mount Makiling National Park, Luzon, October 29, 1939.

For previous introduction see 133254.

135424. ARECA IPOT Beccari.

Palm.

No. 80. Bunga. From Mount Makiling National Park, Luzon, November 16, 1939.

For previous introduction see 47619.

135425. ARECA sp.

Palm.

No. 75. From Tandoc, near Naga, Luzon, November 18, 1939.

135426. CORYPHA ELATA Roxb. Phoenicaceae.

Buri palm.

No. 79. From Pogbilao, Tayabas, November 5, 1939.

For previous introduction see 122837.

135427. Desmodium sp. Fabaceae.

No. 116. From the sand dunes of Pavay, Luzon, December 11, 1939.

135428. DILLENIA PHILIPPINENSIS Rolfe. Dilleniaceae.

No. 113. From Lamao Experiment Station, Luzon, December 17, 1939.

For previous introduction see 59274.

135429. DIOSCOREA sp. Dioscoreaceae.

Yam.

No. 137. From Manila, December 8, 1939. Reported to be a purple-tubered species from which ice cream is made.

135430. DIOSPYROS EBENASTER Retz. Diospyraceae.

Black sapote.

No. 101. From Lamao, Luzon, December 16, 1939. The tree is a vigorous grower of compact habit. The fruit, externally resembling a green tomato, has chocolate-colored flesh of pleasant flavor and good texture.

For previous introduction see 133380.

135431. FERONIA LIMONIA (L.) Swingle. Rutaceae.

Wood-apple.

No. 102. From Lamao Experiment Garden, Luzon, December 16, 1939. The wood-apple or elephant tree of India. Fruit round, 3 inches in diameter; rind gray, corky; pulp dry, edible, used for medicinal purposes, contains many seeds.

135432. FICUS CALOPHYLLOIDES Elmer. Moraceae.

No. 128. Balete. From Mount Makiling National Park, Luzon, December 22,

## 135422 to 135455—Continued

1939, at low altitude. A large forest tree with light-colored bark, smooth, dark-green leaves, and yellow fruits the size of small plums.

#### 135433. Ficus ulmifolia Lam.

Elmleaf fig.

No. 117. From Luzon, December 11, 1939. This has very harsh leaves that are used in polishing wood surfaces.

For previous introduction see 50699.

135434. FLACOURTIA sp. Flacourtiaceae.

No. 109. From Lamao Experiment Station, Luzon, December 16, 1939. A large tree that bears good-sized edible fruit in large clusters.

135435. FREYCINETIA MULTIFLORA Merr. Pandanaceae.

No. 130. From Mount Makiling National Park, Luzon, December 22, 1939. Presented by Professor de la Cruz, who collected it at the mud spring of the National Park. A handsome, narrow leaved climbing native species, with showy bracts and pretty orange compound fruits.

For previous introduction see 134996.

135436 to 135440. LIVISTONA spp. Phoenicaceae.

Palm.

135436. LIVISTONA sp.

No. 49. Swamp Anahan. Collected 1 km. east of Naga, Luzon, November 10, 1939. Differs from Livistona rotundifolia in that it has flattened purplish or violet-colored fruits, instead of red or orange. Petioles very spiny; spines robust on bases of leaves of young plants; seeds almost spherical or slightly flattened.

135437. LIVISTONA sp.

No. 40. From grounds of Provincial capital, Batangas, Luzon, November 2, 1939. Leaves much like other species, but this has larger fruits that become mottled with orange.

### 135438. LIVISTONA MERRILLII Beccari.

Anahu palm.

No. 60. From Legaspe, Luzon, November 1939. A tall native palm, in the deep forest becoming more than 100 feet high with large flabellate-orbicular leaves, entire in the central part and with the periphery more or less deeply divided, the petioles in adult plants being unarmed or slightly spinose. The rather small, blackish fruits are in long racemes.

135439. LIVISTONA COCHINCHINENSIS (Blume) Mart.

N. 87. Turan. From Magat Forestry Station, Coogan Valley, above Bayombong, Luzon.

For previous introduction see 105730.

135440. LIVISTONA ROBINSONIANA Beccari.

No. 74. From Cadwallader-Gibson Concession "Tandoc," Luzon, November 12, 1939. A superb fan palm with a ringed trunk rising to nearly 100 feet in the dense forest. Differs from *Livistona rotundifolia* in having red, not violaceous fruits.

For previous introduction see 135001.

135441. MELASTOMA sp. Melastomaceae.

No. 122. From the highlands of the mountains back of Vigan, Luzon, near the Langangilang Forest Station, December 11, 1939.

135442. NEPENTHES ALATA Blanco. Nepenthaceae.

No. 110. From between Bontoc and Talubin, Luzon, December 9, 1939. A terrestrial or epiphytic climber, with stems up to 10 feet high; elliptic or lanceolate leaves with winged, clasping petioles and pitchers nearly 1 foot long on mature plants. Native to the Philippines.

#### 135422 to 135455—Continued

135443 and 135444. ORANIA PALINDAN (Blanco) Merr. Phoenicaceae.

135443. No. 58. From virgin forest of Cadwallader-Gibson Concession "Tandoc," in Camarines Sur, Luzon, November 12, 1939. An upright endemic palm, up to 20 feet high, with leaves even more graceful than those of the coconut. The light-yellow globose fruits, borne in long racemes, are the size of golf balls, and are sometimes eaten after being cooked. The terminal bud is said to be poisonous.

For previous introduction see 105353.

135444. No. 81. Palindan. From Mount Makiling National Park, November 16, 1939. Fruits larger than those of No. 58; about 2 inches in diameter.

135445. Oroxylon indicum (L.) Vent. Bignoniaceae.

East Indian trumpetflower.

135446. PANGIUM EDULE Reinw. Flacourtiaceae.

No. 86. From Mount Makiling National Park, Laguna, Luzon, November 17, 1939.

For previous introduction see 80875.

135447. PARKIA JAVANICA (Lam.) Merr. Mimosaccae.

Kupang

No. 131. From Mount Makiling National Park, Laguna, Luzon, December 22, 1939. Grown at low altitudes. Gift from Prof. H. M. Curran. A handsome leguminous tree, often planted. Native from India to Timor. The flowers, like small balls of yellow, are on long, pendent stalks. Grows in very wet soils and also stands drought very well.

For previous introduction see 72438.

135448. PINANGA INSIGNIS Beccari. Phoenicaceae.

Palm.

No. 59. From virgin forest at "Tandoc," Cadwallader-Gibson Concession, Luzon, November 11, 1939. A shade-loving palm, about 30 feet high, of slender habit, with graceful feathery leaves and large clusters of brilliant-red fruits.

135449. PINANGA MACULATA Porte.

No. 50. From near Forest Park Office on Bulusan Volcano, Luzon, November 1939. A sylvan palm with slender stems, deeply bilobed leaves, and blades about 1 foot long, green mottled with darker spots, and small fruits, salmon pink turning orange. Native to the Philippines.

135450. PITHECELLOBIUM SCUTIFERUM (Blanco) Benth. Mimosaceae.

No. 127. From Mount Makiling National Forest Park, Laguna, Luzon, December 22, 1939.

For previous introduction see 94198.

135451. POLYSCIAS NODOSA (Blume) Seem. Araliaceae.

No. 133. Malapapaya. From Mount Makiling National Forest Park, Laguna, Luzon, December 22, 1939. A lofty tree found in nearly every Province of the Philippine Islands. It sometimes reaches a height of 100 feet, with a straight trunk and compound leaves more than 3 feet in length. The purplish-green flowers are borne in immense clusters above the leaves. The yellowish-white, light, very soft wood is considered one of the best matchwoods and also is valuable for very light construction purposes.

For previous introduction see 54926.

135452 and 135453. RHAPHIDOPHORA spp. Araceae.

135452. No. 104. From between Bantoc and Banane, Luzon, December 9, 1939, at an altitude of 1,330 meters.

135453. No. 108. From La Union Province, Luzon, December 8, 1939, at an altitude of 1,000 meters.

135454. SOLANUM sp. Solanaceae.

No. 125. From along a mountain trail, Luzon, December 11 and 15, 1939. A handsome, many-flowered shrubby species that produces bunches of brilliant-red berries

135455. TERMINALIA CALAMANSANAI (Blanco) Rolfe. Combretaceae.

No. 119. From the Forestry Station at Caniaw, east of Vigan, Luzon, December 11, 1939.

# 135456 to 135462. LINUM USITATISSIMUM L. Linaceae. Flax.

From Portugal. Seeds presented by Prof. A. Camara, Estação Agronómica Nacional, Belém, Lisbon. Received February 8, 1940.

Introduced under the varietal name "crepitans," for which a place of publication has not been found.

135456 to 135459. Cultivated under irrigation, March and April.

135456. Linho de Primavera E. 112.

135458. Linho Molar E. 449.

135457. Linho Galego E. 324.

135459. Linho Galego E, 729.

135460 to 135462. Cultivated under irrigation, November and July.

**135460.** Linho Mourisco E. 730.

135462. Linho Mourisco E. 1772.

135461. Linho Abertico E. 987.

#### 135463 to 135466.

From the Philippine Islands. Seeds collected by David Fairchild, Bureau of Plant Industry, United States Department of Agriculture. Received February 2, 1940.

135463. Musa glauca Roxb. Musaceae.

Ranana

No. 120. From Mount Makiling National Park, December 19, 1939. An Indian banana with a trunk 10 to 12 feet high, short-petioled lanceolate leaves 4 to 5 feet long, and a drooping spike of small flowers and inedible fruits that are hidden by the large bracts.

For previous introduction see 77980.

135464. PINUS INSULARIS Endl. Pinaceae.

Benguet pine.

No. 124. From Cabonegan Reforestation Project, Luzon, December 11, 1939. A tall three-needled tropical pine that grows on the highlands of the Philippine Islands between 3,000 and 8,000 feet altitude. The flaccid leaves are 7 to 9 inches long, and the ovoid cones are about 3 inches in length.

For previous introduction see 103936.

135465. STRYCHNOS IGNATII Berg. Loganiaceae.

Saint Ignatius bean.

No. 121. From Mount Makiling National Park, December 17, 1939. A large climbing shrub of the Visayan group of the Philippines. The large fruit contains several pebblelike seeds sold in the crude drug market as Saint Ignatius beans; these contain the alkaloids strychnine and brucine, for the extraction of which they are used to some extent.

135466. SWIETENIA MACROPHYLLA King. Meliaceae.

Mahogany.

No. 136. From Mount Makiling National Park, Luzon, December 17, 1939. Presented by Prof. Hugh M. Curran. A large, attractive, well-formed tree, native to tropical America, with compound leaves made up of 3 to 5 pairs of elliptic-oblong leaflets 4 to 8 inches long, and small flowers in panicles. The ovoid woody fruits are 6 inches long and contain winged seeds 3 to 5 inches long.

For previous introduction see 123568.

# 135467 to 135470. CEANOTHUS spp. Rhamnaceae.

From California. Plants purchased from Leonard Coates Nurseries, San Jose. Received February 16, 1940.

135467. CEANOTHUS ARBOREUS Greene.

An evergreen shrub or small tree with light-gray bark, ovate, acute, serrate, or often crenate leaves, white-tomentose beneath, 2 to 4 inches long, and fragrant, pale- to deep-blue flowers in compound racemes. Native to California.

For previous introduction see 4838.

135468. Ceanothus dentatus var. impressus Trelease.

A widespreading shrub up to 8 feet with alternate, persistent, broadly elliptic to round leaves 1 inch long and dark-blue flowers. Native to southern California.

135469. Ceanothus Jepsonii var. purpureus Jepson.

An erect or spreading shrub, up to 4 feet high; leaves opposite, persistent, orbicular to broadly elliptic, sinuate, up to  $\frac{3}{4}$  inch long, and glossy dark green; flowers deep blue to purple, in umbels about 2 inches across. Native to California.

135470. CEANOTHUS THYRSIFLORUS var. GRISEUS Trelease.

A variety with broad-ovate leaves, densely silky pubescent beneath; rather large but dense and compact panicles of pale-lilac flowers.

# 135471. Schizostachyum sp. Poaceae.

Bamboo.

From the Philippine Islands. Plants collected by David Fairchild, Bureau of Plant Industry, United States Department of Agriculture, at Mabasila, Mindanao, January 22, 1940. Received February 20, 1940.

No. 170. A thin-walled large-sized species, grown extensively in parts of Mindanao. Resembles *Schizostachyum lumampao*, but has culms of larger diameter and is much taller, up to 60 feet in height. Grows at medium altitude on fertile soil.

135472. Magnolia campbellii Hook. f. and Thoms. Magnoliaceae.

From England. Seeds purchased from Fox Hill Hardy Plant Nurseries, Keston, Kent, January 10, 1940. Received February 20, 1940.

A beautiful deciduous magnolia from the Himalayas, where it ascends to 8,000 feet above sea level. It reaches a height of 80 feet, has very dark bark, large elliptical dark-green leaves, and flowers (usually white) 10 inches in diameter. This magnolia has flowered freely in southern France and Italy.

For previous introduction see 85676.

# 135473 to 135481. Eucalyptus spp. Myrtaceae.

From Australia. Presented by F. H. Baker, Richmond, Victoria. Received February 21, 1940.

135473. EUCALYPTUS CALOPHYLLA Lindl.

Port Gregory gum.

For previous introduction see 132626.

135474. EUCALYPTUS CITRIODORA Hook.

For previous introduction see 106708.

135475. EUCALYPTUS EREMOPHILA Maiden.

For previous introduction see 123772.

135476. Eucalyptus erythrocorys F. Muell.

For previous introduction see 125012.

135477. EUCALYPTUS LEUCOXYLON F. Muell.

For previous introduction see 38718.

135478. EUCALYPTUS MACROCARPA Hook.

For previous introduction see 125013.

135479. Eucalyptus pyriformis Turcz.

For previous introduction see 130707.

135480. Eucalyptus tetragona (R. Br.) F. Muell.

For previous introduction see 130707.

135481. Eucalyptus tetraptera Turcz.

For previous introduction see 49001.

White ironbark.

135482. HIPPEASTRUM BLUMENAVIA (Carr.) Sealy. Amaryllidaceae.

From Brazil. Seed presented by Dr. F. C. Hoehne, Department of Botany, São Paulo. Received February 21, 1940.

A hippeastrum allied to *Hippeastrum vittatum*, with smaller narrow-oblong to broad-oblong-oval petiolate leaves and 4 or 5 white or pale-red-tinged flowers about 2 inches long. Native to southeastern Brazil.

For previous introduction see 118814.

# 135483. Hordeum distiction L. Poaceae.

Barley.

From Canada. Seed presented by the University of Sackatchewan, Saskatoon. Received February 14, 1940.

Rex.

# 135484. Amygdalus persica L. Amygdalaceae.

Peach.

From Palestine. Seeds presented by Prof. Rudolph Samisch, Division of Horticulture, Agricultural Research Station, Rehovoth. Received February 20, 1940.

The parent tree of this peach, originally imported into Palestine from South Africa, is of excellent vigor and bears yellow-fleshed fruits.

# 135485. Chaenomeles. Malaceae.

From California. Plants purchased from Toichi Domoto, Hayward. Received February 24, 1940.

Contorta.

# 135486. HIPPEASTRUM BLUMENAVIA (Carr.) Sealy. Amaryllidaceae.

From Brazil. Bulbs presented by F. C. Hoehne, Department of Botany, São Paulo. Received February 24, 1940.

For previous introduction see 135482.

# 135487. × PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae. Lemoine mockorange.

From Ohio. Plants purchased from the Siebenthaler Co., Dayton. Received February 26, 1940.

# 135488 and 135489. ARACHIS HYPOGAEA L. Fabaceae. Peanut

From Uruguay. Presented by R. Salgueiro Silveira, Chief, Dirección de Agronómia, Montevideo. Received February 26, 1940.

#### 135490 and 135491.

From Mississippi. Scions presented by Dr. C. H. Ragland, Agricultural Experiment Station, State College. Received February 26, 1940.

135490. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Eckles.

135491. Pyrus communis L. Malaceae.

Common pear.

Pontotoe.

#### 135492 to 135508.

From Manchuria. Scions purchased from L. Ptitsin, Harbin. Received February 26, 1940.

135492. X MALUS ROBUSTA Rehder. Malaceae.

Cherry crab.

135493 to 135499. MALUS spp. Malaceae.

135493. MALUS sp. Kupilov's Anissik.

135494. MALUS sp.
Mitchurin's Dessert.

135495. MALUS sp. Olga Crab.

135496. MALUS sp. Siberian Ranet.

135497. MALUS sp. Tchistaikovka No. 1.

135498. MALUS sp. Tchistaikovka No. 2.

135499. MALUS sp. Tchistaikovka No. 3.

# 135492 to 135508—Continued

135500. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

135501 to 135506. PRUNUS SALICINA Lindl.

Japanese plum.

Cultivated in Manchuria.

135504. Red, oval.

135501. Ivanovka.

135505. Red, sweet.

135502. Red, large.

135506. Yellow, large.

135503. Rose-vellow, large.

135507. PRUNUS USSURIENSIS Kovalev and Kostina.

Wild yellow plum, related to Prunus salicina. Native to eastern Asia.

135508. Pyrus. Malaceae.

Olga.

# 135509 to 135540.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 8, 1940.

135509 and 135510. COTONEASTER spp. Malaceae.

135509. COTONEASTER sp.

No. 4524. From Lorinj, August 26, 1939, at 8,000 feet altitude. From plant growing prostrate on rock face; fruit crimson; mild winter.

135510. COTONEASTER sp.

No. 4800. From Gurzan, October 5, 1939, at 8,500 feet altitude. A handsome bush of open habit and about 8 feet high, growing on dry slopes, loaded with crimson, somewhat glaucous fruits.

135511 to 135515. CRATAEGUS spp. Malaceae.

135511. CRATAEGUS SD.

No. 4489. From Kabul, August 15, 1939. A small tree with clusters of 10 to 20 yellow to orange fruits  $\frac{3}{6}$  inch in diameter.

135512. CRATAEGUS Sp.

No. 4493. From Kabul, August 15, 1939. A tree about 15 feet in height; fruit probably red.

135513. CRATAEGUS sp.

No. 4795. From Gurzan, October 5, 1939, at an altitude of 8,500 feet. A well-formed bush 10 feet in height, growing along a stream, fruit golden yellow and small.

135514. CRATAEGUS Sp.

No. 4796. From Gurzan, October 5, 1939. Altitude 8,500 feet. A well-formed bush 10 feet in height, growing along a stream; fruit abundant, small, and bright crimson.

135515. CRATAEGUS Sp.

No. 4797. From Gurzan, October 5, 1939. Altitude 8,500 feet. A well-formed bush 8 feet in height, growing along a stream; fruit abundant, small, and red black.

135516 to 135540. Rosa spp. Rosaceae.

Rose.

135516. Rosa sp.

No. 4485. Gul-i-sufed. From Kabul, August 14, 1939. A bushy plant used as a hedge; it has clusters of small ( $1\frac{1}{4}$  inches) semidouble fragrant flowers.

135517. Rosa sp.

No. 4521. From Banak, August 25, 1939. Altitude 6,000 feet. A bush 8 feet in height, growing along a watercourse; flowers probably pink or white.

135518. Rosa sp.

No. 4522. From Dasht-i-sufed, August 24, 1939. Altitude 6,000 feet. A bush 6 feet in height, growing along a watercourse.

Nos. 135519 to 135522. From Lorinj, altitude 8,000 feet.

135519. Rosa sp.

No. 4532. August 26, 1939. A bush 6 feet in height, growing along a stream. 135520. Rosa sp.

No. 4533. August 26, 1939. A bush 4 feet in height, growing on a dry slope. Fruits bristly.

135521. Rosa sp.

No. 4535. August 26, 1939. An attractive bush 8 feet in height, growing on a dry slope; hips flattened globose, about  $\frac{1}{2}$  inch wide.

135522. Rosa sp.

No. 4545. August 27, 1939. A bushy rose, in clumps 4 feet high, growing on a dry slope; flowers probably small, single, and yellow.

135523. Rosa sp.

No. 4642. From Kala Sakari, September 8, 1939. A bush from a hedge 4 to 5 feet high, heavily loaded with large hips  $\frac{3}{4}$  inch long.

135524. Rosa sp.

No. 4657. From Chigzar, September 10, 1939. Altitude 8,000 feet, growing on a dry slope. A plant 3 to 4 feet high; flowers probably single, yellow, and about 1 inch across.

135525. Rosa sp.

No. 4707. From Tukzar, September 15, 1939. A bush probably wild, 5 feet high, loaded with orange-red hips,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long.

135526. ROSA SD.

No. 4730. From Safed Sang, September 21, 1939. Altitude 10,000 feet. A well-formed bush about 6 feet high from a dry slope, with an abundance of large bright red hips; flowers single, white, 2 inches across, with heavy musty fragrance.

135527. Rosa sp.

No. 4734. From Safed Sang, September 24, 1939. Altitude 10,000 feet. A low shrub 1 to  $1\frac{1}{2}$  feet high, found on very dry slopes; spreads from the roots; flowers yellow, probably single.

135528. Rosa sp.

No. 4737. From Sufak, September 27, 1939. A very drought-resistant, well-formed bush 5 feet high, with strongly scented leaves and an abundance of hips; flowers pink, single.

135529. Rosa sp.

No. 4756. From Bandichakawak, September 29, 1939. Altitude 9,000 feet. A bush 6 feet high, growing under dry conditions; flowers single, white, fragrant, about 3 inches across, delicate pink in bud.

135530. Rosa sp.

No. 4757. From Bandichakawak, September 29, 1939. Altitude 9,000 feet. A bush 5 feet high, growing under dry conditions, spreads from roots; hips bristly.

135531. Rosa sp.

No. 4760. From Karaghaitu, September 29, 1939. Altitude 8,000 feet. A low bush 3 feet high, growing along a river bottom; spreading from roots; hips smooth, red.

135532. Rosa sp.

No. 4781. From Mak, October 3, 1939. Altitude 8,500 feet. A well-formed bush 5 feet high, found along a stream.

135533. Rosa sp.

No. 4783. From Mak, October 3, 1939. Altitude 8,500 feet. A bush 4 feet high, found along a stream; spreads from roots.

135534. Rosa sp.

No. 4785. From Gharchi, October 3, 1939. Altitude 8,000 feet. A bush 4 feet high, found on a dry slope; leaves scented.

135535. Rosa sp.

No. 4793. From Gharchi, October 4, 1939. Altitude 8,500 feet. A bush 4 feet high, found along a stream; spreads by roots.

135536. Rosa sp.

No. 4798. From Gurzan, October 5, 1939. Altitude 8,500 feet. A rose  $3\frac{1}{2}$  feet high, covering more than 10 square rods of slope near a spring stream, apparently spreading from the roots; hips large, somewhat flattened; flowers probably yellow.

135537. Rosa sp.

No. 4799. From Gurzan, October 5, 1939. Altitude 8,500 feet. A bush 6 feet high, growing along a stream, scraggly; hips very large,  $1\frac{1}{2}$  inches long. 135538. Rosa sp.

No. 4804. From Gurzan, October 5, 1939. Altitude 9,000 feet. A bush 6 to 8 feet high, growing on a dry slope, hips globose, crimson; fruit in clusters.

135539. Rosa sp.

No. 5026. From Puli Komri, October 7, 1939. Altitude 4,000 feet. A bush 5 feet high, from the border of a field; flower said to be single, yellow.

135540. ROSA CABULICA Boiss.

No. 5069. From Kabul, November 20, 1939. A rose, that becomes 20 feet high, with virgate stems, leaves of 5 to 7 ovate leaflets and terminal white flowers 3 inches across, solitary or in corymbs. Related to Rosa beggeriana. Native to Afghanistan.

135541 to 135549. LILIUM spp. Liliaceae.

Lilv.

From Japan. Seeds presented by K. Wada, Hakoneya Nurseries, Numazu-Shi. Received February 17, 1940.

135541 and 135542. LILIUM AURATUM Lindl.

Goldband lily.

135541. Late-flowering.

135542. Midseason.

For previous introduction see 134966.

135543. LILIUM CERNUUM Komar.

A martagon lily with a slender, rigid stem up to 2 feet high, the base and upper part naked, or nearly so, numerous, crowded, linear or strap-shaped leaves 2 to 7 inches long, and fragrant, nodding, lilac, purple-spotted flowers, solitary, in umbels, or racemes of 3 to 6. Related to *Lilium tenuifolium*, but with longer, more numerous leaves and much smaller fragrant flowers, nearly globose in shape. Native to eastern Asia.

135544. LILIUM CORDIFOLIUM Thunb.

Lilv.

A Japanese lily, 3 to 4 feet high, with pendulous leaves 12 to 18 inches long and nearly as wide and a raceme of 4 to 10 fragrant white flowers often 6 inches long.

135545 and 135546. LILIUM PHILIPPINENSE var. FORMOSANUM (Baker) Wilson.

135545. Leucanthum.

135546. Platyfolium.

#### 135541 to 135549—Continued

135547. LILLIUM LEICHTLINII var. MAXIMOWICZII (Regel) Baker.

Grandiflora.

135548. LILIUM TENUIFOLIUM Fisch.

Coral lilv.

A martagon lily with stout gray-green stems 3 to 5 feet high, clothed with dense white scabrid pubescence, and linear to lanceolate leaves 2 to 4 inches long. The fragrant, nodding flowers, 2 inches long, are in subverticillate clusters of 2 to 12 and vary in color from purple-spotted white to pink.

For previous introduction see 102853.

135549. LILIUM RUBELLUM Baker.

Rubellum lily.

A miniature trumpet lily from Japan with slender green stems spotted with purple, rarely exceeding 2 feet in height, narrow leaves, and 1 to 8 smallish trumpets of rosy white, flushed darker without. It is more delicate than Kramer's illy (*Lilium japonicum*), and, like it, should be grown in a low shrubby undergrowth, where its head can rise to full sun.

For previous introduction see 78864.

#### 135550 to 135635.

From Manchuria. Seeds presented by B. V. Skvortzov, Harbin. Received January 6, 1940.

Unless otherwise stated, the material was received as seeds.

135550. AGROPYRON AMURENSE Drobov. Poaceae.

Grass.

No. 39. From a desert steppe near Sartu, west of Harbin, October 19, 1939. A perennial grass native to the Amur district of eastern Asia.

For previous introduction see 131532.

135551 and 135552. AGROPYRON CILIARE (Trin.) Franch.

Grass.

A tall-growing, short-awned grass.

135551. No. 37. From Huangshan, September 12, 1939.

135552. No. 38. From a desert steppe near Sartu, west of Harbin, September 12, 1939.

For previous introduction see 109805.

135553. AGROPYRON CRISTATUM (L.) Gaertn.

Crested wheatgrass.

No. 49. From the desert steppe region of Anda, North Manchuria, September 10, 1939.

For previous introduction see 121787.

135554. AGROSTIS CLAVATA Trin. Poaceae.

Grass.

No. 29. From the Sungari River valley, near Harbin, August 12, 1939. A perennial grass native to northeastern Asia.

135555. Agrostis sp.

Grass.

Grass.

No. 24. From near Maoershan, east of Harbin, September 18, 1939.

135556. ALOPECURUS LONGEARISTATUS Maxim. Poaceae.

No. 26. From near Hsiaoling, North Manchuria, September 10, 1939. An annual grass native to northeastern Asia.

135557. ANEMONE DAHURICA Fisch. Ranunculaceae.

No. 84. From grassy hills near Hsiaoling, July 1939. An anemone with stems up to 1 foot high, divided leaves, and salmon-pink to pale rose-purple flowers about 1½ inches across. Native to northeastern Asia.

135558. AQUILEGIA OXYSEPALA Trauty. and Meyer. Ranunculaceae.

Early columbine.

No. 83. From mountain meadows near Hsiaoling, east of Harbin, August 1939. A very early flowering herbaceous perennial 2 to 3 feet high, with large blue, yellow, and white flowers. The spurs are short and bent forward.

135559. ARTHRAXON HISPIDUS (Thunb.) Makino. Poaceae.

Grass.

No. 21. From a mountain river valley near Maoershan, east of Harbin, August 15, 1939. A slender branching annual grass with decumbent or creeping stems about 2 feet long. Native to Japan.

For previous introduction see 109810.

135560. ARUNDINELLA ANOMALA Steud. Poaceae.

Grass.

No. 52. From the desert steppe region of Anda, North Manchuria, December 6, 1939. A wild grass, found on poor soil.

For previous introduction see 110153.

135561. ASTRAGALUS MELILOTOIDES var. TENUIS Ledeb. Fabaceae.

No. 63. From the desert steppe region of Anda, September 19, 1939. A biennial or perennial, native to eastern Asia.

135562. AVENA SCHELLIANA Trauty. Poaceae.

No. 13. From the desert district of Anda, North Manchuria, September 10, 1939. A perennial grass native to eastern Asia.

135563. BECKMANNIA SYZIGACHNE (Steud.) Fern. Poaceae. Grass

No. 47. From a meadow near a stream in the Ashiho River valley, September 1, 1939.

For previous introduction see 131534.

135564. Bromus inermis Leyss. Poaceae.

Smooth bromegrass.

No. 46. From the steppe district of Anda, west of Harbin, September 11, 1939. For previous introduction see 131535.

135565 to 135573. CALAMAGROSTIS spp. Poaceae.

Grass.

135565. CALAMAGROSTIS ANGUSTIFOLIA Komar.

No. 10. From the Sungari River valley near Harbin, August 7, 1939. A perennial grass native to northeastern Asia.

135566. CALAMAGROSTIS BRACHYTRICHA Steud.

No. 11. From the Huangchan Hills, north of Harbin, October 19, 1939.

135567. CALAMAGROSTIS CANADENSIS (Michx.) Beauv.

No. 7. From grassy mountain slopes near Barim, Great Khingan Mountains, October 16, 1939.

135568 to 135573. CATAMAGROSTIS EPIGEIOS (L.) Roth.

135568. No. 1. From the desert steppe of Anda district, west of Harbin, August 0, 1939.

135569. No. 2. From the steppe district of Sartu, west of Harbin, August 12, 1939.

135570. No. 3. From dry mountain slopes near Maoershan, 200 miles east of Harbin, October 8, 1939.

135571. No. 4. From dry mountain slopes near Barim, Great Khingan Mountains, October 15, 1939.

135572. No. 5. From sandy hills along the Ashiho River valley, September 17, 1939.

135573. No. 8. From the steppe district of Sartu, west of Harbin, August 12, 1939.

135574. CHLORIS VIRGATA Swartz. Poaceae. Feather fingergrass.

No. 12. From the desert district of Anda, west of Harbin, September 10, 1939; grown on alkali soil.

For previous introduction see 110483.

135575. CLEMATIS BREVICAUDATA DC. Ranunculaceae.

No. 85. From along a mountain stream near Maoershan, east of Harbin, September 1939.

For previous introduction see 125284.

135576. DIANTHUS CHINENSIS L. Silenaceae.

Chinese pink.

No. 81. From the dry hills near Huangshan, north of Harbin, August 1939.

For previous introduction see 98357.

135577. DIGITARIA ISCHAEMUM (Schreb.) Muhl. Poaceae.

No. 27. From slopes near Ashiho River valley, September 8, 1939.

For previous introduction see 109815.

135578 to 135583. ELYMUS spp. Poaceae.

Grass.

Grass.

135578. ELYMUS DAHURICUS Turcz.

No. 36. From the dry grassy hills of Huangshan, September 12, 1939. For previous introduction see 113124.

135579 and 135580. ELYMUS CHINENSIS (Trin.) Keng.

135579. No. 18. From the desert region of Anda, west of Harbin, September 10, 1939.

135580. No. 19. From near the Ashiho River valley, north of Harbin, September 17, 1939.

135581 to 135583. ELYMUS SIBIRICUS L.

135581. No. 33. From a dry desert steppe near Anda, west of Harbin, September 11, 1939.

135582. No. 34. From the dry mountain slopes near Ashiho, north of Harbin, September 1, 1939.

135583. No. 35. From the dry grassy hills at Huangshan, September 12, 1939.

For previous introduction see 131578.

135584. Eragrostis pilosa (L.) Beauv. Poaceae.

Grass.

No. 51. From a meadow near the Sungari River valley, September 7, 1939. For previous introduction see 113159.

135585. Euonymus sp. Celastraceae.

No. 71. From the sand dunes along the Ashiho River, September 30, 1939.

135586. Festuca extremiorientalis Ohwi. Poaceae.

Grass.

No. 43. From the mountain meadows near Hsisoling, September 10, 1939. A tall perennial grass related to *Festuca gigantea*. Native to eastern Asia.

135587. FESTUCA sp.

No. 44. From the desert steppe region of Sartu, west of Harbin, August 12, 1939.

135588. GLYCERIA sp. Poaceae.

Grass.

No. 20. From mountain river valley near Maoershan, east of Harbin, August 15, 1939.

135589 and 135590. GLYCINE GRACILIS Skvortzov. Fabaceae.

A procumbent or twining herb about 3 feet long, native to northern Manchuria, with bright-green, hairy, petioled leaves, and clusters of small white or reddishviolet flowers.

135589. No. 68. From the Sungari River valley, North Manchuria, October 27, 1939. Black seeds.

135590. No. 68-A. From the Sungari River valley, October 27, 1939. Brown seeds.

For previous introduction see 110490.

135591. GLYCERIA sp. Poaceae.

Grass.

No. 50. From the Ashiho River valley near a bog, September 1, 1939.

135592. GLYCYRRHIZA URALENSIS Fisch. Fabaceae.

No. 64. From an alkali desert steppe near Sartu, west of Harbin, October 18, 1939. An erect perennial plant with hairy stems; native to the Ural Mountains, Siberia.

For previous introduction see 61427.

135593. HETEROPAPPPUS HISPIDUS (Thunb.) Less. Asteraceae.

No. 93. From the mountain slopes of the Great Khingan Mountains, Barim, October 1939. A perennial herb native to eastern Asia, with rough stems and linear leaves. The clear-blue asterlike flower heads are borne singly at the end of the branchlets, forming broad corymblike clusters 8 to 10 inches across.

For previous introduction see 110492.

135594. HORDEUM BREVISUBLATUM (Trin.) Link. Poaceae.

Grass.

No. 48. From the steppe district of Anda, west of Harbin, September 10, 1939. For previous introduction see 131539.

135595. IMPERATA CYLINDRICA (L.) Beauv. Poaceae.

Blady grass

No. 25. From the mountain slopes near Hsiaoling, east of Harbin, September 10, 1939. A perennial grass native to the plains and hills of central and western India. The blades of this grass become 4 to 5 feet long. It resembles very closely the esparto of Spain and northern Africa, and, when dried before making it into pulp, it yields as high as 68 percent of first-class paper-making pulp. In Queensland, Australia, this grass grows abundantly and three crops a year may be harvested.

For previous introduction see 107549.

135596. INCARVILLEA SINENSIS Lam. Bignoniaceae.

No. 89. From dry hills along the Sungari River, September 1939. Plants 1 to 2 feet high, with finely cut foliage and light-pink flowers.

For previous introduction see 89125.

135597 and 135598. KOELERIA GRACILIS Pers. Poaceae.

Grass.

135597. No. 40. From sandy hills along the Ashiho River, north of Harbin, September 1, 1939.

135598. No. 30. From the desert district of Anda, west of Harbin, September 10, 1939.

For previous introduction see 131540.

135599. LESPEDEZA STRIATA (Thunb.) Hook, and Arn. Fabaceae.

No. 65. From sandy hills near the Ashiho River, north of Harbin, October 9, 1939.

For previous introduction see 116138.

135600. LILIUM CALLOSUM Sieb. and Zucc. Liliaceae.

Lily.

No. 76. From a meadow in the Ashiho River valley, north of Harbin, September 1939. A martagon lily with slender stems 1 to  $2\frac{1}{2}$  feet high, scattered strapshaped or linear leaves usually 1 to 3 inches long, and dully-red or orange-red solitary nodding flowers or racemes of 2 to 9. Native to eastern Asia.

For previous introduction see 135023.

135601. LILIUM CONCOLOR var. BUSCHIANUM (Lodd.) Baker.

No. 77. From the dry mountain slopes near Ertientientze, east of Harbin, September 1939. An upright red-flowered lily growing on the lower levels and occasionally on the sides of the hills. The petals of this lily do not recurve, and the flowers do not droop but stand erect.

For previous introduction see 134969.

135602. MALUS BACCATA (L.) Moench. Malaceae.

Siberian crab.

No. 55. From the Ashiho River valley, October 20, 1939.

135603. Manisuris Compressa (L. f.) Kuntze. Poaceae.

Grass.

No. 31. From a meadow along the Ashiho River, north of Harbin, September 1, 1939. A coarse leafy grass, 5 feet tall, which thrives in swamplands and on the margins of rivers.

For previous introduction see 131580.

135604 and 135605. MISCANTHUS SACCHARIFLORUS (Maxim.) Hack. Poaceae. Grass.

A tall perennial Chinese grass with large, feathery, fan-shaped panicles; related to sugarcane.

135604. No. 42. From the mountain slopes near Hsiaoling, October 10, 1939.

135605. No. 41. From a sandy meadow in the Ashiho River valley, September 1, 1939.

For previous introduction see 90188.

135606 and 135607. MUHLENBERGIA JAPONICA Steud. Poaceae. Grass.

A perennial grass with slender stems up to 3 feet high. Native to eastern Asia.

135606. No. 45. From the mountain meadows near Hsiaoling, east of Harbin, September 10, 1939.

135607. No. 53. From near Maoershan, east of Harbin, September 1939.

135608. OXYTROPIS MYRIOPHYLLA (Pall.) DC. Fabaceae.

No. 66. From a desert steppe near Anda, west of Harbin, September 11, 1939. A stemless perennial with a large root, pinnate leaves about 8 inches long, and purplish flowers in racemes. Native to the mountains of Siberia.

For previous introduction see 110160.

135609. PLATYCODON GRANDIFLORUM (Jacq.) A. DC. Campanula ceae.

No. 92. From the desert steppe region of Anda, September 1939.

135610 to 135613. PoA spp. Poaceae.

Grass.

135610. POA PALUSTRIS L.

Fowl meadowgrass.

No. 32. From a mountain meadow near Hsiaoling, September 10, 1939.

For previous introduction see 115328.

135611. Poa pratensis L.

Kentucky bluegrass.

No. 23. From a meadow near Maoershan, East Harbin, September 18, 1939.

135612, POA SPHONDYLODES Trin.

Bluegrass.

No. 28. From a desert steppe near Anda, west of Harbin, September 10, 1939. Found on dry grassy mountain slopes.

For previous introduction see 131582.

135613. POA USSURIENSIS Roshev.

No. 22. From a mountain meadow near Hsiaoling, September 18, 1939. perennial grass native to eastern Asia.

135614. Primula fistulosa Turkevicz. Primulaceae.

No. 75. From the mountains near Hsiaoling, east of Harbin, July 1939. primula with oblong or lanceolate, obtuse, denticulate leaves about 1½ inches long and a robust scape with an umbel of numerous rosy flowers. Native to eastern Asia.

135615. PRINSEPIA SINENSIS Oliver. Amygdalaceae. Cherry prinsepia. No. 61. From near Hsiaoling, east of Harbin, October 18, 1939.

For previous introduction see 65189.

135616 to 135621. PRUNUS spp. Amygdalaceae.

135616. PRUNUS ARMENIACA L.

Apricot.

No. 54. From the Ashiho region, north of Harbin, October 1939. A small-fruited form.

135617. PRUNUS MAACKII Rupr.

Amur cherry.

No. 56. From a forest near Hsiaoling, east of Harbin, September 19, 1939. A Manchurian bird cherry, 40 feet or more in height, with very smooth brownish-yellow bark that peels off like that of a birch. The leaves are pointed and very finely toothed, and the white flowers are in short racemes borne on the previous season's wood.

For previous introduction see 77262.

135618. PRUNUS PADUS L.

European bird cherry.

No. 58. From large trees near Hsiaoling, east of Harbin, September 19, 1939. For previous introduction see 112284.

135619. PRUNUS SALICINA Lindl.

Japanese plum.

No. 60. From cultivated trees in a Chinese garden near Ashiho, September 15, 1939.

135620. PRUNUS TOMENTOSA Thunb.

Manchu cherry.

No. 57. From cultivated shrubs in a Chinese garden near Ashiho, east of Harbin, September 15, 1939. Tree small, attractive, with curly bark on trunk and branches; fruit very pale pink, edible.

For previous introduction see 122194.

135621. PRUNUS USSURIENSIS Kovalev and Kostina.

No. 59. From near Hsiaoling, east of Harbin, September 18, 1939.

For previous introduction see 135507.

135622. SCABIOSA FISCHERI DC. Dipsacaceae.

No. 91. From the desert steppe region of Anda, September 19, 1939. A much-branched perennial scabiosa with pinnate leaves cut into linear, entire segments and bluish-purple flowers in showy heads. Native to eastern Asia.

135623. SCILLA THUNBERGII Miyabe and Kudo. (S. japonica Baker). Liliaceae.

No. 78. From the desert steppe district of Sartu, west of Harbin, September 1939. A scilla with 2 or 3 fleshy leaves 6 to 12 inches long and 1 to 3 erect scapes with many small rose-purple flowers borne in racemes. Native to Japan.

For previous introduction see 135024.

135624. GLYCINE MAX (L.) Merr.

Soybean.

No. 67. From the Sungari River valley, near Harbin, October 21, 1939.

135625. SORBARIA SORBIFOLIA (L.) A. Br. Rosaceae.

No. 69. From the mountains near Maoershan, east of Harbin, October 11, 1939.

For previous introduction see 122966.

135626. SPODIOPOGON SIBIRICUS Trin. Poaceae.

Grass

No. 62. From the steppe region of Anda, west of Harbin, September 10, 1939. For previous introduction see 90274.

135627. STIPA BAIACALENSIS Roshev. Poaceae.

Grass.

No. 14. From the desert district of Anda, west of Harbin, September 1939.

135628 and 135629. STIPA SIBIRICA (L.) Lam.

135628. No. 17. From the mountain forests near Hsiaoling, October 21, 1939.

135629. No. 16. From the steppe region of Sartu, October 20, 1939.

For previous introduction see 113254.

135630. SWERTIA CHINENSIS (Griseb.) Franch. Gentianaceae.

No. 87. From the dry hills along the Ashiho River valley, October 1939.

For previous introduction see 112286.

135631. TROLLIUS CHINENSIS Bunge. Ranunculaceae.

No. 82. From the meadows near Maoershan, September 1939. A tall perennial herb with stout striate stems, palmate leaves reniform in outline, and about 5 inches long by 7 inches wide, the lobed segments broad, oblanceolate, acute with a cuneate base, up to 3 inches long, and showy yellow, solitary, terminal flowers with petals about 1 inch long. Native to eastern Asia.

135632. VALERIANA OFFICINALIS L. Valerianaceae.

No. 90. From the meadows along the Ashiho River, September 13, 1939.

135633. VERONICA SIBIRICA L. Scrophulariaceae.

No. 88. From the mountain meadows near Hsiaoling, August 1939.

For previous introduction see 131065.

135634. VITIS AMURENSIS Rupr. Vitaceae.

Amur grape.

No. 74. From a forest near Maoershan, east of Harbin, October 28, 1939.

For previous introduction see 131955.

135635. ZIZANIA LATIFOLIA (Griseb.) Stapf. Poaceae.

Wildrice.

No. 15. From near a lake in the Sungari River valley, September 17, 1939. For previous introduction see 69044.

#### 135636. SACCHARUM SPONTANEUM L. Poaceae.

From Turkey. Seed presented by the Turkish Sugar Industry. Received February 28, 1940.

Collected on the plains of Adana.

For previous introduction see 124867.

#### 135637 to 135650.

From France. Trees purchased from Philibert Moussier, Vienne (Isère). Received February 29, 1940.

135637 to 135643. Amygdalus persica L. Amygdalaceae.

Peach.

135637. Henri Adenot.

135641. Superbe de Trévoux.

135638. Belle de Neuville.

135642. Tardive de Vindry.

135639. Entre.

135643. Willermoz.

135640. Madame Chanu.

135644 to 135646. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

135644. Pauline de Vigny.

135645. Reinette Jamin.

135646. Transparente de Croncels.

135647. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Bergeron Gabrielle.

135648 and 135649. PRUNUS spp.

Cherry.

135648. Griotte Dona Maria.

135649. Marmotte de l' Young.

135650. Pyrus communis L. Malaceae.

Common pear.

Alexandrine Douillard.

# 135651 to 135654.

From California. Plants purchased from W. B. Clarke & Co., San Jose. Received March 5, 1940.

135651. CEANOTHUS GLORIOSUS J. T. Howell. Rhamnaceae.

A prostrate shrub with persistent, broad-oblong to round, dark-green, leathery, usually spinescent, leaves and clusters of deep-blue to purple flowers. Native to southern California where it grows on coastal slopes and mesas.

135652. Ceanothus dentatus var. impressus Trelease.

A widespreading shrub up to 8 feet high, with alternate, persistent, broadly elliptic to round leaves 1 inch long and dark-blue flowers. Native to southern California.

For previous introduction see 135468.

135653 and 135654. CHAENOMELES. Malaceae.

135653. Flowering quince No. 331.

135654. Flowering quince No. 315.

# 135655 and 135656.

From England. Seed purchased from Thompson & Morgan, Ipswich. Received February 29, 1940.

135655. ACER GRISEUM (Franch.) Pax. Aceraceae. Paperbark maple.

A handsome maple up to 30 feet in height, native to western China. The coarsely toothed, trifoliolate leaves are 1 to 2 inches long. The striking feature of this maple is the cinnamon-brown, papery bark that flakes off like that of the

For previous introduction see 132594.

135656. CEANOTHUS. Rhamnaceae.

Introduced under the name "azureus," a name of doubtful position.

#### 135657 to 135660.

From France. Plants presented by Philibert Moussier, Vienne (Isère). Received February 29, 1940.

135657. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

A seedling peach.

135658 to 135660. PRUNUS spp. Amygdalaceae.

135658. PRUNUS CERASIFERA Ehrh.

Prunier Murobolan.

135659. Prunus insititia L.

Prunier St. Julien.

135660. PRUNUS AVIUM L.

Cerisier (Merisier).

135661 to 135683. SECALE CEREALE L. Poaceae.

Rye.

From Bulgaria. Seed presented by the Central Agricultural Experimental Institute, Sofia. Received February 29, 1940.

135661. No. 3. 135662. No. 4. 135671. No. 113.

135672. No. 122.

135663. No. 6.

135673. No. 124.

135664. No. 10.

135674. No. 136.

135665. No. 11.

135675. No. 137.

135666, No. 20.

135676. No. 162.

135667. No. 22.

135677. No. 164.

135668. No. 48.

135678. No. 179. 135679. No. 201.

135669. No. 71.

135670. No. 97.

135680. No. 213.

135681. No. 362, Improved Jadowo.

135682. Uass.

135683. Population from Sofia District.

#### 135684 to 135693.

From Japan. Seeds and scions presented by Hokkaido Imperial University, Sapporo. Received March 1, 1940.

135684 and 135685. MALUS PRUNIFOLIA (Willd.) Borkh. Malaceae.

A small tree with pubescent branchlets, ovate to elliptic sharply serrate leaves 2 to 4 inches long, and clusters of white flowers 1 inch across, followed by ovoid yellow or red fruits that persist on the tree for a long time. Native to northeastern Asia.

For previous introduction see 92059.

135686 to 135693. MALUS. Malaceae.

The following were received as scions:

135686. Fukuura.

135690. Iwaki.

135687. Gosho.

135691. Kogen.

135688. Hakko.

135692. Tsugaru.

135689. Heiya.

135693. Umezawa.

#### 135694 to 135726.

From Afghanistan. Seed collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 6, 1940.

135694. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

No. 4502. From Chardeh, August 22, 1939, at 8,000 feet altitude. Fruit subglobose, somewhat flattened,  $1\frac{1}{2}$  inches in diameter; color deep crimson; flesh yellow, of good flavor, semicling.

135695. Amygdalus sp.

No. 5041. From Bandar, October 10, 1939. A low-spreading semixerophytic shrub, 18 inches high, growing on the unwatered hillsides. Possibly ornamental.

135696. Amygdalus persica var. nectarina Ait.

Nectarine.

No. 4484. From Kabul, August 14, 1939. Fruit  $2\frac{1}{4}$  inches in diameter; color deep crimson; flesh white, clingstone, of good flavor.

135697. JUGLANS REGIA L. Juglandaceae.

Persian walnut.

No. 5044. Chaharmagaz. From Kabul, November 14, 1939, at 7,000 feet altitude, where the British Legation has reported a minimum temperature of 30° F. below zero. Produces papershell walnuts of good flavor.

135698. MORUS sp. Moraceae.

No. 4481. Shahbut. From Kabul, August 13, 1939. Fruit red black, 1 inch in diameter; flesh pleasantly acid, much like a blackberry.

135699. NITRARIA SCHOBERI L. Zygophyllaceae.

No. 4515. From Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Bush 3½ feet high, found on a dry slope; has black globose, edible fruits.

For previous introduction see 113358.

135700 to 135715. FRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Nos. 135700 to 135702 are from Kabul.

135700. No. 4483. Zardalu Ashtaki. August 13, 1939. Fruit golden yellow with broad deep red wash over basal half; flesh firm and of good texture.

135701. No. 4474. Zardalu Amiri. August 12, 1939. Fruit 2 inches long, 1½ to 1¾ inches across; suture deep; pale yellow overspread with deep carmine blush; flesh white, very sweet, and of good texture.

#### 135694 to 135726—Continued

- 135702. No. 4488. Zardalu Amiri. August 16, 1939. Fruit  $2\frac{1}{2}$  inches across; skin pale yellow with good crimson blush; flesh white, sweet, and of good texture. Stone loose, kernel sweet.
- Nos. 135703 to 135708 are from Hajar, August 26, 1939, at 8,000 feet altitude.
- 135703. No. 4536. Zardalu Kaisi. Fruit dried, almond-shaped,  $1\frac{1}{2}$  inches long; flesh probably white. Grown in mild climate.
- 135704. No. 4537. Zardalu Said Mohamedi. Fruit dried, almond-shaped, 1¼ inches long, yellow, sweet, of good texture; kernel sweet.
- 135705. No. 4538. Zardalu Aoi Khurak. Fruit dried, globose, 1 inch in diameter; flesh white, very sweet; kernel sweet. Grown in mild climate.
- 135706. No. 4539. Zardalu Bajgai. Fruit dried, almond-shaped, about 1½ inches long; flesh white, sweet; kernel sweet. Grown in mild climate.
- 135707. No. 4540. Zardalu Saki. Fruit dried, almond-shaped, about 1½ inches long; flesh white, very sweet; kernel sweet. Grown in a mild climate.
- 135708. No. 4541. Zardalu Kasak. Fruit dried, almond-shaped, 1½ to 1½ inches long; flesh yellow, acid; kernel sweet.
- 135709. No. 4644. Zardalu. From Kala Sarkari, September 8, 1939. Flesh granular (not sticky), very sweet, like the Baltistan sort. One of the best dried apricots in the country.
- 135710. No. 4647. Zardalu. From Kala Sarkari, September 8, 1939. Fruit dried, 1¼ inches in diameter; flesh very sweet.
- 135711. No. 4697. Zardalu. From Tukzar. Fruits of varying sizes up to  $1\frac{1}{2}$  inches in diameter; flesh granular, very sweet.
- 135712. No. 4910. From Bandar, October 9, 1939, at 7,500 feet altitude. A mixture of large fruits from last year's crop, the largest (dried)  $1\frac{1}{4}$  inches in diameter. Not as sweet as most of the Afghanistan apricots.
- 135713. No. 4986. Zardalu. From Balkh, October 30, 1939, at 1,500 feet altitude. Fruits dried,  $1\frac{1}{4}$  inches high; flesh sweet and of good texture.
- 135714. No. 5008. From Tashkur, November 3, 1939, at 1,500 feet altitude. Fruit dried, 1½ inches long; color apparently pale yellow; flesh dry, mealy, very sweet; kernel sweet.
- 135715. No. 5009. From Shiburghan, November 3, 1939, at 1,500 feet altitude. Fruit dried, 1¼ inches across; color apparently yellow; flesh dried, very sweet, candylike, and sticky; kernel sweet.

#### 135716. Prunus sp.

No. 4494. Alubokhara. From Kabul, August 15, 1939, at 7,000 feet altitude. Fruit globose, 1½ inches in diameter; color red purple; flesh sweet.

#### 135717. Prunus sp.

No. 4500. Alubokhara. From Kabul, August 18, 1939. Fruit globose,  $1\frac{3}{4}$  inches in diameter; color red purple mixed with green; flesh sweet.

#### 135718. Prunus sp.

No. 4500. Alubokhara. From Kabul, August 18, 1939. Fruit globose,  $1\frac{3}{4}$  inches in diameter; color red purple mixed with green; flesh sweet.

#### 135719. PRUNUS sp.

No. 4931. From Andkhui, October 22, 1939, at 2,000 feet altitude. Fruit subglobose,  $1\frac{1}{2}$  inches across; color blue with bloom; flesh of good prune flavor and good texture. Late maturing and of excellent keeping qualities.

#### 135720. PRUNUS sp.

No. 4936. From Andkhui, October 24, 1939, at 1,500 feet altitude. Fruit subglobose,  $1\frac{1}{2}$  inches across; color red purple with blue bloom; skin very tough; flesh of good flavor. A very late-maturing plum.

#### 135721. PRUNUS sp.

No. 5000. From Mazarisharif, November 1, 1939, at 1,200 feet altitude. Fruit subglobose,  $1\frac{1}{2}$  inches across; color blue; skin rather tough; flesh with fine prune flavor, no acid next to pit. A very late-maturing plum.

# 135694 to 135726—Continued

135722. Prunus sp.

No. 5075. Alu. From Kandahar, November 23, 1939. Fruit dried, globose, about 1 inch across; color black; flesh pleasantly acid flavored.

135723 and 135724. Rubus spp. Rosaceae.

135723. Rubus sp.

No. 4504. From Doao, August 23, 1939, at 5,000 feet altitude, along a stream. A prostrate bush covered with white flowers and ripe fruits; fruit globose, compact, of good flavor.

135724. Rubus sp.

No. 4802. From Gurzan, October 5, 1939, at 9,000 feet altitude, along a stream in a canyon. Bush 2 feet high and nearly erect; fruit with a blueberry bloom; rather acid.

135725. Pyrus sp. Malaceae.

No. 4801. From Gurzan, October 4, 1939, at 9,000 feet altitude. A bush growing on dry slopes, not more than 15 feet high with a trunk  $2\frac{1}{2}$  inches in diameter; fruits 2 inches in diameter, somewhat flattened, of good flavor.

135726. VITIS sp. Vitaceae.

Grape.

No. 5058. From Kabul, November 18, 1939. A climbing wild grape that grows in the warm foothills of the northern mountains. It is apparently xerophytic and not cold resistant.

# 135727. HORDEUM VULGARE L. Poaceae.

Barley.

From Australia. Seed presented by H. Wenholz, Director of Plant Breeding, Department of Agriculture, Sydney, New South Wales. Received February 28, 1940.

Bethges Victoria. Grown at the Wagga Experimental Farm, Bomen.

#### 135728 to 135732.

From Morocco. Seed presented by E. Miège, Directeur du Centre de Recherches Agronomique, Rabat. Received February 29, 1940.

135728 to 135730. AVENA BYZANTINA K. Koch. Poaceae.

135728. A. C. 111.

135729. AM.-095.

135730. AM.-0238.

135731. AVENA SATIVA L. Poaceae.

Oats.

A C.-248.

135732. AVENA. Poaceae.

A C.-153.

#### 135733 to 135787.

From Afghanistan. Seed collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 5, 1940.

135733 to 135735. AGROPYRON spp. Poaceae.

Grass.

135733. AGROPYRON sp.

No. 4653. From Chigzar, September 9, 1939. Collected from a dry summer area.

135734. AGROPYRON sp.

No. 5040. From Shanbashak Pass, August 31, 1939, at 9,000 feet altitude.

135735. AGROPYRON sp.

No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude. A mixture of species growing on a dry slope.

135736. AGROSTIS sp. Poaceae.

Grass.

From Chigzar, September 1939.

135737. ARISTIDA PUNGENS Desf. Poaceae.

Grass.

No. 4971. From Akcha, October 27, 1939, at 1,500 feet altitude. A grass growing in clumps up to 4 feet high on the steppes.

For previous introduction see 120642.

135738. ARUNDO DONAX L. Poaceae.

Giant reedgrass.

No. 5021. From Puli Komri, November 6, 1939, at 4,000 feet altitude. Plants erect, about 25 to 30 feet high; roots extend on top of the ground. From top to bottom the stem has a rank leaf growth like corn leaves, extending from two opposite sides; the second year it throws out branches. Found growing along canals and field borders.

135739. Bromus sp. Poaceae.

Grass.

From Chigzar, October 1939.

135740. CYNDON DACTYLON (L.) Pers. Poaceae.

Bermuda grass.

No. 4974. From Akcha, October 27, 1939, at 1,500 feet altitude.

For previous introduction see 134844.

135741. ELYMUS CAPUT-MEDUSAE L. Poaceae.

Grass.

From Chigzar, October 1939. An annual grass native to Europe.

For previous introduction see 134255.

135742. ERIANTHUS sp. Poaceae.

Grass.

No. 5020. From Puli Komri, November 6, 1939, at 4,000 feet altitude.. A clump grass 15 feet high, growing along canals and field borders, serving as roughage for cattle.

135743. EUPHORBIA sp. Euphorbiaceae.

No. 4744. From Safedsang, September 23, 1939, 10,000 feet altitude. Taken from a pigeon's crop.

135744 to 135746. FERULA spp. Apiaceae.

135744. FERULA Sp.

No. 4735. From Zehnadir, September 26, 1939, at 10,000 feet altitude. A plant 6 feet high, growing on bare, dry, sunny slopes. The leaves, when dry, are eaten by cattle.

135745. FERULA Sp.

No. 4890. From Burchao Pass, October 16, 1939, at 8,500 feet altitude. A plant 6 feet high, growing on barren slopes. Leaves apparently eaten by cattle.

135746. FERULA sp.

No. 4731. From Safedsang, September 22, 1939, at 10,000 feet altitude. A perennial 5 feet high, with a large fleshy root that yields hing. The dried plant is eaten by cattle. The leaves are used as a potherb.

135747. Festuca sp. Poaceae.

Grass.

Selected from No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude.

135748. GLYCERIA sp. Poaceae.

No. 4592. From Terak, September 3, 1939, at 10,000 feet altitude.

135749 to 135768. HORDEUM spp. Poaceae.

Barley.

135749. HORDEUM VIOLACEUM Boiss.

Selected from No. 4566. From Sabz Pass, August 29, 1939, at 11,000 feet altitude.

For previous introduction see 64772.

135750. HORDEUM sp.

No. 4509. Jao. From Dasht-i-sufed, August 24, 1939, at 6,000 feet altitude. Sown in the spring and irrigated.

135751. HORDEUM sp.

No. 4519. Jao. From Kamard, August 24, 1939, at 6,000 feet altitude. Sown in the spring and irrigated.

135752. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4616. From Kalassakari, September 7, 1939, sown in the spring and said not to be irrigated.

135753. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4527. Jao. From Hajar, August 26, 1939, at 8,000 feet altitude. Sown in the spring and irrigated.

135754. HORDEUM VULGARE VAR. COELESTE L.

No. 4554. Kaljao. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135755. HORDEUM VULGARE VAR. PALLIDUM Ser.

No. 4556. Jao. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135756. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4579. Charpalu. From Binimang, September 1, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135757. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4669. From Tukzar, September 12, 1939. Sown in the spring and not irrigated.

135758. HORDEUM VULGARE var. PALLIDUM Ser.

No. 4691. Jao Charpalu. From Tukzar, September 14, 1939. Sown in the spring and not irrigated.

135759. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4747. Dopahlu bahan. From Zehnadir, September 25, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135760. HORDEUM Sp.

No. 4748. Chaharpalu aoi. From Zehnadir, September 25, 1939, at 8,000 feet altitude. Sown in the spring and irrigated.

135761. HORDEUM DISTICHON var. PALMELLA Harlan.

No. 4753. From Sufak, September 27, 1939, at 8,000 feet altitude. Sown in the spring and not irrigated.

135762. HORDEUM VULGARE VAR. PALLIDUM Ser.

No. 4777. From Mak, October 2, 1939, at 8,500 feet altitude. Sown in the spring and irrigated.

135763. HORDEUM sp.

No. 4805. From Gurzan, October 5, 1939, at 9,000 feet altitude. Sown in the spring and irrigated.

135764. HORDEUM sp.

No. 4832. Dopahlu. From Sharak, October 8, 1939, at 7,500 feet altitude. Sown in the spring and not irrigated.

135765. HORDEUM VULGARE Var. PALLIDUM Ser.

No. 4892. From Khoshbai, October 16, 1939, at 7,500 feet altitude. Sown in the spring and not irrigated.

135766. HORDEUM VULGARE var. PALLIDUM Ser.

No. 5102. Jau. From Quetta, Baluchistan, November 28, 1939, at 5,000 feet altitude. Sown in the fall and irrigated. Probably adapted to alkali soil.

135767. HORDEUM sp.

"A."

135768 HORDEUM Sp.

"B."

135769. KOELERIA sp. Poaceae.

Grass.

From Shanbashak Pass, October 1939.

135770. LINUM sp. Linaceae.

No. 4559. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. Aerc-phytic perennial with blue-purple flowers 2 inches across.

135771 to 135774. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

135771. No. 4542. From Lorinj, August 26, 1939, at 8,000 feet altitude. A prostrate weed in field.

135772. No. 4918. Rishka. From Khwajaebichajalak, October 19, 1939, at 7,000 feet altitude. A fodder plant.

135773. No. 4715. Rishka. From Tukzar, September 15, 1939. When irrigated yields six crops; persists for 10 years or more.

135774. No. 4954. Rishka. From Akcha, October 26, 1939, at 1,500 feet altitude. A strain adapted to the steppe climate; blooms at this season when 2 feet high.

135775. MELICA CUPANI Guss. Poaceae.

Grass.

No. 4887. From Burchao Pass, October 15, 1939, at 10,000 feet altitude. A good pasture grass that grows in high places on semibarren rubble slopes. Common in the Himalayas of the Punjab.

For previous introduction see 114262.

135776. ORYZOPSIS sp. Poaceae.

Grass.

From Sabz Pass, October 1939.

135777. OXYTROPIS sp. Fabaceae.

No. 4736. From Zehnadir, September 26, 1939, at 10,000 feet altitude, and on a dry slope. A decumbent plant much eaten by cattle.

135778. PHRAGMITES COMMUNIS Trin. Poaceae.

No. 4866. Nai. From Bandar, October 9, 1939, at 7,000 feet altitude. A grass up to 18 inches high found on sand dunes; said to be eaten by cattle.

135779 and 135780. POA BULBOSA L. Poaceae.

Grass.

An important pasture grass that grows over a large range of altitude.

135779. From Chigzar.

135780, From Shanbashak.

For previous introduction see 133161.

135781. POA sp.

From Sabz Pass.

135782. FSORALEA DRUPACEA Bunge. Fabaceae.

No. 4666. From Tukzar, November 12, 1939, at 5,000 feet altitude. A woody perennial about 1 foot high, with roundish dentate leaflets nearly 1 inch long and small white flowers in dense axillary racemes. Native to Turkistan.

For previous introduction see 111191

135783 to 135785. STIPA spp. Poaceae.

Grass.

135783. STIPA sp.

From Chigzar.

135784. STIPA sp.

From Chigzar.

135785. STIPA sp.

From Sabz Pass.

135786 and 135787. TRIFOLIUM spp. Fabaceae.

135786. Trifolium sp.

No. 5004. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. A fodder plant.

135787. Trifolium sp.

No. 4878. From Burchao Pass, October 13, 1939. A prostrate perennial growing along streams and meadows.

#### 135788. Ficus Roxburghii Wall. Moraceae.

Fig.

From India. Plants presented by the Royal Botanical Garden, Sibpur, near Calcutta, through Dr. David Fairchild. Received March 5, 1940.

A low, spreading evergreen tree, native to India, 20 to 30 feet high, with broadly ovate, cordate, entire or toothed leaves and russet-brown or purple fruits 2 inches in diameter.

For previous introduction see 86675.

#### 135789 to 135798.

From Massachusetts. Seeds purchased from F. W. Schumacher, Jamaica Plain, Boston. Received February 27, 1940.

135789. ACANTHOPANAX LEUCORRHIZUS var. SCABERULUS Harms and Rehder. Araliaceae.

A variety with 5 leaflets, smaller and narrower than those of the type, usually oblong-obovate, and doubly serrate.

135790. AMORPHA BRACHYCARPA Palmer. Fabaceae.

A slender erect shrub 2 to 3 feet high, somewhat like *Amorpha nana*, native to Missouri. The pinnate leaves with crowded small leaflets are rather numerous. The small, bright, violet-blue flowers are in dense spikelike racemes arranged like panicles, terminating the stems.

135791. Betula Grossa Sieb. and Zucc. Betulaceae.

A large handsome tree up to 50 feet high, with yellowish-brown bark, ovate, irregularly doubly serrate, long-acuminate leaves 2 to  $3\frac{1}{2}$  inches long. Native to Japan and Manchuria.

For previous introduction see 117054.

135792. Betula Mandshurica (Regel) Nakai. Betulaceae.

Birch.

A white-barked birch up to 80 feet high, with the leaves often broadly wedge-shaped at the base. Native to Hopeh Province, China.

For previous introduction see 102740.

135793. Betula Maximowicziana Regel. Betulaceae.

135794. BUDDLEIA JAPONICA Hemsl. Loganiaceae. Japanese butterflybush.

A deciduous shrub 3 to 5 feet in height, sparsely branched and of an open habit. The very narrow dark-green leaves are up to 8 inches in length, and the pale-lilac flowers are densely crowded in terminal-branched panicles. This shrub is native to Japan and is rather striking in autumn with its long, dense, drooping panicles of fruit.

For previous introduction see 55077.

135795. Evodia daniellii (Benn.) Hemsl. Rutaceae.

A bushy tree, 10 to 20 feet high, with unequally pinnate leaves up to 3 inches long, numerous corymbose panicles of whitish flowers that appear in June and July, and oblong or elongated fruit capsules that have a peculiar aromatic odor and a pungent bitter flavor.

For previous introduction see 93115.

135796. X MAGNOLIA SOULANGEANA Soul. Magnoliaceae.

Brozzoni.

135797. PRINSEPIA SINENSIS Oliver. Amygdalaceae. Cherry prinsepia.

For previous introduction see 135615.

135798. VIBURNUM WRIGHTII var. HESSEI (Koehne) Rehder. Caprifoliaceae.

#### 135799 to 135804.

From India. Seeds presented by G. Ghose & Co., Town-end, Darjeeling. Received March 1, 1940.

135799 to 135802. GAULTHERIA spp. Ericaceae.

135799. GAULTHERIA HOOKERI C. B. Clarke.

135800. GAULTHERIA NUMMULARIOIDES D. Don.

A procumbent shrub, native to the Himalayas at altitudes up to 9,000 feet, where it covers banks with much-branched densely leafy stems. The leathery ovate leaves are  $\frac{1}{2}$  inch long, and the small reddish or nearly white tubular flowers are solitary on densely bracted axillary pedicels; they are followed by small, fleshy, blue-black fruits.

For previous introduction see 111048.

135801. GAULTHERIA PYROLOIDES Hook. f. and Thoms.

A low evergreen shrub less than a foot high, with narrow-elliptic leaves 1 to 2 inches long and large blue-black berries. Native to the Himalayas.

For previous introduction see 99662.

135802. GAULTHERIA TRICHOPHYLLA Royle.

A low evergreen shrub of densely tufted habit, 3 to 6 inches high, spreading by means of underground shoots; the slender, wiry, bristly stems are densely covered with small leaves. The narrow-oblong, stalkless leaves,  $\frac{1}{4}$  inch long and about  $\frac{1}{8}$  inch wide, are smooth on both surfaces but bristly on the margins, glossy dark green above and pale beneath. The solitary bell-shaped pink flowers are borne in the leaf axils and are followed by blue-black fruits. Native to the Himalayas up to 13,000 feet altitude.

For previous introduction see 115979.

135803. OPHIOPOGON CLARKEI Hook. f. Liliaceae.

For previous introduction see 133119.

135804. OPHIOPOGON INTERMEDIUS D. Don.

For previous introduction see 133120.

#### 135805 to 135857.

From Afghanistan. Collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 7, 1940.

Unless otherwise stated, the material was received as seeds.

135805 to 135815. ALLIUM spp. Liliaceae.

135805 to 135809. ALLIUM CEPA L.

Onion.

135805. No. 4621. Pujaz. From Kala Sarkari, September 8, 1939. Said to be flat and red purple.

135806. No. 4692. Pujaz. From Tukzar, September 14, 1939. Probably a mixture. The dominant type seen in gardens is flat, up to 5 inches in diameter, reddish purple, with inner leaves white.

135807. No. 4703. Sir. Bulbs from Tukzar, September 14, 1939.

135808. No. 4998. *Pujaz*. From Mazarisharif, November 1, 1939, at 1.200 feet altitude.

135809. No. 5005. From Tashkurghan, November 3, 1939, at 1,500 feet altitude.

135810. ALLIUM SATIVUM L.

Garlic.

No. 4625. Sir. Bulbs from Kala Sarkari, September 8, 1939.

135811 to 135815. ALLIUM spp.

135811 and 135812. ALLIUM sp.

From Sarasia, August 29, 1939, at 10,000 feet altitude. Plant found growing on dry slope, 2 feet in height; often has double umbels and 1 or 2 broad (2 inches) leaves at base.

135811. No. 4656. Bulbs.

135812. No. 4565-A. Seeds.

135813. ALLIUM sp.

No. 4596. From Terak, September 5, 1939, at 8,000 feet altitude. Bulbs of a plant that grows on dry slopes; it has 2 broad leaves at base and rose-purple flowers in an umbel on a stalk 18 inches high. No onion smell in bulb.

135814. ALLIUM SD.

No. 4654. From Chigzar, September 10, 1939. Bulbs of a plant 1 foot high, growing on dry ground.

135815. ALLIUM sp.

No. 4928. From Maimana, October 21, 1939, at 3,000 feet altitude. Bulbs of a plant 18 inches in height, growing on top of a dry mud wall; dense umbel, 2 inches in diameter; leaves  $\frac{1}{2}$  inch wide.

135816 and 135817. ASPARAGUS spp. Convallariaceae.

135816. ASPARAGUS Sp.

No. 4526. From Lorinj, August 26, 1939, at 8,000 feet altitude. Climbing in bushes along a stream; has small red fruits.

135817. ASPARAGUS Sp.

No. 4562. From Sabz Pass, August 29, 1939, at 10,000 feet altitude. Plant 1 foot in height growing on dry slope; has red fruits.

135818. Beta vulgaris L. Chenopodiaceae.

Common beet.

No. 4620. Lablabu. From Kala Sarkari, September 8, 1939. A long red variety with no fiber; quick growing.

135819 and 135820. Brassica oleracea var. capitata L. Brassicaceae. Cabbage.

135819. No. 4985. Karam. From Balkh, October 29, 1939. at 1,500 feet altitude, Heads globose, 8 inches high, and firm. Plant adapted to a hot climate.

135820. No. 5039. Karam. From Kabul, November 7, 1939. Heads large, up to 15 inches across, subglobose; quality good.

135821. Brassica rapa

Turnir.

No. 5001. Shelgam. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. Turnips on the market were flat, up to 4 inches across, and red purple.

135822 to 135828. Capsicum frutescens L. Solanaceae. Redpepper.

135822. No. 4583. Murch. From Binimang-i-charaolia, September 1, 1939. Fruit bullnosed, flattened, 1 by 34 inch, red, and mildly hot.

135823. No. 4629. Murch. From Kala Sarkari, September 8, 1939. Fruit bullnosed, subglobose, 2 inches in length, red, and mildly hot.

135824. No. 4705. Murch. From Tukzar, September 14, 1939. Fruit topshaped,  $1\frac{1}{2}$  inches in length, red, and mild.

135825. No. 4717. Murch. From Tukzar, September 15, 1939. Fruit 3 inches in length, pointed, red, and hot.

135826. No. 4920. From Almar, October 19, 1939, at 3,000 feet altitude. Fruit elongate bullnosed, 31/2 by 13/4 inches; red and sweet. Seeds only slightly peppery.

135827. No. 5002. Murch. From Mazarisharif, November 2, 1939, at 1,200 feet altitude. Fruit red, slightly flattened, 3/4 inch across; flesh sweet; seeds mildly hot.

135828. No. 5062. From Kabul, November 19, 1939. Fruit scarlet, bullnosed, 6 by  $3\frac{1}{2}$  inches when semidried; flesh sweet and of good quality.

135829. DAUCUS sp. Apiaceae.

No. 4601. From Kala Sarkari, September 7, 1939. Plant grows in fields; up to 5 feet high.

135830. DAUCUS CAROTA L.

Carrot.

No. 4713. Zardak. From Tukzar, September 15, 1939. Roots well-formed, pale yellow, and about 1 foot long.

135831 to 135833. LACTUCA spp. Cichoriaceae.

135831. LACTUCA sp.

No. 4523. From Lorinj, August 26, 1939, at 8,000 feet altitude. Plant  $2\frac{1}{2}$  feet high, with yellow flowers; growing along a stream.

135832. LACTUCA Sp.

No. 4530. From Lorinj, August 26, 1939, at 8,000 feet altitude. Perennial plant 3 feet high; growing on dry slopes; flowers rose.

135833. LACTUCA Sp.

No. 4571. From Balijali Pass, August 30, 1939, at 9,000 feet altitude. Plant 3 feet high, with blue-purple flowers.

135834 to 135839. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae.
Calabash gourd.

135834. No. 4898. From Khwajaebrehagalak, October 17, 1939, at 7,000 feet altitude. Fruit obpyramidal, up to 1 foot long; smooth, greenish white; used to make water jars.

135835. No. 4915. From Khwajaebrehagalak, October 18, 1939, at 7,000 feet altitude. Fruit with a pronounced neck, 1 foot long; smooth, pale green. Used to dip water.

135836. No. 4977. From Balhk, October 29, 1939, at 1,500 feet altitude. Fruit crook-necked, bowl 6 inches in diameter, greenish white.

135837. No. 4996. From Mazarisharif, November 1, 1939, at 1,200 feet altitude. Fruits obpyramidal,  $2\frac{1}{2}$  inches long. Used as snuff boxes.

135838. No. 5015. From Pulikomri, November 4, 1939. Fruits pear-shaped, 1 foot long. Used as water containers.

135839. No. 5034. From Kabul, November 11, 1939. Fruit dipper type with short handle; 8 feet long.

135840 and 135841. LUFFA ACUTANGULA (L.) Roxb. Curcurbitaceae.
Singkwa towelgourd.

135840. No. 4615. Ton. From Kala Sirkari, September 7, 1939. Fruit 8 inches high; used as a vegetable when young.

135841. No. 4922. *Turai*. From Almar, October 20, 1939, at 3,000 feet altitude. Fruit 8 inches in height; used as a vegetable when tender.

For previous introduction see 126466.

135842 to 135844. Lycopersicon esculentum Mill. Solanaceae. Tomato.

135842. No. 4627. Banjanirunu. From Kala Sarkari, September 8, 1939. Fruit flattened, 4 inches across, smooth, red; good quality.

135843. No. 4700. *Pomodoni*. From Tukzar, September 14, 1939. Fruit flattened, 3 inches long, red, smooth.

135844. No. 4933. From Almar, October 19, 1939, at 2,000 feet altitude. Plant sprawling, with branches 7 feet long; fruit red, flattened, 2 to 3 inches across.

135845. Phaseolus aureus Roxb. Fabaceae. Mung bean.

No. 4970. Mash. From Akcha, October 27, 1939, at 1,500 feet altitude,

For previous introduction see 135269,

135846. PISUM SATIVUM L. Fabaceae.

Pea.

No. 4552. Mushung. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude.

135847. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

No. 4619. Muli surkh. From Kala Sarkari, September 8, 1939.

135848. Rheum sp. Polygonaceae.

No. 4886. From Burchao Pass, October 15, 1939, at 9,000 feet altitude. A plant growing on barren shale slopes, with apparently very large petioles (now dry).

135849 to 135854. SOLANUM spp. Solanaceae.

135849 and 135850. SOLANUM MELONGENA L.

Eggplant.

135849. No. 5063. From Kabul, November 19, 1939. Fruit globose, 5 inches in height, green washed with purple.

135850. No. 5017. Benjan. From Pulikomri, November 4, 1939. Fruit purple when immature; up to about 1 foot high and 4 inches across.

135851. Solanum nigrum L.

Black nightshade.

No. 4643. From Kala Sarkari, September 8, 1939. Plant about 3 feet high, with white flowers and black fruits.

For previous introduction see 129359.

135852. Solanum Tuberosum L.

Potato.

No. 5077. Kachalu. From Kandakar, November 24, 1939. Tubers of a middle-late hot-climate potato with yellow skin and white flesh; high yield, good for food and for industrial uses; starch content high.

135853. SOLANUM sp.

No. 4979. From Balkh, October 29, 1939, at 1,500 feet altitude. A very thrifty plant, forming a bush 6 feet across, with orange berries.

135854. SOLANUM NIGRUM L.

Black nightshade.

No. 4516. From Kamard, August 24, 1939, at 6,000 feet altitude. Low herb with white flowers and orange fruits.

135855. SPINACIA OLERACEA L. Chenopodiaceae.

Common spinach. No. 5003. Palak. From Mazarisharif, November 2, 1939, at 1,200 feet altitude.

135856. TRAGOPOGON PORRIFOLIUS L. Cichoriaceae.

Vegetable oyster.

No. 4558. From Aoi Khurak, August 28, 1939, at 9,000 feet altitude. A vigorous plant, 18 inches in height, growing on a dry plain.

For previous introduction see 125852.

135857. VIGNA SINENSIS (Torner) Savi. Fabaceae.

Cowpea.

No. 4602. Lobia. From Kala Sarkari, September 7, 1939. A black-seeded, drought-resistant variety. Pods about 2 feet long, eaten when fresh; dried beans also edible.

# 135858 to 135860.

From South Australia. Seeds presented by I. F. Phipps, Waite Agricultural Research Institute, University of Adelaide, Adelaide. Received February 26, 1940.

135858. MEDICAGO TRUNCATULA var. TRIBULOIDES (Desr.) Burnat. Fabaceae. Barrel Medic. A prostrate or ascending annual medic. Native to Europe.

135859. Trigonella ornithopodioides (L.) DC. Fabaceae.

Fenugreek. A low annual legume with stems trailing about 1 foot long. Native to Europe and North Africa.

135860. TRIGONELLA SUAVISSIMA Lindl.

Sweet fenugreek. This cloverlike plant, called "Darling clover" in Australia, where it is native, has fragrant stems and foliage and in favorable locations is perennial, becoming 3 feet or more in height. If cut when in flower and properly cured, it makes good hay.

#### 135861 to 135934.

From Asia. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 13, 1940.

Unless otherwise specified, this material was collected in the vicinity of Quetta, Baluchistan, November 27 and 28, 1939.

135861. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

No. 5151. Bhindi. Altitude 5,000 feet. Plants grow up to 6 feet in height; fruit 3 inches long.

135862 and 135863. ALLIUM CEPA L. Liliaceae.

Onion.

135862. No. 5113. Lal Piyaz. Altitude 5,000 feet.

135863. No. 5144. Safed Piyaz. Altitude 5,000 feet.

135864. ALLIUM PORRUM L.

Leek,

No. 5142. Gandana or Piyaz-i-khorassani. Altitude 5,000 feet; eaten as greens.

135865. AMARANTHUS sp. Amaranthaceae.

No. 5139. Chaula. Altitude 5,000 feet. Used as a potherb.

135866 and 135867. Amygdalus Persica L. Amygdalaceae. Peac

135866. No. 5098. A mixture of seeds obtained from the Baluchistan Government Garden. The garden catalog lists 16 native varieties, all but one of which have white flesh.

135867. No. 4463. Aru. From Peshawar, North-West Frontier Province, India, August 6, 1939. Fruit 2½ inches in diameter, skin yellow; flesh yellow, red at pit, very freestone.

135868. ANETHUM GRAVEOLENS L. Apiaceae.

Dill.

135869. ARUNDO DONAX L. Poaceae.

Giant reedgrass.

No. 5171. A grass that grows in clumps up to 20 feet high and tolerates temperatures as low as  $12^{\circ}$  F.

For previous introduction see 135738.

135870. BETA VULGARIS L. Chenopodiaceae.

Common beet.

No. 5183. Chukundi. Altitude 5,000 feet. Probably acclimatized.

135871 and 135872. Brassica Rapa L. Brassicaceae. Tur

135871. No. 5124. Lal Shelgam. Altitude 5,000 feet. Said to be a red, round variety.

135872. No. 5132. Safed Shelgam. Altitude 5,000 feet. Said to be white and globose.

135873 and 135874. Capsicum frutescens L. Solanaceae. Redpepper.

135873. No. 5133. Mirch. Altitude 5,000 feet. Said to be long, red, and hot.

135874. No. 5148. Mirch. Altitude 5,000 feet. Fruits top-shaped, about 1 inch long, red, and hot.

135875 to 135883. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

135875. No. 5091. Altitude 5,000 feet. Fruit subglobose, 10 inches across, pea green with faint reticulations; rind  $\frac{1}{2}$  inch thick; flesh rose, of good quality.

135876. No. 4965. From Akcha, Afghanistan, October 26, 1939, at 1,500 feet altitude. Fruit 18 by 9 inches; rind grass green and ¾ inch thick; flesh pink, streaked with yellow, of good quality.

135877. No. 5092. Fruit 20 by  $8\frac{1}{2}$  inches; rind pale green with broad chain stripes of black green,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch thick; fiesh bright pink, of good quality but rather seedy.

135878. No. 5094. Altitude 5,000 feet. Fruit 10 by 8 inches; rind grass green marbled with black green, 3/8 inch thick; flesh bright pink, of fair quality.

#### 135861 to 135934—Continued

135879. No. 5095. Fruit 15 by 6½ inches; rind pea green with traces of vermiculations; flesh bright pink, of good quality.

135880. No. 5096. Altitude 5,000 feet. Fruit globose, 8 inches in diameter; rind black green, with well-indented ribs, 34 inch thick; flesh rose, of good quality.

135881. No. 5097. Altitude 5,000 feet. Fruit 14 by 10 inches; rind sea green with broad chain stripes of black green, ½ inch thick; flesh bright pink, of good quality.

135882. No. 5154. Tarbuza. Altitude 5,000 feet. Fruit globose, 8 inches in diameter; rind black green, ½ inch thick; flesh pink, of good quality.

135883. No. 5111. Tinda. Altitude 5,000 feet.

1358. CORIANDRUM SATIVUM L. Apiaceae.

Coriander.

No. 5099. Dania. Altitude 5,000 feet. All parts of the plant are used in flavoring.

135885 and 135886. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

135885. No. 5118. Sarda. Altitude 5,000 feet. Good keepers.

135886. No. 5116. Kharbuza. Altitude 5,000 feet. Probably long keeping, but of indifferent quality.

135887 and 135888. CUCUMIS SATIVUS L. Cucurbitaceae.

Cucumber.

135887. No. 5114. Khira. Altitude 5,000 feet.

135888. No. 5134. Tar. Altitude 5,000 feet. Fruit up to 3 feet long, excellent when young.

135889 to 135896. CUCURBITA MAXIMA Duchesne. Cucurbitaceae. Squash.

135889. No. 5084. Fruit subglobose, 15 inches long, faintly ribbed, creamy white; flesh pale orange,  $1\frac{1}{2}$  to  $2\frac{1}{2}$  inches thick, and insipid.

135890. No. 5085. Fruit subglobose, 19 inches long, weight 70 pounds; rind pale gray green, with deeply indented ribs; flesh orange,  $2\frac{3}{4}$  inches thick, and insipid.

135891. No. 5086. Fruit elongate, 25 by 15 inches; rind salmon, mottled with paler salmon; flesh pale salmon, 2 inches thick, and insipid.

135892. No. 5087. Fruit flattened, 17 by 9 inches; rind Chinese red, deeply indented ribs; flesh orange, 2 to 3 inches thick, and insipid.

135893. No. 5088. Fruit subglobose, 17 inches long; rind salmon, with deeply indented ribs; flesh salmon, 2¾ inches thick, and insipid.

135894. No. 5107. Altitude 5,000 feet.

135895. No. 5109. Lal Kadu. Altitude 5,000 feet.

135896. No. 5119. Altitude 5,000 feet. Mixed seed.

135897 and 135898. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae.

Cushaw.

135897. No. 5089. Fruit flattened, 15 by 10 inches; rind salmon buff with heavy reticulations of green, often leaving small islands and blotches of ground color, with deeply indented ribs; flesh 2 to 3 inches thick, golden, and fairly sweet.

135898. No. 5090. Fruit elongate, 17 by 15 inches; rind orange brown, with blotches of buff and more or less prominent reticulations of green, deeply indented ribs; flesh golden, 2 to 3 inches thick, fairly sweet. Said to keep 1 year.

135899 and 135900. DAUCUS CAROTA L. Apiaceae.

Carrot

135899. No. 5130. Kala Gajar. Altitude 5,000 feet. Black roots.

135900. No. 5131. Pila Gajar. Altitude 5,000 feet. Yellow roots.

135901 to 135903. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

Tomato.

# 135861 to 135934—Continued

135901. No. 5103. Mitha Tumba. Altitude 5,000 feet. Fruit about 18 inches long and edible.

135902. No. 5082. Fruit flattened, 8 by 5 inches; shell tender; probably eaten when young.

135903. No. 5149. Ghiya Kadu. Altitude 5,000 feet. Fruit club-shaped, 28 by 4 inches; edible when tender.

135904. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd. No. 5125. *Toria*. Altitude 5,000 feet. Fruit a popular vegetable when young and tender.

135905. Luffa Aegyptiaca (L.) Roemer. Cucurbitaceae. Suakwa towelgourd. No. 5150. *Tori*. Fruit cylindrical, 8 by 4 inches; a popular vegetable when young.

135906. Lycopersicon esculentum Mill. Solanaceae.

No. 4470. From Peshawar, North-West Frontier Province, India, August 8, 1939. Fruit flattened and red. Grown under daily temperatures of 100°F. or higher.

135907. Lycopersicon esculentum f. Pyriforme (Dun.) C. H. Mull.

No. 5079. Fruit pear-shaped, 2½ by ¼ inches; red.

135908 and 135909. LYCOPERSICON ESCULENTUM Mill. Tomato.

135908. No. 5080. Fruit flattened, 2 inches long, red.

135909. No. 5140. Altitude 5,000 feet. Large-fruited; said to be acclimatized.

135910. MEDICAGO SATIVA L. Fabaceae. Alfalfa

No. 5115. Said to be an imported Afghanistan strain.

135911 to 135914. MOMORDICA CHARANTIA L. Cucurbitaceae. Balsam-pear.

135911. No. 5105. Karela. A valued vegetable reputedly high in vitamins.

135912. No. 5117. Karela. Altitude 5,000 feet. Small fruits.

135913. No. 5121. Karela. Altitude 5,000 feet. Long fruits.

135914. No. 5143. Karela. Altitude 5,000 feet. Large, round fruits.

135915 to 135917. Phaseolus vulgaris L. Fabaceae. Common bean.

135915. No. 5104. Sem. Altitude 5,000 feet.

135916. No. 5135. Fras Bin. Altitude 5,000 feet.

135917. No. 5137. Altitude 5,000 feet. Cultivated for the green pods and the dry beans.

135918. Physalis Peruviana L. Solanaceae. Peruvian groundcherry.

No. 5126. Widely grown in India for its fruits; seeds probably from naturalized plants.

135919. PISTACIA TEREBINTHUS L. Anacardiaceae. False terebinth.

No. 5078. Shne. From Chaman, India. Tree with a trunk up to 3 feet in diameter, growing on dry mountains.

For previous introduction see 127869.

135920. PISUM SATIVUM L. Fabaceae.

Pea.

No. 5106. Matar. Altitude 5,000 feet. An acclimatized variety.

135921 and 135922. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

135921. No. 5141. Lal Muli. Altitude 5,000 feet. Roots red.

135922. No. 5145. Safed Muli. Altitude 5,000 feet. Roots white.

135923. Rumex sp. Polygonaceae.

No. 5129. Katta Palag. Altitude 5,000 feet. Used as a potherb.

#### 135861 to 135934—Continued

135924. SEMECARPUS ANACARDIUM L. f. Anacardiaceae.

No. 5172. Balawa. Purchased in the bazar. A tree with large oval leaves and yellow fruits that lose their astringency when fully ripe and are eaten after being roasted. The juice of this nut, mixed with lime, forms an indelible ink used for marking clothes.

For previous introduction see 123248.

135925 and 135926. SOLANUM MELONGENA L. Solanaceae.

Eggplant

135925. No. 5136. Bengan. Altitude 5,000 feet. Fruit purple and round.

135926. No. 5081. Fruit purple and round.
135927. SPINACIA OLERACEA L. Chenopodiaceae.

Common spinach.

No. 5110. Palag. Altitude 5,000 feet. A native variety.

135928. TRIFOLIUM sp. Fabaceae.

No. 5146. Shaftal. Altitude 5,000 feet. Used for fodder. Flowers very fragrant.

135929 and 135930. TRIGONELLA FOENUM-GRAECUM L. Fabaceae. Fenugreek. 135929. No. 5120. *Methi*. Altitude 5,000 feet. A potherb.

135930. No. 5122. Methi. Altitude 5,000 feet. A potherb, probably an Afghanistan strain.

135931 and 135932. VICIA FABA L. Fabaceae.

Broadbean.

135931. No. 5101. Bagla. Altitude 5,000 feet.

135932. No. 5108. Bagla. Altitude 5,000 feet. Probably acclimatized.

135933 and 135934. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

135933. No. 5112. Lobra. Altitude 5,000 feet. Pods eaten green.

135934. No. 5128. Lobra. Altitude 5,000 feet. Pods eaten green.

#### 135935 and 135936. VITIS. Vitaceae.

Grape.

From Palestine. Scions presented by Zalman Rapoport, Department of Agriculture, Tel-Aviv. Received March 8, 1940.

135935. Enuni.

135936. Shami.

#### 135937. Canna edulis Ker. Cannaceae.

Edible canna.

From Hawaii. Tubers presented by Dr. J. H. Beaumont, Director, Hawaii Agricultural Experiment Station, Honolulu. Received March 8, 1940.

For previous introduction see 92307.

# 135938 to 135954. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seed presented by R. A. Silow, Cotton Research Station, Trinidad. Received March 9, 1940.

135938. Contorta.

135939. Type 8. Green Lint Crinkled.

135940. Hsiho.

135941. Indore Crinkled.

135942. Indore Crinkled—type 23.

135943. WA7-2. Indore Normal.

135944. Meade Crinkled.

135945. Type 4. Pseudo-Normal.

135946. Religiosum RA8-2.

135947. Religiosum RA8-6.

### 135938 to 135954—Continued

135948. Religiosum RA8-12.

135949. BA1-8A. St. Kitts Sea Island.

135950. T19. Sea Island Crinkled.

135951. Type 18. Sea Island Contorta.

135952. Type 1. Super-Crinkled.

135953. BA1-1. Sea Island Normal.

135954. Super Okra.

# 135955. AVENA SATIVA L. Poaceae.

Oats.

From Sweden. Seed presented by Allmänna Svenska Utsädesaktiebolaget, Svalöf. Received March 7, 1940.

Sun.

# 135956 and 135957. Gossypium. Malvaceae.

Cotton.

From the Union of Soviet Socialist Republics. Seeds presented by Arthur M. Palmer, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received January 26, 1940.

Collected in Kherson, Ukraine, and said to be typical of the cottons introduced into Turkistan from Iran about the twelfth century.

135956. Guza Geratkaya.

135957. Guza Kuldjinskaya.

## 135958 and 135959. MELILOTUS ALBA Desr. Fabaceae.

White sweetclover.

From Canada. Seed presented by the University of Saskatoon, Saskatoon, Saskatchewan. Received March 8, 1940.

135958. Melana S-121.

135959. Pioneer S-898.

# 135960. Poa sinaica Steud. Poaceae.

Grass.

From Syria. Seed collected by Dr. W. C. Lowdermilk, Soil Conservation Service, United States Department of Agriculture. Received March 4, 1940.

Collected on the Syrian steppe, about 258 miles east of Damascus. A perennial grass with erect, tufted stems about 1 foot high. Native to Syria.

## 135961 and 135962.

From Japan. Material presented by the Imperial Horticultural Experiment Station, Okitsu, Shizuokaken. Received March 13, 1940.

135961. MALUS PRUNIFOLIA (Willd.) Borkh. Malaceae.

Scions.

135962. MALUS PRUNIFOLIA var. RINKI (Koidz.) Rehder. Chinese apple.

A handsome small tree, native to China, with obovate leaves, pink or pinkish-white flowers, and yellow edible apples often 2 inches in diameter. Seeds.

# 135963. Podocarpus nagi (Thunb.) Pilger. Taxaceae.

From Japan. Seed purchased from the Chugai Nursery Co., Yamamoto, near Kobe. Received March 8, 1940.

For previous introduction see 71249.

# 135964. HORDEUM sp. Poaceae.

From Sweden. Seed presented by Dr. Gósta Tometorp, Allmänna Svenska Utsädesaktiebolaget, Svalöf. Received March 7, 1940.

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#### 135965 to 135972.

From Manchuria. Scions presented by A. Woeikoff, Harbin. Received March 15, 1940.

135965 to 135968. MALUS. Malaceae.

135965. Michurin's Sinopka.

135966. Longfield × Malus baccata var. mandshurica.

135967. Aitoachus × Malus baccata var. mandshurica.

135968. Calville × Malus baccata var. mandshurica.

135969. PERIPLOCA SEPIUM Bunge. Asclepiadaceae.

A deciduous twining shrub with lanceolate to oblong-lanceolate leaves 2 to 4 inches long and axillary or terminal cymes of few large, greenish-yellow flowers, brown purple within. Native to northern China.

135970. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Ialchenko.

135971. PRUNUS sp.

Plum.

Hudiakoff.

135972. Pyrus sp. Malaceae.

Pear.

Olia.

## 135973 to 135979.

From England. Plants purchased from R. C. Notcutt, Woodbridge, Suffolk. Received March 15, 1940.

135973. DEUTZIA SCABRA Thunb. Hydrangeaceae.

Fuzzy deutzia.

Purpurea Plana.

For previous introduction see 134449.

135974. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

Euphrosyne.

For previous introduction see 40161.

135975. DIERVILLA. Caprifoliaceae.

Received under the name of "atrosanguinea," a name for which a place of publication has not been found.

135976. DIERVILLA.

Avalanche.

135977. DIERVILLA.

Coccinea.

135978. DIERVILLA FLORIBUNDA Sieb. and Zucc.

Crimson weigela.

For previous introduction see 78143.

135979. DIERVILLA.

Styriaca Variegata.

#### 135980 to 135985.

From Manchuria. Seed purchased from the Compagnie Orientale Française, Harbin. Received March 5, 1940.

135980. Fragaria orientalis A. Los. Rosaceae.

Strawberry.

No. 125. From Maoershan, eastern mountainous region. A wild strawberry, native to northern Korea, with erect hairy stems up to 8 inches high, broad, coarsely serrate, hairy leaflets, and small, red, conical or spheroidal fruits.

For previous introduction see 80713,

135980 to 135985—Continued

135981. MALUS sp. Malaceae.

Apple.

No. 118. A mixture of cultivated apples, large-fruited forms.

135982. MALUS BACCATA (L.) Moench.

Siberian crab.

No. 116.

135983. MALUS.

Kurosh sibirica × "Belfleur."

135984 and 135985. PYRUS spp. Malaceae.

Pear.

135984. No. 114. Ma-li. From Ashiho, near Harbin.

135985. No. 115. Men-San.

135986. BERTHOLLETIA EXCELSA Humb. and Kunth. Lecythidaceae. Brazil nut.

From the British West Indies. Seed presented by Atherton Lee, Trinidad. Received February 16, 1940.

135987 to 136021.

From England. Trees purchased from T. Hilling & Co., Chobham, Woking, Surrey. Received March 20, 1940.

135987 and 135988. Amygdalus communis L. Amygdalaceae. Almond.

135987. Pollardii.

135988. Purpurea. A form with purplish flowers.

135989 to 135995. Amygdalus persica L.

Peach.

135989. Cambridge Carmine (ornamental).

135990. Dr. Hogg.

135991. Early Alfred.

135992. Libra.

135993. Noblesse.

135994. Foliis Purpureis. An ornamental variety.

135995. Russell's Red. An ornamental variety.

135996. Amygdalus persica var. nectarina Ait.

Nectarine.

Elruge.

135997 and 135998. MALUS. Malaceae.

135997. Malling II.

135998. Malling XIII.

135999 to 136003. MALUS SYLVESTRIS Mill.

Apple.

135999. Bushy Grove.

136000. Duchess of York's Favourite.

136001. Herring's Pippin.

136002. St. Edmund's Russet.

136003. Washington.

136004 to 136016. Prunus spp. Amygdalaceae.

136004 to 136006. PRUNUS ARMENIACA L.

Apricot.

136004. Blenheim.

136005. Hemskirk.

136006. Moorpark.

136007. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

Asplenifolia.

#### 135987 to 136021—Continued

136008 to 136011. PRUNUS DOMESTICA L.

Plum.

136008. Blaisdon Red.

136010. Late Transparent.

136009. Bryanston Gage.

136011. Pershore Red.

136012. PRUNUS CERASIFERA VAR. ATROPURPUREA Jager.

Pissardii Nigra.

136013. PRUNUS DOMESTICA L.

Prince of Wales.

136014. PRUNUS INSITITIA L.

Shepherd's Bullace.

136015. PRUNUS SPINOSA L.

Tricolor.

136016. PRUNUS DOMESTICA L.

Victoria.

136017. PYRUS COMMUNIS L. Malaceae.

Common pear.

Beurre Van Geert.

136018. MALUS FLORIBUNDA Siebold. Malaceae. Japanese flowering crab. Frau Luise Dittman.

136019. X MALUS MAGDENBURGENSIS Zimmerm.

Apple.

A small tree with ovate leaves, pubescent beneath, semidouble pinkish flowers, and yellow fruits 1 inch in diameter.

For previous introduction see 76589.

136020. MALUS.

Oporto. An ornamental variety  $(M. sylvestris \times niedzwetskyana)$ .

136021. MALUS BACCATA (L.) Moench.

Chinese flowering crab.

 $Lady\ Northcliffe.$ 

For previous introduction see 128508.

# 136022. Sophora tetraptera J. Miller. Fabaceae.

Fourwing sophora.

From Chile. Seed presented by Prof. G. Montero O., Temuco. Received March 20, 1940.

A large shrub or small tree up to 30 feet high. The green pinnate leaves and large clusters of yellow flowers make it an attractive ornamental. Native to New Zealand.

For previous introduction see 129801.

#### 136023 to 136117.

From Afghanistan. Material collected by Walter Koelz, Bureau of Plant Industry United States Department of Agriculture. Received February 8, 1940.

Unless otherwise stated all material was received as seeds.

136023. Adonis sp. Ranunculaceae.

No. 4576. From a dry slope at Shanbashak Pass, August 31, 1939, at 9,000 feet altitude. Plant growing in clumps 2 feet high; it has attractive foliage and a single terminal flower.

136024 and 136025. ALLIUM spp. Liliaceae.

From Safedsang, September 23, 1939, at 10,000 feet altitude. Plant growing up to 4 feet high, on dry soil, with umbels of rose-purple flowers. Stands a mild winter.

136024. No. 4743. Bulbs.

136025. No. 4743-A. Seeds.

136026 to 136031. ALTHAEA ROSEA (L.) Cav. Malvaceae. Hollyhock

136026. No. 4640. From Kala Sakari, September 8, 1939. A plant 6 feet high, with double cerise flowers.

136027. No. 4981. From Balkh, October 29, 1939, at 1,500 feet altitude. Plant much branched from the main stalk and very floriferous, growing 6 to 7 feet high. Flowers single, white, pink, and crimson, and  $4\frac{1}{2}$  inches across.

136028. No. 5012. From Haibak, November 3, 1939. Plant 4 to 5 feet in height, with single crimson flowers 4 inches across.

136029. No. 5007. From Mazarisharif, November 3, 1939, at 1,200 feet altitude. Plant 4 feet in height; the double flowers, 3 inches across, have pink crinkly petals.

136030. No. 5011. From Haibak, November 3, 1939. Plant freely branching from the root, 4 feet in height, with double crimson flowers  $3\frac{1}{2}$  inches across.

136031. No. 4651. From a dry slope at Akupuk, September 11, 1939, at 8,000 feet altitude. Grows in clumps up to 5 feet high, with single rose-purple flowers 3 inches across. Plant much eaten by livestock; stands a mild winter.

136032 and 136033. AQUILEGIA spp. Ranunculaceae.

136032. AQUILEGIA sp.

No. 4794. From a bank of a stream in Gurzan, October 5, 1939, at 8,500 feet altitude. Plant 20 feet in height; flower small. Stands a mild winter.

136033. AQUILEGIA sp.

No. 4881. From along a stream in Burchao Pass, October 13, 1939, at 10,000 feet altitude. A perennial 18 inches in height.

136034 and 136035. ARTEMISIA spp. Asteraceae.

136034. ARTEMISIA sp.

No. 4761. From Kalashahr, September 30, 1939, at 8,000 feet altitude. The dominant plant growing on dry hills; it grows in clumps 2 feet high and is used for winter browsing for the domestic animals.

136035. ARTEMISIA SD.

No. 5070. From Khalat, November 22, 1939, at 6,000 feet altitude. A dominant shrub found on the dry plains; grows in clumps about 1 foot high.

136036. ASTER ALTAICUS Willd. Asteraceae.

No. 4656. From Chigzar, September 10, 1939. Plant much branched, 2 feet in height, with small purple-rayed heads  $\frac{1}{2}$  inch across. Found growing on dry soil. Used for grazing and as an ornamental.

136037. Berberis sp. Berberidaceae.

Barberry.

No. 4803. From a dry slope at Laorlash, October 7, 1939, at 8,000 feet altitude. A well-formed bush 8 feet in height, with crimson fruits. Stands a mild winter.

136038. CICER ARIETINUM L. Fabaceae.

Chickpea.

No. 4595. Nakhud. From Terak, September 5, 1939, at 9,000 feet altitude. Grown without irrigation.

136039 to 136041. CLEMATIS spp. Ranunculaceae.

136039. CLEMATIS sp.

No. 4568. From a dry slope at Sabz Pass, August 29, 1939, at 10,000 feet altitude. An attractive shrub 3 feet high, with white fragrant flowers  $\frac{1}{2}$ :to  $\frac{3}{4}$  inch across.

136040. CLEMATIS sp.

No. 4742. From a dry slope at Safedsang, September 23, 1939, at 10,000 feet altitude. Bush up to 4 feet high, spreading from the roots, with fragrant white flowers 1 inch across.

136041. CLEMATIS sp.

No. 4882. From a thicket along a stream at Burchao Pass, October 15, 1939, at 9,000 feet altitude. An attractive climbing plant; stands a mild winter.

136042. Codonopsis sp. Campanulaceae.

No. 4560. From a damp meadow at Sabz Pass, August 28, 1939, at 10,000 feet altitude. Plant 3 feet in height.

136043. COLUTEA sp. Fabaceae.

No. 4889. From Burchao Pass, October 16, 1939, at 8,500 feet altitude. A shrub growing up to 8 feet in height; the leaves are eaten by cattle in the fall. 136044. Corydalis sp. Papaveraceae.

No. 4755. From the face of a shaded dry limestone cliff in Bandichakawak, September 29, 1939, at 9,000 feet altitude. Plant with fleshy pendulous leaves and upright flower stalks.

136045 to 136049. Cousinia spp. Asteraceae.

136045. Cousinia sp.

No. 4732. From Safedsang, September 24, 1939, at 10,000 feet altitude. A common thistly perennial  $2\frac{1}{2}$  feet high, found in dry places; flowers 2 inches across with white inner bracts forming an attractive involucre for the rose-anthered flowers. Collected and mashed for fodder.

136046. COUSINIA sp.

No. 4733. From dry places at Safedsang, September 24, 1939, at 10,000 feet altitude. A bristly perennial 18 inches in height with heads ( $1\frac{1}{2}$  inches) of bright rose-purple flowers. Cattle eat the leaves when the thorns are crushed.

136047. COUSINIA Sp.

No. 4868. From a dry slope at Bandar, October 9, 1939, at 7,000 feet altitude. An annual growing up to 6 feet in height; leaves long and spiny, arranged around the base of the stalk up to about 1 foot, and at the top a large open panicle with small flower heads, probably yellow. Rare and probably not weedy.

136048. COUSINIA sp.

No. 4877. From a dry slope at Khoshbai, October 16, 1939, at 8,000 feet altitude. An annual growing up to 2 feet high with a single stalk bearing globular clusters of 1-inch heads of rose-purple flowers, often arranged in a terminal umbel on long pedicels.

136049. Cousinia sp.

No. 4883. From Burchao Pass, October 15, 1939, at 9,000 feet altitude. A low-branched annual 1 foot in height with large heads of rose-colored flowers.

136050. Delphinium sp. Ranunculaceae.

No. 4727. From a dry-summer area in Safedsang, September 20, 1939, at 10,000 feet altitude. An attractive perennial 4 inches in height, with blue-purple flowers.

136051. ELAEAGNUS sp. Elaeagnaceae.

No. 4871. From along a torrent at Burchao Pass, October 11, 1939, at 9,000 feet altitude. A well-formed tree 20 feet high, with a trunk 1 foot in diameter, silvery leaves, and fruits about  $\frac{1}{2}$  inch long. Stands a mild winter.

136052. EPHEDRA sp. Gnetaceae.

No. 4544. From Lorinj, August 27, 1939, at 8,000 feet altitude. An attractive dense bush, 2 feet high, heavily loaded with orange fruits.

136053 to 136070. EREMURUS spp. Liliaceae.

Nos. 136053 to 136056 are from a dry slope at Lorinj Pass, August 27, 1939.

136053. Eremurus sp.

No. 4548. Altitude 10,000 feet. Plant  $3\frac{1}{2}$  feet in height with leaves  $1\frac{1}{2}$  inches in length.

136054. EREMURUS Sp.

No. 4549. Grows in clumps 4 feet high; spikes 18 inches long; leaves 1 inch in length.

136055. EREMURUS Sp.

No. 4550. Altitude 12,000 feet. Plant with single stalk 4 feet high; leaves 1 inch long.

136056. EREMURUS Sp.

No. 4551. Altitude 12,000 feet. Plant 4 feet high; spikes 18 inches in length; seed pods large.

136057. EREMURUS sp.

No. 4567. From a dry slope at Sabz Pass, August 29, 1939, at 11,000 feet altitude. Plant  $3\frac{1}{2}$  feet in height; spike 1 foot in length; seed pods  $\frac{1}{2}$  inch long.

136058. EREMURUS Sp.

No. 4575. From Shanbashak Pass, August 31, 1939, at 9,300 feet altitude. Plant with stalks in clumps 4 feet high; spikes 1 foot long.

136059. EREMURUS Sp.

No. 4585. From a dry plain at Shanbashak, September 1, 1939, at 9,000 feet altitude. Plant 4 feet in height; leaves narrow; spikes 18 inches long.

136060. EREMURUS sp.

No. 4589. Seech. From a dry slope at Terak, September 3, 1939, at 6,000 feet altitude. Plant up to 5 feet high, flower spike often  $3\frac{1}{2}$  feet high.

136061. Eremurus sp.

No. 4591. From Terak, September 3, 1939, at 10,000 feet altitude. Plant 4 feet in height, with flower clusters 1 foot long.

136062. EREMURUS Sp.

No. 4648. From Chashmai Gawan, September 9, 1939, at 7,000 feet altitude. Plant 4 feet in height with flowers along the entire stalk. Stands a mild winter.

136063. EREMURUS SD.

No. 4652. From Chigzar, September 9, 1939, at 8,000 feet altitude. Plant endures a dry summer and mild winter. Basal leaves when dry are eaten by cattle and sheep.

136064. EREMURUS Sp.

No. 4659. From Chigzar, September 10, 1939, at 8,000 feet altitude. Plant 4 feet high; spike 2 feet high; flowers probably white. Stands a mild winter.

136065. EREMURUS SD.

No. 4660. From a dry slope at Akupruk, September 11, 1939, at 8,000 feet altitude. Plant  $3\frac{1}{2}$  feet high; spike 1 foot long.

136066. EREMURUS sp.

No. 4728. From a dry slope at Safedsang, September 20, 1939, at 10,000 feet altitude. Plant 2 feet tall, with flower spike about 1 foot long.

136067. EREMURUS Sp.

No. 4740. From Safedsang, September 22, 1939, at 10,000 feet altitude. Plant 4 feet high, with spikes 18 inches long; flowers crowded, on very short pedicels.

136068. EREMURUS Sp.

No. 4741. From Safedsang, September 23, 1939, at 10,000 feet altitude. Plant 4 feet high; spikes up to about 2 feet in length; seed pods large.

136069. EREMURUS SD.

No. 4759. From dry ground at Bandichakawak, September 29, 1939, at 9,000 feet altitude. Plant with 7 stalks in clumps 2 feet high; spike about 10 inches in length.

136070. EREMURUS Sp.

No. 4867. From a dry slope at Bandar, October 9, 1939, at 7,000 feet altitude. Plants 4 feet high with flowers in clusters about 3 feet long; flowers large, probably white; flower stalk often bifid at the top; leaves narrow, 6 inches long.

136071 and 136072. FERULA spp. Apiaceae.

136071. FERULA sp.

No. 4577. Gheghan. From a dry slope at Shanbashak, August 31, 1939, at 9,000 feet altitude. A plant growing in clumps about 3 feet high.

136072. FERULA sp.

No. 4658. From a dry-summer area at Chigzar, September 10, 1939, at 8,000 feet altitude. Plant up to 8 feet high.

136073. FRAXINUS sp. Oleaceae.

Ash.

No. 4982. From Balkh, October 29, 1939, at 1,500 feet altitude. A quick-growing tree of good form, with 5 pinnate, coarsely toothed leaves.

136074. HIPPOPHAE RHAMNOIDES L. Elaeagnaceae. Common sea-buckthorn.

No. 4520. From along a stream at Kamard, August 25, 1939, at 6,000 feet altitude. A bush 8 feet in height, with orange fruits.

For previous introduction see 123057.

136075. HORDEUM sp. Poaceae.

No. 4739. From a dry-summer area at Safedsang, September 22, 1939, at 10,000 feet altitude. Grows in clumps with stems 2 feet in height. A pasture grass for places with mild winters and snow.

136076. INDIGOFERA sp. Fabaceae.

No. 4512. From along a watercourse in Dasht-i-sifed, August 24, 1939, at 6,000 feet altitude. An attractive, thorny, shrubby perennial 2 feet in height, with fragrant rose flowers.

136077. INULA sp. Asteraceae.

No. 4789. From a dry slope at Gharchi, October 4, 1939, at 8,000 feet altitude. A plant 6 feet in height; the large leaves are eaten by cattle.

136078 to 136081. IRIS spp. Iridaceae.

136078. IRIS sp.

No. 4486. From Kabul, August 14, 1939. A cultivated plant growing in clumps up to 4 feet high.

136079. IRIS sp.

No. 4505. From a river plain at Doao, August 23, 1939, at 5,000 feet altitude. Plant 2 feet in height; 4 to 5 flowers on a stalk; leaves  $\frac{1}{2}$  inch wide. Stands a mild winter.

136080. IRIS sp.

No. 4546. From along a stream at Lorini, August 27, 1939, at 8,000 feet altitude. Plant 1 foot high; said to be white-flowered.

136081. IRIS SD.

No. 4778. From a dry slope at Mak, October 2, 1939, at 8,500 feet altitude-Grows in clumps. Cattle eat the dry leaves. Stands a mild winter.

136082. JUNIPERUS sp. Pinaceae.

No. 4879. From Burchao Pass, October 13, 1939, at 9,000 feet altitude. Muchbranched ornamental tree, very drought-resistant, but growing quickly if watered. Can be pruned and trimmed severely; bears a heavy crop of large fruits.

136083 to 136085. LONICERA spp. Caprifoliaceae.

136083. LONICERA Sp.

No. 4506. From along a stream, but probably semixerophytic, in Doao, August 23, 1939, at 5,000 feet altitude. Bush 3 feet high, with orange-red fruits.

136084. LONICERA Sp.

No. 4525. From along a stream in Lorinj, August 26, 1939, at 8,000 feet altitude. Bush 6 feet high, with abundant red fruits.

136085. LONICERA Sp.

No. 4738. From a semiarid slope in Safedsang, September 21, 1939. A well-formed tree 15 feet high and 18 inches in diameter, with ornamental, white, translucent fruits that are eaten by the birds. Received as *Lonicera orientalis*, but the seeds do not agree with that species.

136086 to 136090. MALVA spp. Malvaceae.

136086. MALVA VERTICILLATA L.

No. 4491. From Kabul, August 15, 1939, at 7,000 feet altitude. An annual 2 feet high, with rose-purple flowers 1 inch across.

For previous introduction see 127683.

136087. MALVA sp.

No. 4492. From Kabul, August 15, 1939, at 7,000 feet altitude. An herb 4 feet in height, with rose-purple flowers.

136088. MALVA sp.

No. 4645. From Kala Sarkari, September 8, 1939. An herb 2 feet in height, with rose-purple flowers.

136089. MALVA sp.

No. 4993. From a field edge at Balkh, October 31, 1939, at 1,200 feet altitude. A perennial growing in clumps 5 feet high, with maplelike leaves 2 inches long; flowers probably small.

136090. MALVA sp.

No. 5043. From a garden in Maimana, October 22, 1939. A plant up to 2 feet high, with red-purple flowers 34 inch across.

136091. MELOTHRIA sp. Cucurbitaceae.

No. 4758. Pendent from limestone cliff at Karaghaitu, September 29, 1939, at 8,000 feet altitude. Fruit round and black.

136092. NEPETA sp. Menthaceae.

No. 4873. From a dry slope at Burchao Pass, October 12, 1939, at 9,000 feet altitude. An attractive-scented shrubby perennial about 1 foot in height, with small tomentose leaves and an abundance of rose-lavender flowers in racemes. Stands a mild winter.

136093. OENOTHERA LAMARKIANA Ser. Onagraceae.

No. 4490. From Kabul, August 15, 1939, at an altitude of 7,000 feet. Plant 4 feet high, with yellow flowers 2 inches across. Probably an escape.

136094. OENOTHERA Sp.

No. 5006. From Mazarisharif, November 3, 1939, at 1,500 feet altitude. Plant 4 feet high.

136095. Onobrychis sp. Fabaceae.

No. 4590. From Terak, September 3, 1939, at 10,000 feet altitude. Flowers said to be attractive.

136096. PAPAVER sp. Papaveraceae.

No. 4880. From a dry slope at Burchao Pass, October 13, 1939, at 9,000 feet altitude. An annual plant 18 inches high.

136097. PROSOPIS STEPHANIANA (Bieb.) Kunth. Mimosaceae.

No. 4995. From the fields and borders at Balkh, October 31, 1939, at 1,200 feet altitude. A low shrub about 1 foot in height; seed pods have a spicy odor. Used for fuel and camel fodder.

136098. Reseda sp. Resedaceae.

No. 4543. From a dry slope at Lorinj, August 27, 1939, at 8,000 feet altitude. Plant grows in clumps 2 feet high.

136099. RUMEX PATIENTIA L. Polygonaceae.

No. 4884. From the edge of a dry river bed at Burchao Pass, October 15, 1939, at 8,000 feet altitude. Plant 5 feet in height, with large racemes of flowers.

136100 to 136103. SALVIA spp. Menthaceae.

136100. SALVIA sp.

No. 4501. From Shibar Pass, August 22, 1939, at 8,000 feet altitude. An attractive semixerophytic plant 3 feet in height, with large flowers, the hood blue purple and the lip yellow.

136101 to 136103. SALVIA spp.

136101. SALVIA PRATENSIS L.

Meadow sage.

No. 4534. From Lorinj, August 26, 1939, at 8,000 feet altitude. Attractive bushy perennial 2 feet in height, with large blue-purplish flower spikes; withstands dry conditions.

136102. SALVIA sp.

No. 4593. From the edge of a spring torrent at Terak, September 4, 1939. Attractive plant up to 4 feet in height; yellow and purple flowers; leaves are eaten by cattle and goats.

136103. SALVIA SYLVESTRIS L.

No. 4726. From along a stream at Katakala, September 17, 1939. An attractive much-branched floriferous plant 3 feet in height; flowers rose purple.

136104. Sesamum Indicum L. (S. orientale L.) Pedaliaceae. Sesame.

No. 4712. From Tukzar, September 15, 1939. Grown without irrigation. A tall variety 4 feet in height that produces heavily.

136105 to 136107. SORGHUM VULGARE Pers. Foaceae.

Sorghum.

136105. No. 4661. From Darai Yusuf, September 6, 1939. Grows about 7 feet high, with heads 12 by 7 inches.

136106. No. 4724. From Tukzar, September 15, 1939. Grown without irrigation. Fruiting stalks 20 inches long.

136107. No. 5042. Jauwari-i-Jharu. From Tukzar, September 16, 1939.

136108. Tetragonia sp. Aizoaceae.

No. 4704. Palag. From Tukzar, September 14, 1939. A potherb.

136109. TULIPA sp. Liliaceae.

No. 4655. From a dry-summer area at Chigzar, September 10, 1939. Plant 1 foot in height; stands a mild winter.

136110 and 136111. TYPHA spp. Typhaceae.

136110. TYPHA SD.

No. 5022. November 6, 1939. Plant up to 4 feet in height, with cattails about 4 inches long. Ornamental where a low species is desired.

136111. TYPHA Sp.

No. 5028. November 8, 1939. A species 3 to 4 feet tall with cattails 2 to 3 inches long and 34 inch thick. A good plant for small pools.

136112 and 136113. UNGERNIA spp. Amaryllidaceae.

136112. Ungernia sp.

No. 4750. From a dry slope at Kotalibedak, September 26, 1939, at 10,000 feet altitude. A plant with a flower stalk 1 foot long and linear basal leaves about 1 inch wide.

136113. UNGERNIA Sp.

No. 4808. From a dry slope at Gurzan, October 5, 1939, at 9,000 feet altitude. Bulbous monocot, with flower stalk 1 foot long; leaves about 1 foot long and 1 inch wide. Bulbs from Katal-i-Terak.

136114. VICIA sp. Fabaceae.

No. 4555. Shakhal. From Aoikhurak, August 28, 1939, at 9,000 feet altitude.

136115 and 136116. VIOLA spp. Violaceae. Violet.

Nos. 4874 and 4875 were collected from a dry slope at Burchao Pass, October 13, 1939, at 10,000 feet altitude.

136115. VIOLA Sp.

No. 4874. A rare low plant.

136116. VIOLA sp.

No. 4875. From the face of a perpendicular limestone boulder, October 13, 1939. Grows in clumps; leaves in rosettes and lanceolate-linear, so that plant resembles a small Bellis; flowers blue purple and abundant.

136117. (Undetermined.)

No. 4597. Sumbul. From a dry slope at Terak, September 4, 1939, at 8,000 feet altitude. Bulbs of a plant with a stalk 8 inches long; flowers rose purplish with green ribs on the outer segments.

136118. Malus sylvestris Mill. Malaceae.

Apple.

From Manchuria. Scions presented by L. Ptitsin, Harbin. Received March 22, 1940.

Kurosh's Ranet.

136119. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From Palestine. Scions presented by the Chief Horticultural Officer, Department of Agriculture and Fisheries, Jaffa. Received March 23, 1940.

Mustekawi.

## 136120 to 136129.

From Australia. Seeds presented by W. Poggendorff, Rice Research Station, Leyton, New South Wales. Received March 25, 1940.

136120. LOLIUM SUBULATUM Vis. Poaceae.

Ryegrass.

Wimmera.

For previous introduction see 134847.

136121 to 136128. ORYZA SATIVA L. Poaceae.

Rice.

136121. Cristal Y 5520. Originally from Mozambique.

136122. Giza No. 29 Y 5496. Originally from Mozambique.

136123. Iragi 6 Y 5501. Originally from Egypt.

136124. Orealla Y 5477. Originally from British Guiana.

136125. Pata de Gallinazo Y 5371. A late variety originally from Ecuador.

136126. Sterje 144 Y 5370. An early variety originally from Italy.

136127. No. 200 Y 5534. A midseason variety originally from Argentina.

136128. Sathi Y 5525. An early variety originally from the United Provinces, India.

136129. TRIFOLIUM SUBTERRANEUM L. Fabaceae. Subterranean clover. A midseason strain.

For previous introduction see 134735.

# 136130 and 136131.

From Ohio. Plants purchased from the Wayside Gardens Co., Mentor. Received March 25, 1940.

136130. COTONEASTER sp. Malaceae.

Received under the name "meyeri," for which a place of publication has not been found.

136131. CYDONIA. Malaceae.

Masterpiece.

# 136132 and 136133. DIERVILLA. Caprifoliaceae.

From England. Plants purchased from John Waterer Sons & Crisp, Bagshot, Surrey. Received March 26, 1940.

136132. Golden Horn.

136133. Waterers Ruby.

#### 136134 to 136142.

From England. Plants purchased from W. J. Marchant, Keeper's Hill Nursery, Stapehill, Wimborne, Dorset. Received March 26, 1940.

136134. X PHILADELPHUS INSIGNIS Carr. Hydrangeaceae.

A tall shrub with ovate or broad-ovate leaves 2 to 4 inches long and large panicles of fragrant flowers.

For previous introduction see 132040.

136135 to 136142. RUBUS spp. Rosaceae.

136135. RUBUS BIFLORUS Buch.-Ham.

A rambling shrub with large leaves, woolly beneath, and subacid yellow berries about the size of a thimble. Native to the Himalayas.

For previous introduction see 104860.

136136. Rubus biflorus var. Quinqueflorus Focke.

This ornamental shrub, native to western Szechwan, China, between 5,800 and 6,900 feet altitude, produces its clusters of orange-yellow berries through so long a period as to be almost everbearing. Because of its white wax-coated stems, it is one of the most striking plants in the garden in autumn and winter.

For previous introduction see 104861.

136137. Rubus flagelliflorus Focke.

An evergreen or partly deciduous, shrubby, climbing species about 8 feet high, with simple, heart-shaped leaves, white flowers, and medium-sized, glossy black fruits. Native to central and western China at altitudes of 4,000 to 6,000 feet.

For previous introduction see 59276.

136138. RUBUS GIRALDIANUS Focke.

A deciduous Chinese bramble with ornamental foliage and attractive, slender, white stems.

For previous introduction see 52944.

136139. Rubus henryi var. Bambusarum (Focke) Rehder.

An evergreen woody climber differing from the type in its ternate leaves. Native to central China.

136140. RUBUS LEUCODERMIS Dougl.

An erect shrub 3 to 6 feet high, found in open woods in the northwestern United States. The leaves are usually trifoliolate, the small white flowers are in few-flowered corymbs, and the black hemispherical fruits are ½ inch in diameter.

For previous introduction see 104650.

136141. RUBUS THYRSOIDEUS Wimm.

Flore Pleno. A double-flowered white variety with erect, pyramidal panicles 6 to 8 inches high.

136142. RUBUS TRICOLOR Focke.

A prostrate shrub with bristly stems, simple, ovate, cordate leaves  $2\frac{1}{2}$  to 4 inches long, irregularly toothed, dark green above, and white flowers, 1 inch

across, in short terminal racemes, followed by bright-red edible fruits. Native to western China at altitudes up to 10,000 feet.

# 136143. RHODODENDRON LINEARIFOLIUM var. MACROSEPALUM

(Maxim.) Makino. Ericaceae.

From Japan. Seeds presented by Chugai Nursery Co., Yamamoto, Kobe. Received March 22, 1940.

A laxly branched spreading shrub, upright and 10 feet high, with narrowly ovate leaves that are dull green during summer and turn rich vinous purple in autumn. The broadly funnel-shaped, rose-pink, fragrant flowers, 2 inches across, are in clusters of 2 to 10. This belongs to the Tsutsutsi section and is native to Japan.

For previous introduction see 85687.

## 136144 to 136159.

From France. Plants purchased from Pépinières Rodolausse, Tarne-et-Garonne. Received March 27, 1940.

136144 to 136154. Amygdalus Persica L. Amygdalaceae. Peach

136144. Angevine.

136150. Henri Adenot.

136145. Belle Illoise.

136151. La Plus Précoce de Sauma-

136146. Chilon.

chez.

136147. Girerd No. 3.

136152. Madeleine Jaune. 136153. Tardive d'octobre.

136148. Girerd No. 4. 136149. Girerd No. 23.

136154. Triompholicio.

136155. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Reinette de Brive.

136156. PRUNUS AVIUM L. Amygdalaceae.

Bigarreau Pelissier.

Sweet cherry.

136157. PRUNUS sp.

Vernissee.

136158 and 136159. Pyrus communis L. Malaceae.

136158. Directeur Tisserand.

136159. Winioska-Saska (Beurré Montécat).

# 136160 to 136163. Pyrus communis L. Malaceae. Common pear.

From Sweden. Scions presented by Carl G. Dahl, Director, Experimentalfaltet, Akarp, Alnarp. Received March 27, 1940.

136160. Cecilia.

136161. Experimentalfaltet Augustipäron.

136162. Fürstlight Taffelpäron.

136163. Johantorp.

136164. Pyrus serotina Rehder. Malaceae.

Late pear.

From Japan. Seeds purchased from Chugai Nursery Co., Yamamoto, Kobe, Received March 12, 1940.

For previous introduction see 119217.

# 136165. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

From Brazil. Seeds presented by Dierberger & Co., São Paulo. Received March 30, 1940.

A small tropical-American vine with pale-blue flowers. It forms a mat of foliage 1 to 2 feet thick and is used as a cover crop.

#### 136166 to 136229.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg, Manitoba. Received March 28, 1940.

136166 and 136167. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

136166. No. 13. Meshedi. Originally from the Department of Agriculture, Quetta, Baluchistan, India.

136167. No. 14. Quetta Local. Originally from the Department of Agriculture, Quetta, Baluchistan, India.

136168 to 136229. Cucumis melo L. Cucurbitaceae.

Muskmelon.

136168. No. 1. Ukrainian × American. Originally from Dufrost, Manitoba.

136169. No. 2. Japanese × American. Originally from the Tanaka Seed Co., Japan, as a Spasy variety.

136170. No. 3.  $Arabian \times Ukrainian$ . Originally from Italy as an Arabian variety.

136171. No. 4. Polish × Ukrainian. Originally from Warsaw, Poland, as Arctic Sweets.

Nos. 136172 to 136175 originally came from Harbin, Manchuria.

136172. No. 5. Chinese.

136173. No. 6. Ashiho District.

136174. No. 7. Mixed.

136175. No. 8. Eastern Siberia.

Nos. 136176 to 136178. Ukrainian banana hybrids.

136176. No. 9. Originally from Million, Manitoba.

136177. No. 10. Originally from Milo, Saskatchewan.

136178. No. 11. Originally from Togo, Saskatchewan.

Nos. 136179 to 136181 originally came from the Department of Agriculture, Quetta, Baluchistan, India.

136179. No. 12. Quetta Sarda.

136180. No. 15. Irani Sarda.

136181. No. 16. Duki Garma.

136182. No. 17. Kirkagatch. Originally collected by E. K. Balls in Asia Minor, 1939.

136183. No. 18. Ahunt. Originally collected by E. K. Balls in Asia Minor, 1939.

136184. No. 19. Calabazas Grandes. Originally from Valparaiso, Chile, 1939.

136185. No. 20.  $Ukrainian \times American$ . Originally from the Agricultural Experimental Station, Indian Head, Saskatchewan, 1939.

136186. No. 20-A. Originally from Harbin, Manchuria, 1939.

Nos. 136187 to 136189. Ukrainian × American.

136187. No. 21. Originally from the Agricultural Experiment Station, Medicine Hat, Saskatchewan, 1939.

136188. No. 22. Originally from the Agricultural Experimental Station, Rosthern, Saskatchewan, 1939.

136189. No. 23. Originally from Tolstoi, Manitoba, 1939.

136190. No. 24. Ukrainian-Persian type. Originally from Morden, Manitoba, 1939.

136191. No. 25. Ukrainian-Persian type. Originally from Morden, Manitoba, 1939.

136192. No. 26. Ukrainian-Persian type. Originally from Miami, Manitoba, 1939.

# 136166 to 136229—Continued

136193. No. 27. Ukrainian X Honey Dew. Originally from Hamilton, Ontario, 1939.

136194. No. 28. Ukrainian × American.

136195. No. 29. Ukrainian × American.

136196. No. 30. Banana Ukrainian × American. Originally from Marquis, Saskatchewan, 1939.

136197. No. 31. Large Ukrainian  $\times$  American.

136198. No. 32. Ukrainian × American. Originally from Dufrost, Manitoba, 1939.

136199. No. 33. Egyptian  $\times$  American. Originally from Cairo, Egypt.

Nos. 136200 to 136204. Ukrainian × American.

136200. No. 34. Originally from Morden, Manitoba, 1939.

136201. No. 35. Originally from Valley River, Manitoba, 1939.

Nos. 136202 to 136204 originally from North Portal, Saskatchewan.

136202. No. 36.

136203. No. 37.

136204. No. 38.

Ukrainian Banana × American. Originally from Gould-136205. No. 39. town, Saskatchewan, 1939.

136206. No. 40. Ukrainian × American. Originally from Portage la Prairie, Manitoba, 1939.

136207. No. 41. Hungarian X American. Originally from Melville, Saskatchewan, 1939.

136208. No. 42.  $Ukrainian \times American$ . Originally from Tisdale, Saskatchewan, 1939.

136209. No. 43. Banana Ukrainian × American. Originally from Kamsack, Saskatchewan, 1939.

Nes. 136210 to 136229. Ukrainian  $\times$  American.

136210. No. 44. Originally from Gonor, Manitoba, 1939.

136211. No. 45. Originally from Altona, Manitoba, 1939.

136212. No. 46. Originally from Winkler, Manitoba, 1939.

Nos. 136213 to 136229 came originally from Keller, Saskatchewan, 1939.

136213. No. 47.

136222. No. 56.

136214. No. 48.

136223. No. 57.

136215. No. 49.

136224. No. 58.

136216. No. 50.

136225. No. 59.

136217. No. 51.

136226. No. 60.

136218. No. 52.

136227. No. 61.

136219. No. 53.

136228. No. 62.

136220. No. 54.

136229. No. 63.

136221. No. 55.

#### 136230 to 136237.

ba.

From England. Plants purchased from Sunningdale Nurseries, Windlesham, Surrey. Received March 29, 1940.

136230 to 136232. Chaenomeles lagenaria (Loisel.) Koidz. Malaceae.

136230. Carmine Queen.

136232. Salmon.

136231. Coral Red.

#### 136230 to 136237—Continued

136233. CHAENOMELES JAPONICA var. ALPINA Maxim.

A variety with procumbent stems and leaves up to 1 inch long.

136234. DEUTZIA sp. Hydrangeaceae.

136235 to 136237. PHILADELPHUS spp. Hydrangeaceae.

136235. PHILADELPHUS PEKINENSIS Rupr.

Peking mockorange.

For previous introduction see 132604.

136236. PHILADELPHUS sp.

Farrar.

136237. PHILADELPHUS SD.

Forrest a-2, 152, F-19, 133.

#### 136238 to 136240.

From England. Plants purchased from Knap Hill Nursery Co., Woking, Surrey Received March 30, 1940.

136238. CHAENOMELES LAGENARIA (Loisel.). Koidz. Malaceae.

Japanese quince

Philis Moore.

For previous introduction see 136232.

136239. DEUTZIA CORYMBOSA R. Br. Hydrangeaceae.

A deutzia with pure-white flowers.

For previous introduction see 132362.

136240. DEUTZIA MOLLIS Duthie.

A very distinct and beautiful species from central China. The white or pinktinged flowers are in flat corymbose panicles.

For previous introduction see 132637.

#### 136241 to 136275.

From France. Plants purchased from Pépinières A. Michel, Le Neubourg (Eure) Recieved March 30, 1940.

136241 and 136242. AMYGDALUS PERSICA L. Amygdalaceae.

Peach

136241. Belle de Louveciennes.

136242. Octave Opoix.

136243 to 136271. MALUS SYLVESTRIS Mill. Malaceae. Apple

136243. Amzr Gauthier.

136258. Gros Doux d'Angers.

136244. Argile var. Peau d'Ane.

136259. Joly Rouge.

136245. Beauty of Kent.

136260. Long Bois de Neubourg.

136246. Beurrière.

136261. Michelin.

136247. Binet Violet.

136262. Pigeon Rouge d'Hiver.

136248. Blonde de Chamfort.

136263. Reinette de Bayeux.

136249. Chailleux (Chayeux).

136264. Reinette Fardel.

136250. Chataignier.

136265. Rétin.

136251. Doux-amer Gris.

136266. Rousse de l'Orne.

136252. Dous Normandie.

136267, Saint Laurent.

136253. Égrain de Picardie.

136268. Tardive de la Sarthe.

136254. Fleur de Juin.

136269. Transparente de Boisguillaume

136255. Frèquin Lajoie.

136270. Vice-Président Heron.

136256. Frèquin Tardif.

136271. Villebéru.

136257. Gilet Rouge.

## 136241 to 136275—Continued

136272 and 136273. PRUNUS DOMESTICA L. Amygdalaceae.

Plum.

136272. Reine Claude d'Oullins Hative.

136273. Reine Claude R., Tardive Diaphane.

136274 and 136275. Pyrus communis L. Malaceae.

Common pear.

136274. Fondante du Panisel.

136275. Président Mas.

#### 136276 and 136277.

From Argentina. Seeds presented by Dr. Carlos Storni, Director of Agriculture, Buenos Aires. Received March 25, 1940.

136276. DESMODIUM CUNEATUM Hook. and Arn. Fabaceae.

Pega-pega. An erect, pubescent, shrubby plant with ternate leaves of cuneateoblong leaflets and dense terminal racemes. Native to southern South America.

136277. DESMODIUM DISCOLOR Vogel.

Mermelada de Caballo. A shrubby, erect, hairy plant from southern Brazil, with oval membranous leaflets and large panicles of light-blue flowers. Cultivated in Brazil for forage and silage, being cut while young, as it becomes woody with age.

For previous introduction see 135266.

#### 136278 and 136279.

rey v

ncele

pink 2

Apple

From the Union of Soviet Socialist Republics. Seed presented by the Mountain-Taiga Station, Far Eastern Branch of Academy of Sciences, Voroshilov-Ussuriaky. Received March 25, 1940.

136278. LACTUCA RADDEANA Maxim. Cichoriaceae.

For previous introduction see 125288.

136279. LACTUCA SQUARROSA (Thunb.) Miquel. (L. laciniata Mak.). Cichoriaceae.

A tall, erect annual with long, linear or linear-lanceolate, leaves and panicled yellow flower heads. Native to eastern Asia.

#### 136280 and 136281.

From Switzerland. Seeds purchased from Corevon Fils, Floraire, Chêne-Bourg, near Geneva. Received March 30, 1940.

136280. Rubus Chamaemorus L. Rosaceae.

The cloudberry is of circumpolar distribution, and the edible yellowish fruits are much prized by the natives of the subarctic regions. The plant is creeping in habit and is frequently found in peat bogs.

For previous introduction see 92294.

136281. Rubus saxatilis L.

A low unarmed woody perennial with trifoliolate leaves about 6 inches long, found in a birch forest. The few fruits are scarlet, rather acid, but pleasant.

For previous introduction see 122948.

# 136282 to 136289. PRUNUS spp. Amygdalaceae.

From Manchuria. Seeds purchased from Compagnie Orientale Francaise, Ltd., Harbin. Recdived March 28, 1940.

136282. PRUNUS MANDSHURICA (Maxim.) Koehne.

Manchurian apricot.

No. 140. Cultivated Manchurian apricot.

136283 to 136285. Prunus domestica L.

Common plum.

136283. No. 128. Ivanovka.

136284. No. 129. Fruit large, red.

136285. No. 130. Local forms (mixed).

# 136282 to 136289—Continued

136286. PRUNUS MAACKII Rupr.

No. 136. From Hsiaoling.

136287. PRUNUS PADUS L.

European bird cherry.

No. 137.

136288. PRUNUS SALICINA Lindl.

Japanese plum.

Amur cherry.

No. 126. From Maoershan. Introduced under the varietal name "koreana." for which a valid place of publication (as a variety of Prunus salicina) has not been found.

136289. PRUNUS sp.

No. 135. From Ashiho, near Harbin. A cultivated cherry.

#### 136290 to 136369.

From Canada. Seeds presented by the Central Experimental Farm, Ottawa. Received March 23, 1940.

136290 to 136311. AGROPYRON spp. Poaceae.

136290 to 136298. AGROPYRON CRISTATUM (L.) Gaertn. Crested wheatgrass.

136290. No. 653.

136295. No. 1161.

136291, No. 1082.

136296, No. 1163.

136292, No. 1155.

136297, No. 1164.

136293. No. 1159.

136298. No. 1165.

136294. No. 1266.

136299 to 136301. AGROPYRON ELONGATUM (Host) Beauv.

Grass.

136299. No. 820.

136300, No. 1300.

136301. No. 1302.

136302 and 136303. AGROPYRON INTERMEDIUM (Host) Beauv.

136302. No. 1077.

136303. No. 1087.

For previous introduction see 119607.

136304 to 136306. AGROPYRON TRACHYCAULUM (Link) Malte. Wheatgrass.

136304. No. 1267.

136305, No. 1268.

136306, No. 818.

136307 to 136309. AGROPYRON SUBSECUNDUM (Link) Hitchc.

Grass.

136307. No. 1083.

136308. No. 932.

136309, No. 1080.

For previous introduction see 115298.

136310. AGROPYRON sp.

No. 1443.

136311. AGROPYRON sp.

No. 1078.

136312. ALOPECURUS PRATENSIS L. Poaceae.

Meadow foxtail.

No. 132.

For previous introduction see 119616.

136313. AVENA PRATENSIS L. Poaceae.

Grass.

No. 1426. A perennial grass native to Europe.

## 136290 to 136369—Continued

136314. AVENA PUBESCENS Huds.

No. 1430.

For previous introduction see 133259.

136315. Bromus inermis Leyss. Poaceae.

Smooth bromegrass.

No. 1334.

136316 and 136317. Bromus Marginatus Nees.

136316. No. 927.

136317. No. 1265.

For previous introduction see 125045.

136318. CORONILLA VARIA L. Fabaceae.

Crownvetch.

No. 654.

For previous introduction see 121114.

136319. Deschampsia caespitosa (L.) Beauv. Poaceae. Tufted hairgrass. No. 955.

For previous introduction see 119640.

136320 to 136327. ELYMUS spp. Poaceae.

Grass.

136320. ELYMUS CANADENSIS L.

No. 937.

For previous introduction see 16374.

136321. ELYMUS DAHURICUS Turcz.

No. 928.

For previous introduction see 135578.

136322 to 136326. Elymus sibiricus L.

136322. No. 89.

136325. No. 1167.

136323. No. 1111.

136326. No. 1168.

136324. No. 1166.

For previous introduction see 135583.

136327. Elymus virginicus var. submuticus Hook.

No. 1086. A coarse perennial, native to the Rocky Mountains. It affords good pasturage and makes a coarse hay.

For previous introduction see 53052.

136328 to 136344. FESTUCA spp. Poaceae.

Grass.

136328. FESTUCA CAPILLATA Lam.

Hair fescue.

No. 1210.

For previous introduction see 110794.

136329 to 136339. FESTUCA ELATIOR L.

Meadow fescue.

136329. No. 125.

136335. No. 1231.

136330. No. 15.

136336. No. 1471.

136331. No. 19.

136337. No. 1372.

136332. No. 684.

136338. No. 1473.

136333. No. 755.

136339. No. 38.

136334. No. 1208.

136340. FESTUCA ELATIOR var. ARUNDINACEA (Schreb.) Wimm.

No. 39.

136290 to 136369—Continued

136341 to 136344. FESTUCA RUBRA L.

Red fescue.

136341. No. 30.

136343. No. 1125.

136342. No. 960.

136344. No. 1468.

136345 and 136346. KOELERIA CRISTATA (L.) Pers. Poaceae.

Grass.

136345. No. 1105.

136346. No. 1107.

For previous introduction see 108355.

136347. Koeleria gracilis Pers.

Grass.

No. 402.

For previous introduction see 135598.

136348. PHALARIS ARUNDINACEA L. Poaceae.

Reed canary grass.

No. 1057.

136349. Phleum Phleoides (L.) Karst. Poaceae.

Timothy.

No. 1130.

136350 to 136369. POA spp. Poaceae.

Grass.

136350. Poa alpina L.

Bluegrass.

No. 1067.

For previous introduction see 129887.

136351 and 136352. POA BULBOSA L.

136351. No. 1065.

136352. No. 1318.

For previous introduction see 135780.

136353. POA CANBYI (Scribn.) Piper.

No. 1211.

136354. Poa compressa L.

Canada bluegrass.

No. 956.

For previous introduction see 133162.

136355. POA EPILIS Scribn.

No. 1312.

136356. POA GLAUCA Vahl.

No. 1098. A densely cespitose perennial grass, native to Europe, with flowering stems 1 or 2 feet high and leaves resembling those of Kentucky bluegrass (*Poa pratensis*). It grows very freely, seeding itself.

For previous introduction see 58708.

136357 to 136359. POA INTERIOR Rydb.

136357. No. 1194.

136358. No. 1195.

136359. No. 1204.

136360. POA NEMORALIS L.

Wood bluegrass.

No. 9.

For previous introduction see 89954.

136361. POA NEVADENSIS Vasey.

Nevada bluegrass.

No. 1320.

For previous introduction see 125061.

# 136290 to 136369—Continued

136362 and 136363. POA PALUSTRIS L.

Fowl meadow grass.

136362 No. 1149.

136363. No. 10.

For previous introduction see 135610.

136364. POA SECUNDA Presl.

No. 1309.

136365. POA STERILIS Bieb.

No. 1073. A tufted perennial grass, native to the Caucasus region.

For previous introduction see 114273.

136366 to 136369. POA spp.

136366. POA sp.

No. 1321.

136367. POA sp.

No. 1075.

136368. Poa sp.

No. 1074.

136369. Poa sp.

No. 1074.



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tuberosum, 135852

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Tabernaemontana panducaqui, 135017. Tarchonanthus minor, 134745. Taxodium mucronatum, 134978. Terebinth, false. See Pistacia terebinthus. Terminalia calamansani, 135455. nitens, 135018.

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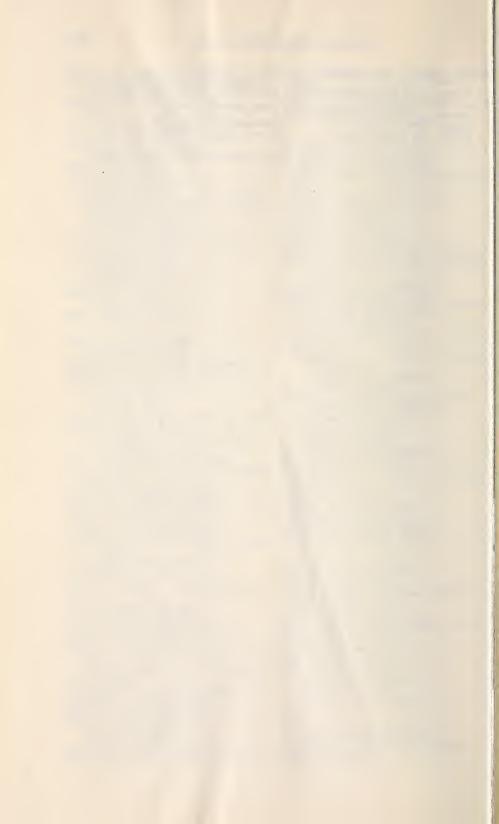
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# Plant Inventory No. 143

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., August, 1950



# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1940 (Nos. 136370 to 137937)

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This inventory, No. 143, lists the plant material (Nos. 136370 to 137937) received by the Division of Plant Exploration and Introduction during the period April 1 to June 30, 1940. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Botanist.

Plant Industry Station Beltsville, Md.

<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### INVENTORY

#### 136370 to 136383.

From Ohio. Plants purchased from Henry Kohankie & Son, Painesville. Received April 19, 1940.

136370. X DEUTZIA MYRIANTHA Lemoine. Hydrangeaceae.

Boule Rose.

136371. DEUTZIA NINGPOENSIS Rehder.

A shrub up to 7 feet high with ovate-oblong, entire or slightly toothed leaves, and white flowers in panicles up to 4 inches long. Native to eastern China.

136372 to 136377. DIERVILLA spp. Caprifoliaceae.

136372. DIERVILLA HORTENSIS Sieb. and Zucc.

Var. Rubra.

136373. DIERVILLA.

Var. Desboisii.

136374. DIERVILLA JAPONICA (Thunb.) DC.

Japanese weigela.

For previous introduction see 62710.

136375 to 136377. DIERVILLA.

136375. Var. Sieboldii Argenteo-marginata.

136376. Var. Abel Carrière.

136377. Var. Gustav Mallot.

136378. Periploca sepium Bunge. Asclepiadaceae.

A deciduous twining shrub with lanceolate to oblong-lanceolate leaves 2 to 4 inches long and axillary or terminal cymes of few large greenish-yellow flowers, brown purple within. Native to northern China.

For previous introduction see 135969.

136379 to 136383. PHILADELPHUS spp. Hydrangeaceae.

136379. PHILADELPHUS CORONARIUS L.

Sweet mockorange.

Var. Multiflorus Plenus

For previous introduction see 132458.

136380. PHILADELPHUS LEWISH Pursh.

Lewis mockorange.

For previous introduction see 132826.

136381. PHILADELPHUS MAGDALENAE Koehne.

Magdalena mockorange.

A bushy mockorange from Szechwan, China, which becomes about 6 feet high, with finely toothed narrow leaves and white flowers 1 inch in diameter, borne in early June in few-flowered racemes.

For previous introduction see 132602.

136382. PHILADELPHUS NEPALENSIS Koehne.

A Himalayan shrub up to 6 feet high with ovate-oblong leaves 2 to 4 inches long and pure-white flowers  $1\frac{1}{2}$  inches across in 5-flowered racemes.

136383. PHILADELPHUS.

Var. Ophelia.

#### 136384 and 136385. VITIS. Vitaceae.

Grape.

From Greece. Cuttings presented by Prof. B. Krimbas, Ecole Supérieure Abronomique, Athens. Received April 22, 1940.

136384. Sultanina à Pepins.

136385. Sultanina Strongylhorax.

#### 136386 and 136387.

From the Netherlands. Plants presented through J. Horace McFarland, Mount Pleasant Press, Harrisburg, Pa. Received April 23, 1940.

136386. Berberis Linearifolia Phil. Berberidaceae.

A handsome evergreen barberry of loose, erect habit, 4 to 8 feet high, with entire linear-oblong to elliptic leaves ¾ to 1¾ inches long, dark green, shining above, and corymbs of 3 to 7 orange to crimson flowers followed by dark blue-black fruits. Native to Chile.

For previous introduction see 134391.

136387. X Berberis Lologensis Sandw.

Var. Higdoron.

#### 136388 and 136389. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

From Canada. Seeds presented by the Division of Forage Plants, Central Experimental Farm, Ottawa. Received April 17, 1940.

**136388.** *U.B.C.* (hay type).

**136389.** *U.B.C.* (pasture type).

#### 136390. Vitis. Vitaceae.

Grape.

From China. Cuttings purchased from P. Mirksch, Tientsin, Hopei. Received April 25, 1940.

#### 136391 to 136399.

From the Union of Soviet Socialist Republics. Seeds presented by Dr. S. N. Shundenko, Institute of Plant Industry, Leningrad. Received April 15, 1940.

136391. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae.

Okra.

No. 2. Bamia Siliquous. A low-growing form.

136392. APIUM GRAVEOLENS L. Apiaceae.

Celery.

No. 244. Kereviz celerv.

136393 and 136394. Capsicum frutescens L. Solanaceae.

Redpepper.

136393. No. 251. (Origin Peru.)

136394. No. 2-A. (Origin Soviet Union.)

136395 and 136396. Cucumis sativus L. Cucurbitaceae.

Cucumber.

136395. No. 573. Ohara Fusionari Kiuri. (Origin Japan.)

136396. No. 571. (Origin Japan.)

136397. Cucurbita Moschata Duchesne. Cucurbitaceae. No. 763. (Origin Turkey.)

Cushaw.

2C200 Derraria de Dome I

136398. Daucus carota L. Apiaceae.

Carrot.

No. 1203. Blacu (Origin Afghanistan.)

136399. Solanum melongena L. Solanaceae.

Eggplant.

No. 173. Wild Kluster (Origin India.)

#### 136400 to 136402.

From England. Plants purchased from Reginald Kaye, Waithman Hardy Plant Nursery, Silverdale, Lancaster. Received April 3, 1940. 136400 to 136402-Continued.

136400. Deutzia reflexa Duthie. Hydrangeaceae.

A small, rather slender shrub with grayish bark, narrow-lanceolate, serrate leaves, and corymbs of small pure-white flowers. Related to *Deutzia discolor*. Native to central China.

136401. DIERVILLA. Caprifoliaceae.

Var. Brightness.

136402. Philadelphus sp. Hydrangeaceae.

Mockorange.

136403. Trifolium subterraneum L. Fabaceae. Subterranean clover.

From New Zealand. Seeds presented by L. W. Gorman, Grasslands Division, Palmerston North, through F. H. Bruning Pty., Melbourne, Australia.

Burnerang F. C. No. 13218.

#### 136404 to 136411.

From Venezuela. Seeds presented by Dr. D. G. Langham, Estación Experimental de Agricultura, El Valle, Caracas. Received April 3, 1940.

136404 to 136407. Coix Lacryma-Jobi L. Poaceae.

Jobs-tears.

136404. From near Maracay.

136406. From near Maracay.

**136405.** From El Valle.

136407. From El Valle.

136403 to 136411. Euchlaena Mexicana Schrad. Poaceae.

hrad. Poaceae. Teosinte.

136408. From El Valle.136409. From Maracay.

136411. From Maracav.

136412. Saccharum. Poaceae.

Sugarcane.

From the Virgin Islands. Cuttings presented by R. H. King, Christiansted, Saint Croix. Received April 3, 1940.

136413. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by the Cotton Research Station, Trinidad. Received April 4, 1940.

Triumph Crinkled C B 262 Selfed.

#### 136414 to 136419.

Barrington.

From England. Plants purchased from Bees Ltd., Liverpool. Received April 5, 1940.

136414. Amygdalus persica L. Amygdalaceae.

Peach.

Apple.

136415 to 136417. Malus sylvestris Mill. Malaceae. 136415. Ard Cairn Russet.

136416. Norfolk Royal.

136417. Queen Mary.

136418. Rubus sp. Rosaceae.

Bedford Giant blackberry.

136419. Rubus sp.

Veitch berry.

136420 and 136421. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by the Cotton Research Station, Trinidad. Received April 5, 1940.

136420. BD. Ba. 1-12.

136421. AN. Ba. 1-2.

# 136422. Philadelphus. Hydrangeaceae.

Mockorange.

From England. Plants purchased from the Baggesens Nurseries Ltd., Pembury, near Tunbridge Wells, Kent. Received April 6, 1940.

Pembury Puritan.

#### 136423 to 136426.

From New Jersey. Plants purchased from the F. and F. Nurseries, Springfield. Received April 6, 1940.

136423. CHAENOMELES JAPONICA VAR. ALPINA Maxim. Malaceae.

Alpine Japan quince.

136424 and 136425. Chaenomeles Japonica (Thunb.) Lindl. Japan quince.

136424. Var. Corallina.

136425. Var. Grandiflora.

136426. DIERVILLA LONICERA Mill. (D. trifida Moench). Caprifoliaceae.

# 136427. Eucalyptus alba Reinw. Myrtaceae.

From Brazil. Seeds presented by Dr. Edmundo Navarro de Andrade, Rio Claro, São Paulo. Received April 2, 1940.

White Gum. A tall tree with ash-colored, rough, persistent bark and glaucous leaves varying from ovate-oblong and 3 inches long to ovate-lanceolate and 6 inches long. The small flowers are gathered into panicles at the ends of the branches, and the top-shaped fruits are  $\frac{1}{4}$  inch in diameter. It is native to New Guinea and Java, and has been successfully established in Brazil, where it is considered of much value.

For previous introduction see 93227.

# 136428. Pachyrhizus erosus (L.) Urban. Fabaceae. Yam bean.

From Venezuela. Seeds presented by Dr. Henry Pittier, Ministry of Agriculture, Caracas. Received April 2, 1940.

For previous introduction see 117928.

## 136429. Solanum maglia Schlecht. Solanaceae.

Nightshade.

From Chile. Tubers presented by the Ministerio de Agricultura, Departamento de Divulgación y Propaganda Agrícola, Santiago. Received April 10, 1940.

A wild species, native to Chile, with oblong tubers about 1½ inches long.

For previous introduction see 133080.

#### 136430 to 136454.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg. Received April 4, 1940.

136430. Astragalus Chinensis L. f. Fabaceae.

Milkvetch.

Originally from Manchuria. An erect herbaceous perennial, native to China, with smooth slender stems, elliptic-obtuse leaflets, and pendulous and few-flowered racemes of yellow flowers.

For previous introduction see 89399.

136431. Capsicum frutescens L. Solanaceae.

Redpepper.

No. 5 Early Manchurian Yellow. Originally from Manchuria.

136432 to 136443. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

136432. No. 14. Sardia a Carne. Originally from Valparaiso, Chile.

136433. No. 15. A variety with peculiar small fruits, native to India. Originally from Sydney, Australia.

136434. No. 16. South African. Originally from Big River, Saskatchewan.

136435. No. 17. Lemon Hungarian, Originally from Melville, Saskatchewan.

136430 to 136454-Continued.

136436. No. 18. Siberian × Mennonite. Grown for 50 years by the Mennonites in Canada; originally from Gouldtown, Saskatchewan.

136437. No. 19. Ukrainian. Originally from Taber, Alberta.

136438. No. 20. Ukrainian Earliest. Originally from Morden, Manitoba.

136439. No. 21. Harbin No. 6 1-37-6-1. Originally from Harbin, Manchuria.

136440. No. 22. Harbin No. 9 1-37-9-1. Originally from Harbin, Manchuria.

136441. No. 23. Local. Originally from Southern Rhodesia.

136442. No. 24. Phale Egyptian. Originally from Cairo, Egypt.

136443. No. 25. Meshedi. Originally from Quetta, Baluchistan, India.

136444 to 136447. Cucurbita Maxima Duchesne. Cucurbitaceae. Squash.

136444. No. 7. Russian X American. Originally from Eldersley, Saskatchewan.

136445. No. 8. Ukrainian × American. Originally from Ceylon, Saskatchewan.

136446. No. 9. Russian Field  $\times$  American. Originally from Kamsack, Saskatchewan.

136447. No. 6. Ukrainian. Originally from Tolstoi, Manitoba.

136448 and 136449. Cucurbita Pepo L. Cucurbitaceae. Pumpkir.

136448. Summer squash. No. 10, of Chinese origin; originally from Harbin, Manchuria.

136449. No. 3. Chinese Sweet. Originally from Harbin, Manchuria.

136450 to 136452. Lycopersicon esculentum Mill. Solanaceae. Tomato.

136450. No. 11. Del Pais. Originally from Valparaiso, Chile.

136451. No. 12. Egyptian. Originally from Cairo, Egypt.

136452. No. 13. Pear-shaped, red. Originally from Southern Rhodesia.

136453. Physalis sp. Solanaceae.

Groundcherry.

No. 2. Siberian. Originally from Moore Park, Manitoba.

136454. Zea mays L. Poaceae.

Corn.

No. 1. Extra Early Prizetaker. Originally from Tisdale, Saskatchewan.

136455. Ceanothus fendleri A. Gray. Rhamnaceae.

From Colorado. Plants purchased from the Rockmont Nursery, Boulder. Received April 12, 1940.

136456 to 136467. Castanea mollissima Blume. Fagaceae.

Hairy chestnut.

From China. Scions presented by Peter Liu. Received April 12, 1940. Collected Febuary 26 and 27, 1940.

136456. No. 1. From the vicinity of Pei Tao village, north of San Tun Ying, February 26, 1940. Trunk about 20 feet high; nuts not considered very good.

136457. No. 2. From north of Pei Tao village, February 26, 1940. Trunk about 9 feet high.

136458. No. 3. From the vicinity of Pei Tao village, north of San Tun Ying, February 26, 1940. Trunk about 10 feet high.

136459. No. 4. From Pei Tao village, north of San Tun Ying, February 26, 1940. Trunk about 10 feet high; nuts fairly large.

136460. No. 5. From the vicinity of Pei Tao village, February 26, 1940. Trunk of tree not very tall; a good yielder.

136461. No. 6. From north of Pei Tao village, February 26, 1940. Trunk about 9 feet high; a good yielder.

136462. No. 7. From near Pa Li Pu village, southeast of San Tun Ying, February 27, 1940. Tree about 35 feet high.

136456 to 136467—Continued.

136463. No. 8. February 27, 1940. Tree about 35 feet high.

136464. No. 9. From west of Pa Li Pu village, February 27, 1940. Tree about 35 feet high.

136465. No. 10. From an orchard in Pa Li Pu village, February 27, 1940; a good yielder.

136466. No. 11. From near the village of Fang An Chai about 5 miles southeast of San Tun Ying, February 27, 1940.

136467. No. 12. From the same orchard as the preceding, February 27, 1940.

## 136468 to 136471. CITRUS spp. Rutaceae.

From Iran. Collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 13, 1940.

Collected at Khabis, Kirman, January 10, 1940.

136468, CITRUS LIMON (L.) Burm. f.

Lemon.

No. 5648. Limue Khargi. Fruit ellipsoid, up to 4 inches long; rind very thin, light orange; flesh moderately seeded, less acid than that of the Italian lemon; good keeper.

136469. Citrus sp.

No. 5647. Bakh. Fruit grapefruit-shaped, 3 by 4 inches; rind smooth, lemon color; flavor pleasantly acid.

136470 and 136471. CITRUS LIMON (L.) Burm. f.

136470. No. 5645. Dahe. Fruit subglobose, 6 inches long; rind smooth, 15 mm. thick, lemon yellow; seeds numerous at the core, flesh softer than 5646; lemon acid flavor.

136471. No. 5646. Otroj. Fruit subglobose to elongate, 5 by 4 inches; rind rough, 10 mm. thick, lemon yellow; seeds numerous at the core, firm salmon-tinted flesh; flavor pleasantly acid, milder than a lemon.

## 136472. Aleurites montana (Lour.) Wilson. Euphorbiaceae.

Mu-oil tree.

From France. Seeds purchased from Vilmorin-Andrieux & Co., Paris. Received April 9, 1940.

A tree with oil-producing seeds, closely allied to the tung tree, for use in breeding experiments; native to southern China.

For previous introduction see 93240.

136473. Cynodon plectostachyus (Schum.) Pilg. Poaceae. Grass.

From South Africa. Seeds presented by L. J. Keena, American Minister, Cape Town. Received April 9, 1940.

"Star" grass. A low, perennial grass with creeping stolons and short blades and upright flowering stems.

For previous introduction see 61089.

## 136474. Cynodon plectostachyus (Schum.) Pilg. Poaceae. Grass.

From South Africa. Seeds presented by the Department Van Landbou en Bosbou Rietondale, Weidings-Navorsingstasie, through Prof. A. D. Leppan, of the National Marketing Council, Pretoria. Received April 9, 1940.

East African "Star" grass (Lake Shirwa strain).

### 136475. Lycopersicon esculentum Mill. Solanaceae. Tomato.

From New Zealand. Seeds presented by Dr. Carl Taylor, Chief of the Division of Farm Population and Rural Life, Bureau of Agricultural Economics, United States Department of Agriculture. Received April 16,1940.

#### 136476 and 136477.

From England. Plants purchased from D. Stewart & Son, Ltd., Ferndown Nurseries near Wimborne, Dorset. Received April 22, 1940.

136476. Chaenomeles Japonica (Thunb.) Lindl. Malaceae. Dwarf Japan quince. Var. Crippsii.

136477. CHAENOMELES.

Var. Knapp Hill Scarlet.

#### 136478 to 136519.

From France. Trees purchased from Pépinières F. Delaunay, Angers. April 15, 1940.

Peach. 136478 to 136481. Amygdalus persica L. Amygdalaceae.

136478. Belle Bausse.

136479. Bourdine.

136482 to 136492. MALUS SYLVESTRIS Mill. Malaceae. Apple.

136482. Bouteille Jaune de Caen.

136483. Doux Normandie.

136484. Ecarlatine.

136485. Fenouillet Gris.

136486. Frequin Tardif de la Sarthe.

136487. Michelin.

136493 to 136496. PRUNUS DOMESTICA L. Amygdalaceae. Common plum.

136493. Monsieur à Fruits Jaunes.

136494. Reine Claude Diaphane.

136495. Reine Claude Dorée.

136496. Reine Claude Tardive de Chambourcy.

136497 to 136502. PRUNUS AVIUM L.

136497. Bigarreau Antoine Momblot.

136498. Bigarreau Gros Blanc.

136499. Bigarreau Gros Coeuret.

136503 and 136504. PRUNUS CERASUS L.

136503. Belle de Sauviany.

136504. Poitevine.

136505 to 136507. PRUNUS AVIUM L.

136505. Beauté de l'Ohio.

136506. Ramon Oliva.

136507. Sucrée de L. Leclerc.

136508. Prunus domestica L.

Reine Claude Verte.

136509 to 136519. Pyrus communis L. Malaceae. Common pear.

136509. Besi Quessoy d' Hiver.

136510. Beurré d'Avril.

136511. Figue d' Alençon.

136512. Général de Lamorecière.

136513. Philippe Chauveau.

136514. Présent de Van Mons.

136515. René Dunan.

136516. Saint-Germain d' Hiver.

136517. Suzette de Bavau.

136518. Tardive de Toulouse.

136519. Bergamotte Hertrich.

136480. Chancelière.

136481. Pêcher Pleureur.

136488. Paradisiaca Atrosanguinea.

136489. Peau de Vache.

136490. Rambourg d' Hiver.

136491. Reinette Grise du Canada.

136492. Schoolmaster.

Sweet cherry.

136500. Bigarreau Pélissier.

136501. Bigarreau Tardif de Collonge.

136502. Bigarreau Tombret.

Sour cherry.

Sweet cherry.

Common plum.

#### 136520 to 136546.

From France. Plants purchased from G. Benard & Co., Olivet-Orleans. Received April 15, 1940.

136520 to 136523. Ceanothus. Rhamnaceae.

136520. Ibis Rose.

136521. Indigo.

136522. Perle Rose.

136523. Richesse.

136524 to 136527. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

Dwarf Japan quince.

136524. Candida.

136525. Gaujardii.

136526. Grand Perfecta.

136527. Versicolor Lutescens.

136528. Chaenomeles lagenaria var. Wilsonii Rehder.

Japan quince.

136529 and 136530. DIERVILLA CORAEENSIS (Thunb.) DC. Caprifoliaceae.

Korean weigela.

An ornamental Japanese shrub 6 to 10 feet high, with oval long-pointed leaves 3 to 5 inches long and flowers that are at first pale pink, later changing to carmine.

136529. Alba.

136530. Rosea.

For previous introduction see 135408.

136531 and 136532. DIERVILLA CORAEENSIS X FLORIBUNDA.

136531. Lavalle.

136532. Othello.

136533. Diervilla florida X floribunda.

President Duchartre.

136534. DIERVILLA.

Bouquet Rose.

136535. Diervilla florida X coraeensis.

Madame Couturuer.

136536 to 136545. DIERVILLA.

136536. Descartes.

136537. Docteur Baillon.

136538. Voltaire. 136539. Heroine.

136540. Kosteriana Variegata.

136541. Madame Billard.

136542. Madame Lemoine.

136543. Rosea Folius Purpureis.

136544. Seduction.

136545. Verschaffelti.

136546. X PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae. Lemoine mockorange.

Candelabre.

#### 136547. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

From Canada. Seeds presented by Dominion Forage Crops Laboratory, University of Saskatchewan, Saskatoon. Received April 16, 1940. Viking S-897.

136548. Platanus orientalis L. Platanaceae. Oriental planetree.

From Italy. Scions presented by Dr. Antonio Biraghi, R. Stazione de Patologia Vegetal, Rome. Received April 17, 1940.

For previous introduction see 42648.

#### 136549 to 136555.

From France. Plants purchased from Pépinières R. Turbat & Co., Orleans. Received April 25, 1940.

136549. Chaenomeles lagenaria var. cathayensis (Hemsl.) Rehder. Malaceae. Quince.

 $136550. \times$  Deutzia маgnifica var. Latiflora (Lemoine) Rehder. Hydran geacea.

136551. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Longipetala.

136552. DIERVILLA PRAECOX Lemoine. Caprifoliaceae. *Profusion*.

136553 and 136554. PHILADELPHUS. Hydrangeaceae.

Mockorange.

136553. Argentine.

136554. Sir de Billard.

136555. Platanus orientalis L. Platanaceae.

Oriental planetree.

#### 136556 to 136564.

From Greece. Cuttings presented by Prof. P. T. Anagnostopoulos, Ecole Supérieure d'Agriculture, Athens. Received April 15, 1940.

For previous introduction see 136548.

136556 and 136557. Amygdalus persica L. Amygdalaceae.

Peach.

136556. Flore rubro-pleno.

136557. Seedling stocks.

136558. Prunus armeniaca L. Amygdalaceae.

Apricot.

Précoce d'Espéren.

136559.  $\times$  Prunus effusa (Host) Schneid.

Duke cherry.

Belle Magnifique.

136560 and 136561. PRUNUS INSITITIA L.

136560. Crosse Miratelle de Metz.

136561. St. Julien.

136562. PRUNUS DOMESTICA L.

Common plum.

Damas de Toulouse.

136563 and 136564. Pyrus communis L. Malaceae.

Common pear.

136563. Bergamotte d'Espéren.

136564. Comtesse de Paris.

136565 to 136577. Triticum Aestivum L. Poaceae. Common wheat.

From Spain. Seeds presented by the Instituto de Cerealicultura, Estación de Jerez de la Frontera. Received April 15, 1940.

136565. Andalucia No. 344.

136566. Azul de Carmona Linea 291.

136567. Barbilla.

136568. Capablanca.

136569. Colorado de Jerez.

136570. Coruche.

136571. Jerez 1936 Linea 112.

136572. Jerez 1. 937 Linea 142.

136573. Macolo de Jerez Linea 33.

136574. Obispado.

136565 to 136577-Continued.

136575. Semental de Sevilla Linea 70.

136576. Senatore Cappelli.

136577. Tremes.

## 136578 to 136627.

From France. Trees purchased from Pépinières Baltet, Troyes (Aube). Received April 16, 1940.

136578 to 136586. Amygdalus persica L. Amygdalaceae. Peach.

**136578.** Baron Dufour. **136579.** Belle Beausse.

136580. Belle Imperiale.136581. Bourdine.

136582. Cote d'Azur.

136587 to 136606. MALUS SYLVESTRIS Mill.

136587. Ananas.

136588. De Chataignier.

136589. De Vigne.

**136590.** *Ecarlatine*. **136591.** *Fenouillet Gris.* 

136592. Fleuritard.

136593. Francatu.

136594. Galloway Pippin.136595. Gros Locard Vert.

136596. Nez Plat.

136607. Prunus armeniaca L. Amygdalaceae. Kaisha.

136608 to 136610. X PRUNUS EFFUSA (Host) Schneid.

136608. Anglaise Tardive.

**136609.** Belle de Chatenay. **136610.** Belle de Choisu.

136611 to 136614. PRUNUS AVIUM L.

136611. Belle de Franconville.

**136612.** *Gros Coeuret.* 

136615 and 136616. PRUNUS CERASUS L.

136615. Montmorency Bretonneau.

136616. Montmorency de Sauvigny.

136617 to 136619. Prunus avium L.

136617. Pelissier.

136618. Sylva de Palluau.

136619. Tardif de Ladé.

136620 to 136627. Pyrus communis L. Malaceae.

eae. Common pear.

136620. Bergamotte Arsène Sannier. 136624. Carisi.

136621. Beurré d'Avril. 136625. Professeur Gillekins.

136622. Beurré Gris d'Amboise. 136626. Professeur Opoix.

136623. Cardinal Georges d'Amboise. 136627. Saint Germain d'Hiver.

Malaceae.

136583. Gros violet.

136584. *Hative Paullard*.136585. *Lily Baltet*.

136586. Madeleine Hariot.

136598. Pigeon de Rouen.136599. Reinette de Cuzy.

136597. Peau de Vache.

136600. Reinette de la Pentecote. 136601. Reinette des Carmes.

136602. Reinette Dorée.

136603. Reinette Dorée de Versailles.

136604. Rousse Latour.136605. Royale d'Angleterre.

136613. Gros Rouge.

136606. Verollot.

D 1 1

Apricot.

Apple.

Duke cherry.

Sweet cherry.

Sirect care

136614. Jaune de Buttners.

Sour cherry.

#### 136628 to 136646.

From the Philippine Islands. Seeds collected by the Archbold-Fairchild Expedition. Received March 15, 1940.

136628. Aglaia sp. Meliaceae.

No. 162. From Mount Apo National Park, Mindanao, January 22, 1940.

136629. Alocasia macrorhiza (L.) Schott. Araceae Hawaiian giant taro.

No. 158. From Mindanao, January 23, 1940.

For previous introduction see 134979.

136630. Artocarpus odoratissima Blanco. Moraceae.

Marang.

No. 148. From Mindanao, January 18, 1940. A medium-sized tropical tree, the fruit of which resembles the jackfruit and the seeded breadfruit in appearance, but is superior in quality to either. It is native to the southern Philippine Islands and the Sulu Archipelago. The roundish oblong fruits, about 6 inches long, have a thick fleshy rind and white, sweet flesh that is juicy and aromatic, with a pleasant flavor.

For previous introduction see 80852.

136631. Capsicum frutescens L. Solanaceae.

Redpepper.

No. 171. From the hillsides of Maripipi in the Samar Sea, January 13, 1940.

136632. Caryota cumingii Lodd. Phoenicaceae.

Palm.

No. 141. From the cliffs of Maripipi in the Samar Sea, January 13, 1940.

For previous introduction see 134985.

136633. Castanopsis philipensis (Blanco) Vidal. Fagaceae.

No. 149. From Marasila, Mindanao, January 22, 1940.

For previous introduction see 103851.

136634. Diospyros Maritima Blume. Diospyraceae.

No. 138. From the water's edge of El Templo Island, January 10, 1940. A large and handsome tree with oblong-elliptic leaves 2 to 6 inches long, shining above, and globose 4-seeded fruits about 1 inch through. Native to tropical coastal areas of eastern Asia.

136635. Momordica sp. Cucurbitaceae.

No. 144. From an arbor at Dumaguete, Negros Island, January 16, 1940. An ornamental vine, bearing deep-orange-colored fruits up to 4 inches in diameter that are covered with soft spines like the spines of a chestnut bur; they open and show curious brown seeds covered with a blood-red, rather slimy arillus, contrasting with the color of the fruit.

136636. Oncosperma sp. Phoenicaceae.

Palm.

No. 152. From a fresh-water swamp 6 to 12 inches above water level, Davao-Madaum Road, Mindanao, January 23, 1940. A slender, spiny, cluster palm up to 60 feet high, resembling *Oncosperma horridum*.

136637. Ormosia calavensis Blanco. Fabaceae.

No. 146. From Camp Lookout, Dumaguete, Negros Island, Janaury 16, 1940, at 1,000 feet altitude. A large tropical tree with unequally pinnate leaves consisting of 7 or 9 ovate leaflets. The violet-colored flowers are followed by dark-brown small woody pods containing 2 or 3 coral-pink seeds. Native to the Philippines.

For previous introduction see 134361.

136638. Pandanus sp. Pandanaceae.

Screwpine.

No. 153. From hammocks in Bincimgan, Davao Province, Mindanao, January 23, 1940. A screwpine with roots up to 12 feet, then a straight trunk 12 feet higher with a total height of 30 feet; it has many branches. The decorative scarlet fruits, borne in clusters of a dozen or less are 5 by 9 inches, resembling large unopened pine cones. The leaves are 2 inches wide and 9 feet long, with spiny edges.

186339. Pandanus sp.

Screwpine.

No. 156. From marshy soil near Talomo, Davao, January 22, 1940. The coneshaped scarlet fruits are borne close under the leaves on short stems. The leaves are long and broad. 136628 to 136646-Continued.

136640. PANGIUM EDULE Reinw. Flacourtiaceae.

No. 155. From Mount Apo National Park, Malasila, Mindanao, January 21, 1940. For previous introduction see 135446.

136641. PINANGA Sp. Phoenicaceae.

Palm.

No. 161. From a forest at Malasila, Mindanao, January 22, 1940. The attractive fruits are borne in immense clusters.

**136642.** Pinanga sp.

Palm.

No. 154. From along Taguni River, January 21, 1940. A slender pinnate-leaved palm of medium height, with the leaflets bipartite down to  $\frac{1}{3}$  their length. The young leaflets are mottled as in *Pinanga maculata*. The fruit cluster, about 2 feet long, bears more than a thousand small fruits  $\frac{3}{4}$  inch long, brilliant red at first, becoming silky black when ripe.

136643. Callicarpa cumingiana Schauer. Verbenaceae.

No. 157. January 1, 1940. A rather low stocky tree with an umbrella-shaped crown and scattered, oblong to elliptic, stout-petioled leaves, the medium-sized blades about 8 inches long. The small whitish flowers, in paniculate corymbs about 4 inches across in the upper leaf axils, are followed by shiny, red, globose fruits \( \frac{1}{8} \) inch in diameter. Native to the Philippine Islands.

136644. Pueraria Phaseoloides (Roxb.) Benth. Fabaceae.

No. 159. From Cotabato-Davao, Mindanao, January 21, 1940. A twining, semi-shrubby plant, densely covered with brown hairs. The leaflets are green above and densely matted beneath with gray hairs, and the reddish flowers are in long-stemmed racemes. Native to tropical regions of the Himalayas.

For previous introduction see 133962.

136645. (Undetermined.)

No. 163. From near Cotabato, Mindanao, January 22, 1940. A shrub bearing only a few attractive, yellow, tubular flowers, followed by hard yellow fruits.

136646. PITTOSPORUM sp. Pittosporaceae.

No. 139. From Tagapulo Island, Samar Sea, January 12, 1940. An ornamental shrub of open habit, 12 feet high with large glossy leaves. The deep-orange, egg-shaped fruits are in terminal clusters of four to six.

#### 136647 to 136660.

From England. Trees purchased from Thompson & Morgan, Ipswich. Received April 18, 1940.

136647. Amygdalus persica L. Amygdalaceae.

Peach.

Russell's Red.

136648 to 136652. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

136648. Beauty of Kent.

136651. *Juneating*.

136649. Fearn's Pippin.

136652. Kerry Pippin.

136650. James Kirk.

130030. James 1111k.

136653. MALUS PRUNIFOLIA (Willd.) Borkh.

Golden Gem.

136654. Malus toringoides (Rehder) Hughes.

Cutleaf crab.

A shrub or small tree, up to 25 feet high, with oval 4-lobed leaves, and handsome fruits about half an inch long, yellow, usually with a red cheek. Native to western China.

For previous introduction see 77840.

136655 and 136656. Prunus cerasifera var. atropurpurea Jäger. Amygdalaceae.

136655. Hazeldene.

136656. Nigra.

136647 to 136660-Continued.

136657 and 136658. PRUNUS DOMESTICA L.

Common plum.

136657. Prince of Wales.

136658. Sultan.

136659 and 136660. Pyrus communis L.

Common pear.

136659. Jean Van Geert.

136660. Winter Orange.

### 136661 to 136675.

From New Jersey. Plants purchased from the Princeton Nurseries, Princeton. Received April 19, 1940.

136661. Ceanothus americanus L. Rhamnaceae.

New Jersey tea.

For previous introduction see 132035.

136662. Chaenomeles Japonica (Thunb.) Lindl. Malaceae. Dwarf Japan quince. For previous introduction see 136527.

136663. Deutzia gracilis Sieb. and Zucc. Hydrangeaceae.

For previous introduction see 132456.

136664. DEUT IA SCABRA Thunb.

Fuzzy deutzia.

Pride of Rochester.

For previous introduction see 136551.

136665 to 136671. DIERVILLA spp. Caprifoliaceae.

136665. DIERVILLA CORAEENSIS (Thunb.) DC.

Korean weigela.

For previous introduction see 136530.

136666. DIERVILLA FLORIBUNDA Sieb, and Zucc.

Crimson weigela.

For previous introduction see 135978.

136667. DIERVILLA FLORIDA (Bunge) Sieb. and Zucc.

A shrub up to 10 feet high, with short-petioled, serrate leaves 2 to 4 inches long, tomentose beneath. The tubular flowers, more than 1 inch long, rosy pink outside and paler inside, are borne in axillary cymes.

For previous introduction see 93126.

136668. DIERVILLA SESSILIFOLIA Buckl.

Southern bush-honeysuckle.

A beautiful free-flowering North American plant, with light pea-green leaves 8 inches long and 3 to 4 inches broad and pretty, sweet-scented, light-yellow flowers

For previous introduction see 49945.

136669 to 136671. DIERVILLA.

136669. Eva Rathke.

136670. Nana Variegata.

136671. Candida.

136672. Periploca graeca L. Asclepiadaceae.

A tall woody vine, with ovate-lanceolate leaves and wheel-shaped brownish-green flowers 1 inch across in loose, terminal cymes. Native to Asia Minor and southern Europe.

For previous introduction see 122650.

136673 to 136675. PHILADELPHUS spp. Hydrangeaceae.

136673. X PHILADELPHUS MAXIMUS Rehder.

A tall shrub, a hybrid between Philadelphus tomentosus and P. pubescens.

136661 to 136675—Continued.

136674. PHILADELPHUS SERICANTHUS Koehne.

Silk mockorange.

A white-flowered shrub 10 feet high, native to thickets of western Szechwan, China, at altitudes of 4,200 feet.

For previous introduction see 132607.

136675. Philadelphus verrucosus Schrad.

For previous introduction see 132609.

#### 136676 to 136753.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg. Received April 19, 1940.

136676 to 136751. Phaseolus vulgaris L. Fabaceae. Common bean.

136676. No. 2. Yellow. Originally from Melville, Saskatchewan.

136677. No. 3. Purple. Originally from Punnicky, Saskatchewan.
136678. No. 4. Originally from Punnicky, Saskatchewan.

136679. No. 5. Originally from Viking, Alberta.

136680. No. 6. 1200-1. Originally from Arborfield, Saskatchewan.

136681. No. 7. Princess of Artois. Originally from Manitoba.

136682. No. 8. Sel 26-27. Originally from Minnesota University, Minneapolis, Minn.

Minn. 136683. No. 9. Vax-Guldhorn. Originally from the Gustafson Seed Co., Sweden.

Nos. 136684 to 136686 originally from the Department of Agriculture, Sydney, Australia.

136684. No. 10. Meyer.

136685. No. 11. Kleine Weisse.

136686. No. 12. Little Navy.

136687. No. 13. Yamal. Originally from Lenore, Manitoba.

136688. No. 14. Lapin. Originally from the New Hampshire Agricultural Experiment Station.

136689. No. 15. Burbank Navy.

136690. No. 16. 0-675. Originally from Ottawa, Ontario.

136691. No. 17. Dwarf Green Round Pod. Originally from Indian Head, Saskatchewan.

136692. No. 18. Drought Resistant. Originally from Milo, Alberta.

136693. No. 19. Idaho Brown. Originally from Arrowwood, Alberta.

136694. No. 20. Norida. Originally from Carmen, Manitoba.

136695. No. 21. Rice (Paraguay). Originally from Steinback, Manitoba.

**136696.** No. 22. Norwegian Brown.

136697. No. 23. Swedish Brown. Originally from Noves, Minn.

136698. No. 24. Pearl Sugar. Originally from Avebury, Saskatchewan.

136699. No. 27. Originally from Ethelton, Saskatchewan.

136700. No. 28. Red. Originally from Benton, New Brunswick.

136701. No. 29. Originally from Hyas, Saskatchewan.

136702. No. 30. Golden Shower Hungarian. Originally from Leask, Saskatchewan.

136703. No. 31. Originally from Gouldtown, Saskatchewan.

136704. No. 32. Originally from Lintlaw, Saskatchewan.

136705. No. 33. Originally from Argyle, Manitoba.

#### 136676 to 136753-Continued

136706. No. 34. Laurentian. Originally from Lac Nantel, Terrebonne County, Quebec.

136707. No. 35. Aunt Susie. Originally from Waterloo, Ontario.

136708. No. 36. Golden Early. Originally from Hyas, Saskatchewan.

136709. No. 37. Merveille du Marche. Originally from Moreau Frères, France.

136710. No. 38. Originally from Daylesford, Saskatchewan.

136711. No. 39. Hungarian. Originally from Leask, Saskatchewan.

136712. No. 40. Originally from Norquay, Saskatchewan.

136713. No. 41. Louisiana. Originally from Zelma, Saskatchewan.

136714. No. 42. Red-White. Originally from Noyse, Minnesota.

136715. No. 43. Golden Shower. Originally from Avebury, Saskatchewan.

136716. No. 44. Swedish Brown. Originally from Balmoral, Manitoba.

136717. No. 45. Winter. Originally from Winkler, Manitoba.

136718. No. 46. Oregon Brown Greasy. Originally from Rife, Alberta.

136719. No. 47. Phasels No. 52. Originally from Harbin, Manchuria.

136720. No. 48. Originally from Norge, Saskatchewan.

136721. No. 49. Originally from Wadena, Saskatchewan.

136722. No. 50. Originally from Miami, Manitoba.

136723. No. 51. Originally from Blumenhof, Saskatchewan.

136724. No. 52. White. Originally from Prince Albert, Saskatchewan.

136725. No. 53. Originally from Punnicky, Saskatchewan.

136726. No. 54. Olsok. Originally from Weibull Seed Co., Norway.

136727. No. 55. Austrian Sugar. Originally from Norquay, Saskatchewan.

136728. No. 56. Striped Brown. Originally from Plumas, Manitoba.

136729. No. 57. Kotenashi. Originally from Bon Accord, Alberta.

136730. No. 58. Golden. Originally from MacKay, Alberta.

136731. No. 59. Originally from Thornhill, Manitoba.

136732. No. 60. Brown. Originally from Tavistock, Ontario.

136733. No. 61. Brown Dwarf. Originally from Nilon, Alberta.

136734. No. 62. Russian. Originally from Blumenhof, Saskatchewan.

136735. No. 63. Swedish Brown. Originally from Noyes, Minnesota.

136736. No. 64. Originally from Rock Island, Quebec.

136737. No. 65. Horticultural. Originally from Plumas, Manitoba.

136738. No. 66. O-683. Originally from Ottawa, Ontario.

136739. No. 67. Bush Bean. Originally from Hyas, Saskatchewan.

136740. No. 68. Red and Black Striped. Originally from Souris, Manitoba.

136741. No. 69. 0-719. Originally from Ottawa, Ontario.

136742. No. 70. No. 13. Originally from Souris, Manitoba.

136743. No. 71. Snyboonen. Originally from Tollend P. O., Alberta.

136744. No. 72. Cameleon. Originally from Lac Du Bonnet, Manitoba.

136745. No. 73. Buckskin. Originally from Grimshaw, Alberta.

136746. No. 74. Golden Horn. Originally from Benary Seed Co., Germany.

136747. No. 75. Pole Bean, Early Purple. Originally from Punnicky, Saskatchewan.

136748. No. 76. Pole Bean. Originally from Victoria, British Columbia.

136749. No. 77. Pole Bean. Originally from Glenside, Saskatchewan.

136750. No. 78. Pole Bean. Originally from Melville, Saskatchewan.

136676 to 136753—Continued.

136751. No. 1. 60-Day Bean. Originally from Hoey, Saskatchewan.

136752 and 136753. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

Originally from Harbin, Manchuria.

136752. No. 26. Asparagus Bean No. 54.

136753. No. 25. Asparagus Bean No. 61.

## 136754 to 136769.

From France. Plants purchased from V. Lemoine & Son, Nancy. Received April 20, 1940.

136754. Ceanothus americanus var. Intermedius (Pursh) Trelease. Rhamnaceae.

Nanus.

136755 to 136762. CEANOTHUS.

136755. Biela.

136759. La Condamine.

136756. Carmen.

136760. Saphir.

136757. Croix de Sud.

136761. Vesta.

136758. Esperanto.

136762. Victor Jouin.

136763. DEUT IA SCABRA Thunb. Hydrangeaceae. Macrothyrsa.

Fuzzy deutzia.

136764. DEUTZIA.

Cuneata.

136765 to 136769. DIERVILLA. Caprifoliaceae.

136765. Buisson Flueri.

136768. Perle.

136766. Glorieux.

136769. Richesse.

136767. Gracieux.

## 136770 to 136793.

From France. Trees purchased from Pinquet-Guindon et Fils, Saint-Symphorien (Indre-et-Loire). Received April 22, 1940.

136770 to 136780. Malus sylvestris Mill. Malaceae.

Apple.

136770. Bouteille de Caen.

136776. Muscadet.

136771. Closette.

136777. Reinette Étoilée.

136772. Cravert.

136778. Reinette Grise du Canada.

136773. Doux d'Argent.

136779. Reinette Grise Dure.

136774. Francatu Rose.

136780. Royal d'Angleterre.

136775. Lambron.

136781 to 136789. Prunus spp. Amygdalaceae.

136781. X PRUNUS EFFUSA (Host) Schneid.

Duke cherry.

Cerise de Spa.

136782. PRUNUS AVIUM L.

Sweet cherry.

Guiane Ramon Oliva.

136783 and 136784. PRUNUS CERASUS L.

Sour cherry.

136783. Triaux de Fondettes.

136784. Triaux Precoce.

136785. Prunus insititia L.

Mirabelle de Flotow.

136786 to 136789. Prunus domestica L. 136786. Monsieur a Fruit Jaune.

Common plum.

136770 to 136793-Continued.

136787. Reine Claude Diaphane.

136788. Reine Claude Tardive.

136789. Reine Claude Verte.

136790 to 136793. Pyrus communis L. Malaceae.

Common pear.

136790. Beurré Sichet.

136791. Madame Du Puis.

136792. Précoce Poitevin.

136793. Président Mas.

#### 136794 to 136829.

From Italy, Trees purchased from Vivai Ernesto Schwintzer, Bergamo. Received April 23, 1940.

136794 to 136796. Amygdalus persica L. Amygdalaceae.

Peach.

136794. Gialla di Negrone.

136795. Morellone d' Entratico.

136796. Rossa Gialla Romanesca.

136797. Malus sylvestris Mill. Malaceae.

Apple.

Mela di Moio.

136798 to 136810. Prunus spp. Amygdalaceae.

136798. PRUNUS ARMENIACA L.

Apricot.

Mognana.

136799. PRUNUS CERASUS L.

Sour cherry.

Amarasca di Mondorf.

136800 to 136804. PRUNUS AVIUM L.

Sweet cherry.

136800. Calemer.

136801. Carnea.

136802. Grossa di Germersdorf.

136803. Grossa Nera.

136804. 9 Maggio.

136805. Prunus cerasus L.

Sour cherry.

Marenone di Verona.

136806 to 136810. PRUNUS AVIUM L.

Sweet cherry.

136806. Marosticana.

136807. Moretta di Cesana.

136808. Nera di Bolzano.

136809. Nera di Piemonte.

136810. Precoce di Bolzano.

136811 to 136813. Pyrus communis L. Malaceae.

Common pear.

136811. Butirra d'Aprile.

136812. Butirra Liegel.

136813. Di Trescore.

136814 to 136829. VITIS. Vitaceae.

Grape

136814. Angelo Pirovano.

136815. Aurora (I.P. 100).

136816. Barbaleu.

136794 to 136829-Continued.

136817. Ciclopica (I.P. 60).

136818. Delizia di Vaprio (I.P. 46a).

136819. Italia (I. P. 65).

136820. Perlona (I. P. 54).

136821. Primus (I. P. 7).

136822. I. P. 1.

136823. I. P. 14.

136824. I. P. 17.

136825. I. P. 47.

136826, I. P. 52.

136827. I. P. 75.

136828. I. P. 90.

136829. Moscato Dell' Adda.

### 136830 to 136834. SACCHARUM. Poaceae.

Sugarcane.

From the Fiji Islands. Cuttings presented by the Colonial Sugar Refining Co., Nausori. Received April 25, 1940.

136830. No. 4. Duruka Coqecoqe. Cauliflower edible head.

136831. No. 5. Duruka Memanu. Cauliflower edible head type.

136832. No. 2. Duruka Vico Damu. Flowering type.

136833. No. 3. Duruka Vico Teiniloka (Bronze). Flowering type.

136834. No. 1. Duruka Vico Vula. Flowering type.

## 136835 to 136839. Paspalum dilatatum Poir. Poaceae. Dallis grass.

From Australia. Seeds presented by Dr. W. L. Waterhouse, School of Agriculture, University of Sydney, Sydney, New South Wales. Received April 17, 1940.

This grass has long been introduced in the Southern States, where it is widely distributed. It is used for pasturage, particularly on rich land, and frequently is cut for hay. It is native to Argentina, but is now extensively cultivated in Australia, New Zealand, South Africa, and in general throughout the Tropics.

For previous introduction see 62047.

136835. From Glen Innes

136836. From Casino.

136837. From Carlingford.

136838. From Ourimbah.

136839. From Kyogle.

## 136840. X PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae.

Lemoine mockorange.

From England. Plants purchased from Walter C. Slocock, Ltd., Goldsworth "Old" Nursery, Woking, Surrey. Received April 25, 1940.

Var. Coquette.

#### 136841 to 136849.

From South Australia. Seeds presented by J. Howard Johnson, Saint Peters. Received April 3, 1940.

136841 to 136846. ACACIA spp. Mimosaceae.

136841 to 136843. ACACIA ARGYROPHYLLA Hook.

An evergreen spreading shrub or small tree, 12 to 20 feet high, with crooked trunk and branches. The phyllodes are obliquely obovate or oblong, rather broad

#### 136841 to 136849—Continued.

obtuse or mucronulate, silvery-silky, sometimes turning golden yellow, mostly  $\frac{3}{4}$  to  $\frac{1}{2}$  inches long. The yellow flower heads are few and short, in axillary racemes or solitary, and the pods are linear to narrow-elliptical. Native to Australia, where it grows in poor sandy soil with a limestone subsoil.

136841. No. 1. From Milang.

136842. No. 2.

136843. Low-growing form.

136844. ACACIA MELANOXYLON R. Br.

An evergreen Australian tree up to 100 feet high, with lanceolate leathery phyllodes 4 inches long, heads of creamy flowers in short racemes, and reddishbrown twisted pods. The dark wood is very similar to black walnut and is used for the same purposes. The tree makes rapid growth when young.

For previous introduction see 106682.

136845. ACACIA Sp.

136846. ACACIA Sp.

From Milang. A bushy, wide-spreading tree, 12 to 20 feet high, called "coastal wattle." It is said to cover a considerable area of sand hills, directly on the coast and a few miles inland, on the southern Yorke Peninsula. The trunk and limbs are crooked and never more than 4 or 5 inches in diameter; the lower branches sweep the ground. The foliage is reported to be silvery green and the flowers to be in racemes. The wood is used only for fuel.

136847. Albizzia sp. Mimosaceae.

From Milang, March 1, 1940.

136848. Casuarina glauca Sieber. Casuarinaceae.

From Milang, January 1, 1940. A small bushy tree.

For previous introduction see 116780.

136849. CASUARINA SD.

From Milang, January 1, 1940. An ornamental tree 30 to 50 feet high and with a tall, straight trunk.

#### 136850 to 136872.

From Canada. Seeds presented by T. F. Ritchie, Central Experimental Farm, Ottawa. Received April 18, 1940.

136850 and 136851. Cucumis sativus L. Cucurbitaceae.

Cucumber.

136850. Delcrow O. A. 1604.

136851. Early Fortune C. S. G. A.

136852. Daucus carota L. Apiaceae.

Carrot.

Chantenay O-A-1154.

136853 to 136858. Lycopersicon esculentum Mill. Solanaceae. Tomato.

136853. Abel O. A.-1607.

136854. Bestal O. A.-1627.

136855. Beston O. A.-1654.

136856. Bonton O. A.-1653.

136857. Farthest North.

136858. Globonnie O. A.-1639.

136859. Phaseolus lunatus L. Fabaceae.

Lima bean.

Henderson Bush.

136850 to 136872—Continued.

136860 and 136861. Phaseolus vulgaris L. Fabaceae.

Common bean.

136860. Princess of Artois O. A. 1145.

136861. Round Pod Kidney Wax O. A. 1148.

136862 to 136868. PISUM SATIVUM L. Fabaceae.

Pea.

136862. Bruce.

136863. Director.

136864. Engress O. A. 926.

136865. Kootenay.

136866. Laxal O. A. 919.

136867. Lincoln.

136868. Tiny.

136869. Solanum melongena L. Solanaceae.

Eggplant.

Blackie O. A. 2698.

136870 to 136872. Zea mays L. Poaceae.

Corn.

136870. Banting.

136871. Dorinny O. A. 1148.

136872. Goldban.

#### 136873 to 136877.

From Rumania. Seeds presented by the Botanic Garden, Cluj. Received April 22, 1940.

136873 to 136876. Onobrychis spp. Fabaceae.

136873. Onobrychis Caput-Galli (L.) Lam.

For previous introduction see 121219.

136874. Onobrychis Crista-Galli (L.) Lam.

An annual or biennial ascending plant 8 to 20 inches high, with pinkish-purple flowers. Native to dry places in the Mediterranean region.

For previous introduction see 72975.

136875. Onobrychis gracilis Bess.

A perennial herb with branching, ascending or erect stems up to  $1\frac{1}{2}$  feet high and small flowers. Native to the eastern Mediterranean region.

136876. Onobrychis Viciaefolia Scop.

For previous introduction see 115398.

136877. Trifolium repens L. Fabaceae.

White clover.

#### 136878 to 136896.

From the Philippine Islands and the Dutch East Indies. Seeds collected by the Archbold-Fairchild Expedition. Received April 10, 1940.

136878. Acanthus ilicifolius L. Acanthaceae.

No. 180. From muddy soil at Port Lebak, the western coast of Mindanao Philippine Islands. January 25, 1940.

136879. Alocasia sp. Araceae.

No. 195. From Sangi Island, Dutch East Indies, January 28, 1940.

136880. Areca sp. Phoenicaceae.

Palm.

No. 208. From the Volcano Sopoetan, Minahassa, Celebes, Dutch East Indies, February 7, 1940, at 800 m. altitude.

136881. Areca sp.

Palm.

No. 218. From Teteloe, Mount Klabat, Minahassa, Celebes, Dutch East Indies, February 15, 1940. A dwarf solitary, feather palm only 8 feet tall and 1 inch in

136878 to 136896 Continued.

diameter. It bears small clusters of orange-yellow fruits  $1\frac{1}{2}$  inches long and  $\frac{1}{2}$  inch through; these resemble clusters of the betel palm but are much smaller; the pinnae have a tendency to split at their edges, forming filaments that hang down. It grows in semishade, but does not like dense shade.

136882. Arenga microcarpa Beccari. Phoenicaceae.

Palm.

No. 224. From Tidore Village, Sangi Island, Dutch East Indies, January 27, 1940. A handsome East Indian palm, with a ringed trunk covered with black hairs when young and a crown of large pinnate leaves. The male and female flowers are borne in the axils of the immense leaves. This palm furnishes sago to a considerable portion of the inhabitants of this island.

For previous introduction see 68109.

136883. BRUGUIERA PARVIFLORA (Roxb.) Wight and Arn. Rhizophoraceae.

No. 198. From a tidal river flowing into Bai van Dago, Sangi Island, Dutch East Indies, February 1, 1940.

136884. Cassia alata L. Caesalpiniaceae.

Ringworm cassia.

No. 179. From the river bed of Palimbang River, west coast of Mindanao, Philippine Islands, January 26, 1940. A shrub up to 10 feet high, sometimes cultivated as an ornamental, with pinnate leaves 2 feet long and showy yellow flowers. Native to tropical America.

For previous introduction see 123477.

136885. Ficus sp. Moraceae.

No. 216. From Manado, Celebes, Dutch East Indies, February 16, 1940.

136886. IXORA Sp. Rubiaceae.

No. 215. From the forest on the island of Sangi, on the borders of Dago Bay, Dutch East Indies, February 1, 1940.

**136887.** (Undetermined.)

No. 181. From Port Lebak, Mindanao, Philippine Islands, January 25, 1940. A rank climber, with large, glossy, trifoliate leaves. It bears clusters of striking crimson pods 2 inches long and mango-shaped; when the pods open they disclose a single large brown seed with a bright light-orange arillus covering the upper half of the seed  $\frac{2}{3}$  the way around.

136888. Passiflora foetida var. Hispida (DC.) Killip. Passifloraceae.

No. 178. From low river land back of Barunayan, western coast of Mindanao, Philippine Islands, January 25, 1940. A trailing vine, hispid throughout, with cordate-trilobate, membranous leaves, small purple flowers, and small, edible, yellow fruits. Native to northwestern South America.

For previous introduction see 114984.

136889. Pinanga sp. Phoenicaceae.

Palm.

No. 192. Lindoeng. From Tahoena, Sangi Island, Dutch East Indies, January 30, 1940. A slender palm, 25 feet high, with a stem 3 inches in diameter at the flower cluster; this is more than 2 feet long and bears hundreds of almost black berries, which are round with a pointed apex and ½ inch in diameter. The stain from the ripe fruit is claret red, turning to blue. The branches of the fruit stems are simple, not branched, and tinged with red; the slightly mottled leaves are long with pointed pinnae.

136890. Premna sp. Verbenaceae.

No. 185. From Port Lebak, Mindanao, Philippine Islands, January 25, 1940. Resembles *Premna odorata* but has almost glabrous leaves.

136891. Sterculia sp. Sterculiaceae.

No. 200. From Bai van Dago, Sangi Island, Dutch East Indies, January 31, 1940

136878 to 136896—Continued.

136892. Tabernaemontana sp. Apocynaceae.

No. 225. From Lembeh Island, Minahassa, Celebes, Dutch East Indies, February 13, 1940. A small shrub, bearing white flowers and large red fruits in pairs.

136893. Tetrastigma sp. Vitaceae.

No. 204. From Menado, Tana Waneke, Celebes, Dutch East Indies. A climbing vine, growing on the edge of Sonneretia mangrove swamp, with salt water covering its roots at times. It has 3-parted leaves of glossy light green and clusters of somewhat flattened glossy black fruits that are more than ½ inch across; the fruits are sweet but contain crystals of calcium oxalate.

136894. XYLOCARPUS MOLUCCENSIS (Lam.) M. Roem. Meliaceae.

No. 206. From Port Lebak, Mindanao, Philippine Islands, January 25, 1940. A large tree with dark, flaky bark, compound leaves of two or three pairs of leaflets, and globular fruits about the size of a small orange and hanging on long stems. The wood is hard, heavy, and easily worked. Native to the Old World Tropics.

136895. (Undetermined.)

No. 212. From a sulfur pit on top of Kawah Masem, Minahassa, Celebes, Dutch East Indies, February 8, 1940.

136896. Deeringia polysperma (Roxb.) Moq. Amaranthaceae.

No. 186. From Port Labek, Mindanao, Philippine Islands, January 25, 1940. A shrub with arching branches 3 to 4 feet long, thin, ovate, acuminate leaves and clusters, 2 or 3 inches long, of small, pearly white, almost translucent berries. Native to tropical Asia.

136897. Hevea Brasiliensis (H. B. K.) Muell. Arg. Euphorbiaceae.
Para rubbertree.

From Panama. Plants presented by the Goodyear Rubber Plantation, Gatun Lake. Received April 29, 1940.

G. V. No. 17.

136898 to 136902. Chaenomeles spp. Malaceae.

Quince.

From Massachusetts. Plants purchased from the Eastern Nurseries, Holliston. Received April 29, 1940.

136898. Chaenomeles lagenaria (Lois.) Koidz.

Japan quince.

Baltzi.

136899 and 136900. CHAENOMELES.

136899. Grandiflora Semiplena.

136900. Sanguinea Semiplena.

136901. X CHAENOMELES SUPERBA f. PERFECTA (Froebel) Rehder.

A form with scarlet flowers and larger and broader leaves than the type.

136902. CHAENOMELES.

Versicolor Lutescens.

#### 136903 to 136907.

From France. Plants purchased from Grandes Roseraies du Val de la Loire, Orleans. Received April 29, 1940.

136903. Chaenomeles lagenaria (Lois.) Koidz. Malaceae.

Permesina Semiplena.

Japan quince.

136904. Chaenomeles.

Quince.

Orange

136905. Deut IA scabra Thunb. Hydrangeaceae.

Fuzzy deutzia.

Eminens.

136903 to 136907-Continued.

136906. DIERVILLA. Caprifoliaceae.

Majesteux.

136907. DIERVILLA RIVULARIS Gattinger.

136908. Gossypium raimondii Ulbrich. Malvaceae.

Cotton.

From Peru. Seeds presented by Prof. Teodoro Boza-Barducci, Estación Experimental Agrícola, Lima. Received April 29, 1940.

A shrub or small tree native to Peru.

For previous introduction see 133056.

#### 136909 to 136911.

From France. Plants presented by L. Levavasseur, Angers. Received April 29, 1940.

136909 and 136910. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

Dwarf Japan quince.

136909. Carnea.

136910. Lavalliensis.

136911. Ceanothus. Rhamnaceae.

Marguerite Andusson.

#### 136912 to 136927.

From France. Trees purchased from Charles Détriché, Angers. Received April 29 1940.

136912. Amygdalus persica L. Amygdalaceae.

Peach.

Belle Beauce.

136913. Malus sylvestris Mill. Malaceae.

Apple.

Reinette Grise du Grand Faye.

136914 to 136925. PRUNUS spp. Amygdalaceae.

136914. PRUNUS ARMENIACA L.

Apricot.

Pêche de Nancy.

136915 to 136918. PRUNUS AVIUM L.

Sweet cherry.

136915. Bigarreau Early Black.

136916. Bigarreau Gros Coeuret.

136917. Bigarreau Rouge.

136918. Ramon Oliva.

136919 and 136920. PRUNUS CERASIFERA Ehrh.

136919. One-year seedlings.

136920. Myrobalan.

136921 and 136922. PRUNUS INSITITIA L.

136921. St. Julien.

136922. St. Julien de Toulouse.

136923 and 136924. PRUNUS DOMESTICA L.

Common plum.

136923. Reine Claude Diaphane.

136924. Reine Claude Violette.

136925. PRUNUS INSITITIA L.

Petite Mirabelle.

136926 and 136927. Pyrus communis L. Malaceae.

Common pear.

136926. Alexandrine Douillard.

136927. Souvenir Jules Guindon.

#### 136928 to 136948.

From France. Trees purchased from L. Levavasseur, Angers. Received April 29, 1940.

136928 to 136934. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

136928. Châtaignier.

136929. Fenouillet Gris Anisé.

136930. Haute Bonté.

136931. Rambour d' Hiver.

136932. Reinette de Bretagne.

136933. Reinette du Roi.

136934. Reinette Grise du Canada.

136935 to 136943. Prunus spp. Amygdalaceae.

136935 and 136936. Prunus avium L.

136935. Bigarreau Gros Coeuret.

136936. Bigarreau Pélissier.

136937 and 136938. X PRUNUS EFFUSA (Host) Schneid.

Duke cherry.

Sweet cherry.

136937. Cerise Belle de Choisy.

136938. Griotte du Portugal.

136939 and 136940. PRUNUS AVIUM L.

Sweet cherry.

136939. Guigne Noire Hative.

136940. Guigne Sucrée de Leon Leclerc.

136941 to 136943. Prunus domestica L.

Common plum.

136941. Abbaye d'Arton.

136942. Reine Claude l' Echoisier.

136943. Reine Claude Noire.

136944 to 136948. Pyrus communis L. Malaceae.

Common pear

136944. Bergamotte d'Eté,

136945. Bési de Chaumontel.

136946. Bon Chrétien d' Hiver.

136947. Figue d'Alencon.

136948. St. Germain d' Hiver.

#### 136949 to 136959.

From France. Plants purchased from Charles Détriché, Angers. Received April 29 1940.

136949 to 136955. CHAENOMELES. Malaceae.

Quince

136949. Alba Plena.

136950. Coccinea Plena.

136951. Columbia.

136952. Eximia.

136953. Maillardii.

136954. Nivea.

136955. Semperflorens.

136956 to 136959. DIERVILLA. Caprifoliaceae.

136956. Beranger.

136957. Grandiflora.

136958. Hortensis Floribunda

136959. Venosa.

### 136960 to 137011.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden University of Middle Asia, Tashkent. Received April 17, 1940.

136960. Agropyron cristatum (L.) Gaertn. Poaceae. Crested wheatgrass.

136961 to 136970. Allium spp. Liliaceae.

136961. Allium aflatunense B. Fedtsch.

A large allium with broad-oblong leaves and umbels of purple flowers on a scape up to 4 feet high. Native to Turkistan.

For previous introduction see 113869.

136962. Allium Barsczewskii Lipsky.

A hardy bulbous plant which may be of ornamental value. Native to western Russia.

For previous introduction see 73943.

136963. ALLIUM CEPA L.

Onion.

136964. ALLIUM CRISTOPHI Trauty.

An allium of the Molium section, with a large dense umbel of deep-lilac flowers. Native to Turkistan.

For previous introduction see 112853.

136965. Allium inconspicuum Vved.

136966. ALLIUM JESDIANUM Boiss, and Buhse.

A pink-flowered onion about 2 feet high, with flat linear leaves and a many-flowered umbel. Native to the mountains of Caucasus.

For previous introduction see 107484.

136967. ALLIUM OLIGANTHUM Kar. and Kir.

136968. Allium schubertii Zucc.

A large bulbous plant native to Asia Minor and Iran, with broadly strap-shaped leaves and dull rose-colored flowers in huge rather open subglobose heads, which are at times a foot in diameter.

For previous introduction see 124947.

136969. Allium sewerzowi Regel.

An onion with a scape about 6 inches high and linear-lanceolate leaves slightly exceeding the scape. The rosy-lilac flowers are in a hemispherical umbel. Native to Turkistan.

For previous introduction see 107485.

136970. Allium suworowi Regel.

A hardy bulbous plant with very narrow flat leaves up to 16 inches long, and hemispherical umbels of fragrant violet-rose flowers. Native to the Kirghis Desert, Turkistan.

For previous introduction see 115061.

136971. ALTHAEA LITWINOWI Iljin. Malvaceae.

A hardy herbaceous althaea with solitary or few stems, ovate to orbicular leaf blades, 3-lobed or almost entire, and pale-violet flowers with sulfur or rarely whitish bases arranged singly in axils or few in racemes. A hybrid found in Turkistan, between Althaea nudiflora and A. rhyticarpa.

136972. Alyssum sp. Brassicaceae.

Introduced as Alyssum minimum Willd., a name without botanical standing.

136973. ALYSSUM SZOVITSIANUM Fisch. and Mey.

An annual yellow-flowered alyssum from southeastern Europe, about a foot high, with oblong-linear leaves and pods sometimes 1 inch long.

For previous introduction see 107489.

136960 to 137011—Continued.

136974. ARUM MACULATUM L. Araceae.

An arum from Asia Minor about 1 foot high with brownish, broadly hastatesagittate leaves. The spathe tube is oblong ovoid, white within, with the limb intense black purple. A perennial herb related to Arum orientale.

For previous introduction see 106462.

136975. Arum korolkowi Regel.

A perennial herb.

136976. Asparagus brachyphyllus Turcz. Convallariaceae.

A perennial asparagus with flexuose, branching stems up to  $1\frac{1}{2}$  feet high, and scalelike leaves. Native to Turkistan.

136977. Berberis sp. Berberidaceae.

136978. Capparida spinosa L. Capparidaceae. Caper.

A spineless form of the caper of commerce.

For previous introduction see 62662. 136979. Cotoneaster ignava E. L. Wolf. Malaceae.

A hardy ornamental shrub about 5 feet high, native to eastern Turkistan. The oval-orbicular leaves are about an inch long, and the dark-purple fruits are in rather dense pendulous clusters.

For previous introduction see 77859.

136980. Cucumis trigonus Roxb. Cucurbitaceae.

A species similar to Cucumis melo, but with a perennial root. The fruit, about 1½ inches long, is ellipsoid, obovoid, round, or obscurely trigonous.

136981. Delphinium longipedunculatum Regel and Schmalh. Ranunculaceae.

A perennial larkspur with rounded-cordate, palmately lobed leaves and long-stalked azure-blue flowers in lax racemes. Native to the mountains of Turkistan.

For previous introduction see 107522.

136982. Ephedra ciliata C. A. Mey. Gnetaceae.

136983 to 136987. Eremurus spp. Liliaceae.

136983. Eremurus Bucharicus Regel.

An eremurus with long linear leaves and a scape about 3 feet high bearing a lax raceme of many white flowers with reddish central stripes. Native to Turkistan.

136984. Eremurus comosus O. Fedtsch.

An eremurus with linear leaves  $1\frac{1}{2}$  feet long and a tall, slender scape with a raceme about  $1\frac{1}{2}$  feet long. The narrow, campanulate, rosy flowers have greenish bases. Allied to *Eremurus spectabilis*. Native to Turkistan.

136985. Eremurus olgae Regel.

A hardy herbaceous perennial with white flowers, produced in dense racemes. Native to Turkistan.

For previous introduction see 116197.

136986. Eremurus regelli Vved.

An eremurus with long linear leaves and a dense elongate raceme of brown flowers with white-margined perianth segments. This species has been confused with  $Eremurus\ turkestanicus$ . Native to Turkistan.

136987. Eremurus stenophyllus (Boiss. and Buhse) Baker.

An eremurus, with linear leaves ½ foot long, a scape 1½ feet high, and a dense raceme, 3 or 4 inches long, of yellow flowers. Native to Iran.

136988. Fritillaria raddeana Regel. Liliaceae.

A fritillaria, with a fleshy stem about 1 foot high, lanceolate leaves 4 inches long, and umbels of greenish-yellow flowers 2 inches across. Allied to Fritillaria imperialis. Native to Turkistan.

136960 to 137011—Continued.

136989. Fritillaria sewerzowi Regel.

A bulbous plant, with numerous ovate to lanceolate leaves up to 4 inches long and a terminal raceme of 5 to 12 purplish-green flowers. Native to Turkistan.

For previous introduction see 115074.

136990. Hyacinthus atroviolaceus (Regel) Macbride. Liliaceae.

A hyacinth, with four to six linear ligulate leaves 4 to 8 inches long and a dense oblong raceme of dark-violet flowers on a scape about the same length as the leaves. Native to Bokhara.

For previous introduction see 107548.

136991 to 136993. IRIS spp. Iridaceae.

136991. Iris orchioides Carr.

A Juno iris with about six lanceolate leaves up to 9 inches long and a 3- to 6-headed stem, often a foot high. The bright-yellow falls have purple blotches on each side of the crest.

For previous introduction see 122991.

136992. Iris stolonifera Maxim. (Iris leichtlini Regel).

For previous introduction see 122994.

136993. Iris sp.

136994. Juniperus serayschanica Kom. Pinaceae.

A juniper up to 50 feet high, with a dense ovoid or conical crown. Related to Juniperus satina. Native to Turkistan.

136995. LEONTICE EVERSMANNI Bunge. Berberidaceae.

A herbaceous perennial about 1 foot high, with pinnatisect leaves and terminal racemes of small yellow flowers. Native to Turkistan.

For previous introduction see 112856.

136996. LINUM HETEROSEPALUM Regel. Linaceae.

A perennial with erect stems more than a foot high, ovate-lanceolate leaves, and corymbs of rather large yellow flowers. Native to Turkistan.

For previous introduction see 110136.

136997. Lonicera arborea Boiss. Caprifoliaceae.

A shrub up to 10 feet high with broad-ovate to ovate-oblong leaves 3% to 1½ inches long and reddish-white flowers. Native to the western Mediterranean region.

136998. LONICERA MICROPHYLLA Willd.

A small, erect, much-branched shrub, with oblong or obovate leaves ½ to ¾ inch long and small upright or nodding, yellowish-white flowers followed by orange-red berries. Native to the Himalayan region.

For previous introduction see 126323.

136999. Peganum Harmala L. Zygophyllaceae.

A shrub common in dry soil in Turkey and Turkistan.

For previous introduction see 110082.

137000. PISTACIA VERA L. Anacardiaceae.

Pistachio.

137001. Rheum Maximowiczi Losina-Losink. Polygonaceae.

A stout herb, with a solitary branching stem up to 3 feet high, large rotund leaves, and broad fruits about 1 inch long. Related to *Rheum ribes*. Native to Turkistan.

137002. Rheum turkestanicum Janischew. Polygonaceae.

A wild rhubarb from the Transcaspian region, more than 2 feet high, with a large thick rhizome and a short, thickened, densely leafy stem. The cordate-reniform leaves, up to 8 in number, are about a foot wide.

For previous introduction see 112050.

136960 to 137011—Continued.

137003. SACCHARUM SPONTANEUM L. Poaceae.

Grass.

137004. SILENE BRAHUICA Boiss. Silenaceae.

A tufted perennial, with erect, simple or branching stems, and linear subulate leaves about 1 inch long. Native to Afghanistan.

137005. SPINACIA TETRANDRA Stev. Chenopodiaceae.

A wild spinach that grows in heavy soil in central Asia.

For previous introduction see 104661.

137006. Limonium myosuroides (Regel) Kuntze. (Statice myosuroides Regel). Plumbaginaceae.

An annual sea-lavender, with pinnate, mucronate leaves and lax, filiform spikes of small, white flowers. Native to Turkistan.

137007. Tragopogon krascheninnikovii Nikitin. Cichoriaceae.

A biennial 1 to 2 feet or sometimes taller, with linear leaves and large heads of violet flowers. Native to Turkistan.

137008. Tragopogon major Jacq.

A hardy biennial up to 6 feet high, with yellow flower heads. Native to Europe. 137009 to 137011. Ungernia spp. Amaryllidaceae.

137009. Ungernia sewerzowi (Regel) B. Fedtsch.

137010. Ungernia tadshikorum Vved.

A bulbous plant from Turkistan, with 8 to 12 linear, bluish, two-ranked leaves and pinkish or yellowish flowers borne on a stem about a foot high.

For previous introduction see 107593.

137011. UNGERNIA TRISPHAERA Bunge.

An amaryllid, with lorate leaves, a scape  $\frac{1}{2}$  to 1 foot high, and an umbel of 6 to 15 flowers, the center ones erect and the outer inclined. The perianth, 1 inch long or more, has reddish segments. The funnel-shaped tube is naked at the throat. Native to Turkistan.

## 137012 to 137015. ALLIUM SATIVUM L. Liliaceae.

Garlic.

From Iran. Bulbs collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 30, 1940.

137012. No. 5208. Sir. From Bandar Abbas, December 20, 1939. Suited to hot localities with alkaline soil.

137013. No. 5287. Sir. From Saidabad, Kirman, January 1, 1940. Adapted to regions with mild winters.

137014. No. 5515. Sir. From Tomogaon, February 6, 1940. Grown in a hot date-growing country.

137015. No. 5712. Sir. From Shiraz, Fars, March 14, 1940. A mild variety.

## 137016. Quercus sp. Fagaceae.

Truffle oak.

From France. Trees purchased from Leopold Laval, Loupchat, par Martel. Received April 30, 1940.

137017. DIERVILLA. Caprifoliaceae.

From Switzerland. Plants presented by Pépinières Boccard, Petit Saconnex, Geneva. Received April 30, 1940.

Viger.

#### 137018. Platanus orientalis L. Platanaceae.

Planetree.

From Greece. Seeds presented by Prof. P. T. Anagnostopoulos, École Supérieure d'Agriculture, Athens. Received April 17, 1940.

137019. X PHILADELPHUS LEMOINEI Lemoine. Hydrangeaceae. Lemoine mockorange.

From Ohio. Plants presented by H. Kohankie & Son, Painesville. Received April 19, 1940.

Var. Erectus.

137020. CITRUS GRANDIS (L.) Osbeck. Rutaceae. Grapefruit.

From Mexico. Seeds presented by Dr. Narciso Souza-Novelo, Merida, Yucatán. Received May 2, 1940.

Red Pomelo.

#### 137021 and 137022.

From Australia. Seeds purchased from Law, Somner Ptv., Ltd., Melbourne. Received April 25, 1940.

137021. TRIFOLIUM ALEXANDRINUM L. Fabaceae. Berseem.

137022. Trifolium fragiferum L.

Clover.

Benbecula Strawberry.

#### 137023 to 137080.

From Switzerland. Trees purchased from Pépinières Boccard, Geneva. Received April 30, 1940.

137023 to 137035. Amygdalus persica L. Amygdalaceae. Peach.

Apple.

137023. Dugelay.

137024. Girerd No. 2.

137025. Girerd No. 4.

137026. Julie Treyve.

137027. Mignonne Lepère.

137028. Pêche Fragnière.

137029. Pêche de Surie.

137030. Président Cardinaux.

137031. Président Luizet.

137032. Trionfo Liscio.

137033. Valla.

137034. Vérot.

Malaceae.

137035. Vineuse de Fromenthal.

137050. Reinette Sanguine du Rhin.

137051. Reinette Verte de Versailles.

137048. Reinette Courthau.

137049. Reinette Jamain.

137052. Reinette Vignat.

137055. Surprise.

137058. Tobiäsler.

137053. Rouge de Juvigny.

137056. Surprise Reinette.

**137057.** That Pippin.

137054. Royale d'Angleterre.

137036 to 137058. MALUS SYLVESTRIS Mill.

137036. Antonowka Kamenithka.

137037. Banziger.

137038. Calville Glorie de Douai.

137039. Calville d'Oberrieder.

137040. Châtaigne du Léman.

137041. Edelgrauech.

137042. Euzia.

137043. Fischer Apfel.

137044. Glockenapfel.

137045. Nouvelle France.

137046. Préfet Goulet.

137047. Prince Nicolas.

137059 to 137070. PRUNUS spp. Amygdalaceae.

137059 and 137060. PRUNUS ARMENIACA L.

137059. Bergeron.

137060. Précoce de Boulbon.

137061. PRUNUS MAHALEB L.

Apricot.

Mahaleb cherry.

Mahaleb Pendula.

137023 to 137080—Continued.

137062 and 137063. PRUNUS AVIUM L.

Sweet cherry.

137062. Bigarreau d' Ecully.

137063. Bigarreau Gros Rouge.

137064 and 137065. PRUNUS CERASUS L.

Sour cherry.

137064. Cerise du Rhighi.

137065. Noire Boccard.

137066 to 137070. PRUNUS DOMESTICA L.

Common plum.

137066. Andrières.

137068. Bérudge.

137067. Belle Lygusienne.

137069. Favorite Précoce.

137070. Reine Claude de Pontbriand.

137071 to 137080. Pyrus communis L.

Malaceae. Common pear.

137071. Alexandrine Mas.

137072. Bergamotte La Gantoise.

137073. Doyenné de Montjean.

137074. Fauvanelle.

137075. Louise Bonne Sannier.

137076. Madame Lyé Baltet.

137077. Nouvelle Fulvie. 137078. Président Hardy.

137079. Président Mas.

137080. Triomphe de Touraine.

### 137081 to 137086.

From England. Plants purchased from Hillier & Sons, Winchester. Received May 1,

137081 and 137082. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

Japan quince.

137081. Atropurpurea.

137082. Flore Pleno.

137083. DEUTZIA PULCHRA Vidal. Hydrangeaceae.

A shrub 8 feet or higher, with lanceolate to narrow-ovate leaves  $1\frac{1}{2}$  to 4 inches long and pendulous white flowers, tinged with pink, in slender panieles, often compound and about a foot long. Native to the Philippines and Formosa.

For previous introduction see 132365.

137084. DEUTZIA SCABRA Thunb.

Fuzzy deutzia.

Macrocephala.

137085. DIERVILLA JAPONICA (Thunb.) DC. Caprifoliaceae. Japanese weigela. Looymansii.

137086. DIERVILLA MAXIMOWICZII (S. Moore) Makino.

#### 137087 to 137111.

From Belgium. Trees purchased from Pépinières Armand op de Beeck, Putte-lez Malines. Received May 1, 1940.

137087 and 137088. Amygdalus persica L. Amygdalaceae.

Peach.

137087. Grosse Mignonne Violette.

137088. Triomphe de St. Laurent.

137089 to 137095. Malus sylvestris Mill. Malaceae.

10 1 1 1 TOTAL Apple.

137089. Beauty of Kent.

137093. Northern Dumplin.

137090. Bellefleur Double.

137094. Notaire.

137091. Bon Pommier.

137095. Seedling of Windsor.

137092. Calville des Prairies.

137087 to 137111—Continued.

137096 to 137108. Prunus spp. Amygdalaceae.

137096 to 137099. PRUNUS ARMENIACA L.

137096. Chauteaubriand.

137097. Du Chancelier.

137098. Gros Précoce.

137099. Précoce de Montplaisir.

137100 to 137103. PRUNUS AVIUM L.

137100. Bigarreau Blanc.

137101. Bigarreau Goosens.

137102. Biggareau Noir.

137103. Bigarreau Rose.

137104. X PRUNUS EFFUSA (Host) Schneid.

Cerise Lemercier.

137105. PRUNUS AVIUM L.

Guiane Hative de St. Trond.

137106 to 137108. PRUNUS DOMESTICA L.

137106. Abricot Double.

137107. Altesse Double.

137108. Drap d'Or d'Esperen.

137109 to 137111. Pyrus communis L.

137109. Ananas de Courtrai.

137110. Beurré Dilly. 137111. Madame Gillekins.

137112 to 137116. AVENA BYZANTINA Koch. Poaceae.

From Australia. Seeds presented by H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received April 26, 1940. 137112. Fulghum Sel. W. 987. 137115. S. M. '39. Fulghum S. H.

137113. Fulghum 6 A. W. 2908. 137116. M 38. Fulghum S. H. W 983.

137114. Fulghum W. 3083.

137117 to 137125.

From Canada. Seeds presented by the McFayden Seed Co., Winnipeg, Manitoba. Received April 30, 1940.

137117. Phaseolus vulgaris L. Fabaceae.

Common bean.

Pole beans, from Lowe Farm, Manitoba.

137118 to 137125. PISUM SATIVUM L. Fabaceae.

137118. Chinese Purple. From Ericksdale, Manitoba.

137119. Gray's. From Blackfoot, Alberta.

137120. Peulties. From Newlandia, Alberta.

137121. Windsor. From Norwood, Manitoba.

137122. From Lucky Lake, Saskatchewan.

137123. From Waskatenau, Alberta.

137124. Belgium Sugar. From Fairholme, Saskatchewan.

137125. Brown Dutch. From Vanderhoof, British Columbia.

879385-50-3

Apricot.

Sweet cherry.

Duke cherry.

Sweet cherry.

Common plum.

Common pear.

137126 to 137141. Cinchona spp. Rubiaceae.

From Brazil. Seeds presented by C. A. Krug, Instituto Agronómico do Estado, Campinas, São Paulo. Received May 3, 1940.

137126 to 137132. CINCHONA OFFICINALIS L.

Nos. 137126 to 137129 were collected by Alcides Carvalho in Bolivia.

137126. No. 3514. Vera. From Calabatéa.

137127. No. 3516. Josephiana. From Calabatéa.

137128. No. 3518. Josephiana. From Coroico.

137129. No. 3520. Josephiana. From Coroico.

137130. No. 3526. From cinchona plantation, Jamaica.

137131. No. 3527. From cinchona plantation, Jamaica.

137132. No. 3811. Collected by Alcides Carvalho in Quito, Ecuador.

137133 to 137138. CINCHONA PUBESCENS Vahl. (Cinchona succirubra Pav.).

137133. No. 3528. From cinchona plantation, Jamaica.

Nos. 137134 to 137138 were collected by Alcides Carvalho.

137134. No. 3703. From Lima, Peru.

137135. No. 3704. From Lima, Peru.

Nos. 137136 to 137138 were from Quito, Ecuador.

137136. No. 3803.

137137. No. 3804.

137138. No. 3810.

137139 to 137141. CINCHONA spp. Rubiaceae.

Collected by Alcides Carvalho in Lima, Peru

137139. CINCHONA Sp.

No. 3705.

137140. CINCHONA Sp.

No. 3706.

137141. CINCHONA Sp.

No. 3707.

137142 to 137147. Trifolium pratense L. Fabaceae. Red clover.

From Wales. Seeds purchased from the Welsh Plant Breeding Station, Aberystwyth. Received April 23, 1940.

137142. Aberystwyth S. 123.

137145. Montgomery Late Flowering.

137143. Cotswolds Late Flowering.

137146. Vale of Clwyd.

137144. True Wild.

137147. English Broad.

137148 to 137152. Trifolium pratense L. Fabaceae. Red clover.

From Canada. Seeds presented by the Central Experimental Farm, Ottawa. Received April 26, 1940.

137148. Altaswede.

137151. Ontario Mammoth.

137149. Dollard.

137152. Ottawa.

137150. Manhaidy.

137153 to 137159. PHILADELPHUS spp. Hydrangeaceae.

From Illinois. Plants purchased from the Naperville Nurseries, Naperville. Received May 6, 1940.

137153. Philadelphus cordifolius Lange.

137153 to 137159-Continued.

137154 to 137156. Philadelphus coronarius L.

Sweet mockorange.

137154. Flore Pleno.

137155. Grandiflorus.

137156. Nanus.

For previous introduction see 136379.

137157. PHILADELPHUS GORDONIANUS Lindl.

137158. × PHILADELPHUS LEMOINEI Lemoine.

Splendens.

Lemoine mockorange.

137159. X PHILADELPHUS NIVALIS Jacques.

#### 137160 to 137162.

From Mexico. Cuttings presented by S. W. Parish, Merida, Yucatán. Received May 6, 1940.

137160. Jasminum sp. Oleaceae.

Flore de India.

137161 and 137162. Plumeria spp. Apocynaceae.

137161. Amarilla. (Golden yellow.)

137162. Roja. (Very dark red.)

137163. DICTYANTHUS YUCATANENSIS Standley. Asclepiadaceae.

From Mexico. Seeds presented by Dr. Narciso Souza-Novelo, Merida, Yucatán. Received May 2, 1940.

No. 86. A slender vine, with long-petiolate, ovate-cordate, acuminate leaves and cymes of small flowers with broad-campanulate, black-reticulate corollas. Endemic in Yucatán.

137164. PISTACIA TEREBINTHUS L. Anacardiaceae. False terebinth.

From France. Seeds presented by Vilmorin-Andrieux & Co., Paris. Received May 6, 1940.

Collected in the eastern Mediterranean region.

For previous introduction see 135919

#### 137165 to 137188.

From Sweden. Seeds presented by Algot Holmberg and Söner, Norrköping. Received April 25, 1940.

**137165 to 137173.** Lupinus spp. Fabaceae.

Lupine.

137165 to 137170. Lupinus angustifolius L.

137165. Free from bitter principle; purple foliage.

Nos. 137166 to 137170. From Corsica. Growing wild.

137166. No. 1.

137169. No. 4.

137167, No. 2.

137170, No. 5.

137168, No. 3.

For previous introduction see 133479.

137171. Lupinus hirsutus L.

European blue lupine.

From Japan. An ovate-leaved lupine used for forage and green manure.

For previous introduction see 89545.

137172. LUPINUS LUTEUS L.

European yellow lupine.

Ordinary yellow type.

For previous introduction see 133480.

137165 to 137188—Continued.

137173. Lupinus pilosus Murray.

From Australia. A hairy annual 2 to 4 feet high, with compound leaves of 9 to 11 oblong-lanceolate leaflets and a raceme of rose-colored flowers arranged in whorls. It is native to southern Europe.

For previous introduction see 127649.

137174 to 137184. PISUM SATIVUM L. Fabaceae.

Pea.

137174. Bottnia. Used for fodder.

137175. Concordia. Used for food.

137176. Gyllen. Used for food.

137177. Hero. Used for fodder.

137178. Kron. Used for food.

137179. Marmor. Used for fodder.

137180. Ostgota. A green pea used for food.

137181. Ostgota. A yellow pea used for food.

137182. Pelusker. Used for fodder.

137183. Solo. Used for fodder.

137184. Torsdag II. Used for food.

137185 to 137188. VICIA spp. Fabaceae.

137185 to 137187. VICIA SATIVA L.

Common vetch.

137185. Gray variety.

137186. Small variety.

137187. Sweet variety.

137188. VICIA VILLOSA Roth.

Winter vetch.

For previous introduction see 122741.

Hairy vetch.

## 137189. CITRUS. Rutaceae.

From Palestine. Budsticks presented by Dr. Y. Carmon, Agricultural Research Station, Rehoboth. Received May 8, 1940.

Shamuti orange.

# 137190 to 137203. Castanea mollissima Blume. Fagaceae. Hairy cl

Hairy chestnut.

From China. Scions presented by Peter Liu. Received May 8, 1940.

Collected March 7 and 8, 1940.

137190. No. 14. From Shen Kuan Ying village, northwest of Luan Chow. A young tree 15 years old with a trunk about 12 feet high.

137191. No. 15. From an orchard near Shen Kuan Ying village, northwest of Luan Chow. A tall tree 25 years old with a trunk about 10 feet high.

137192. No. 16. From an orchard north of Shen Kuan Ying, village northwest of Luan Chow. Tree 20 years old.

137193. No. 17. From an orchard between Shen Kuan Ying and Tsui Ke Chuang village. A young tree with a trunk 8 feet high.

137194. No. 18. Scions from same location and type of tree as No. 17.

137195. No. 19. From the north of Tsui Ke Chuang, northwest of Luan Chow. A low, wide-spreading tree 9 years old, grafted 6 years ago.

137196. No. 20. From north of Tsui Ke Chuang. A straight, healthy tree 10 years old with a trunk between 8 and 9 feet high.

137190 to 137203—Continued.

137197. No. 21. From an orchard north of Tsui Ke Chuang. A young tree with a trunk 9 feet high.

137198. No. 22. Fom an orchard north of Tsui Ke Chuang. A straight tree 10 years old with a trunk about 9 feet high.

137199. No. 23. Scions from the same location and type of tree as No. 22.

137200. No. 24. From the same location as No. 22.

137201. No. 25. From an orchard north of Tsui Ke Chuang.

137202. No. 26. From an orchard in Tsui Ke Chuang.

137203. No. 27.

## 137204 to 137213.

From the Dutch East Indies and the Philippine Islands. Seeds collected by the Fairchild-Archbold Expedition. Received April 10, 1940.

Unless otherwise stated, all seeds are from the Dutch East Indies.

137204. Alpinia sp. Zingiberaceae.

No. 174. From Port Lebek, Mindanao, Philippine Islands, January 25, 1940. A tall species, with broad leaves and an inflorescence of drooping, bell-shaped white flowers that are followed by numerous scarlet fruits 1½ inches through. The angular dark-brown seeds are enclosed in a papery covering.

137205 to 137208. Areca spp. Phoenicaceae.

Falm.

137205. Areca catechu L.

Betel palm.

No. 211. From the village of Pananaroe on Bai van Dago, Sangi Island, January 30, 1940.

For previous introduction see 135423.

137206. Areca sp.

No. 191. From Jahoena Bay, Sangi Island, January 29, 1940. The "Kanesu" feather palm has a straight slender trunk 40 feet or more high, tapering gradually from a base of 1½ feet in diameter to 6 inches at the top. The attractive leaf sheaths are more than 4 feet long without any bulge at the base. The fruit clusters are 2½ feet and bear 60 to 100 lacquer-red fruits 2 inches long.

137207. Areca sp.

No. 201. From Mount Tomato, Siaoe Island, Febraury 3, 1940. A solitary palm 25 feet high and 6 feet in diameter, with stilt roots 4 to 12 feet long in a dense mass 3 to 6 feet across at the ground. The leaves are 6 to 8 feet long, with broad pinnae 4 to 7-nerved, with pointed tips, and leave prominent scars. The fruit clusters appear in the leaf axils when the leaf falls.

137208. ARECA Sp.

No. 219. From Mount Klabat, Minahassa, Celebes, February 15, 1940. A stilt palm with orange leaf sheaths; the fruits and fruit stems are lacquer red with the stems more orange than the fruits.

137209. Mimusops kauki L. Sapotaceae.

No. 203. From the shore of Siaoe Island, February 4, 1940. "Kajoe Saoe" of the Javanese. The tree has glossy green foliage and bright-red fruits; prefers moist or wet soils.

137210. Pandanus sp. Pandanaceae.

Screwpine.

No. 202. From Osloe, Siaoe Island, February 4, 1940.

137211. Pinanga sp. Phoenicaceae.

Palm.

No. 207. From Minahassa, Celebes, February 7, 1940. A solitary palm 20 feet high, with a trunk 3 inches in diameter and leaves 5 feet long, with the lower part of the midribs turning red in sunlight. The leaf sheaths are dull orange. When only 3 feet tall the decorative clusters of black fruit are borne on red stems.

137212. PINANGA Sp.

Palm.

No. 209. From the slopes of Sopoetan, Mount Minahassa, Celebes, February 7, 1940. A solitary palm up to 40 and 50 feet high and 6 inches in diameter, irregular

#### 137204 to 137213—Continued.

in growth. The leaf sheaths are dark green flecked with brown specks; the leaves resemble those of  $Pinanga\ insignis$ , with simple pinnae that have 2 prominent veins  $2\frac{1}{2}$  feet long. The fruits, greenish when unripe, turn black when ripe and are in clusters 18 inches by 1 foot and crowded very closely with male flowers.

137213. Zingiber sp. Zingiberaceae.

No. 221. From Mount Klabat, Minahassa, Celebes, February 15, 1940. A tall species 6 to 8 feet high, with leaves 12 to 18 inches long and 3 inches wide. From the bases of the tall stems rise short stems with brilliant-red flower heads and fruits. The pulp in which the seeds are embedded is edible.

Ginger.

137214 to 137458. Malus sylvestris Mill. Malaceae. Apple. From England. Layers presented by R. C. Hatton, Director, East Malling Research Station, East Malling, Kent. Received May 10, 1940.

Nos. 137214 to 137230.

NOS. 13/214 to 13/230.	
1/30 Malling No. $I \times Northern Spy$ .	
<b>137214.</b> No. 1.	137223. No. 15.
<b>137215.</b> No. 2.	137224. No. 17.
137216. No. 3.	137225. No. 18.
137217. No. 6.	<b>137226.</b> No. 19.
137218. No. 7.	137227. No. 20.
137219. No. 9.	137228. No. 21.
137220. No. 10.	137229. No. 22.
137221. No. 12.	137230. No. 23.
137222. No 13.	
Nos. 137231 to 137258.	
1/31 Malling No. I $\times$ Northern $S_{T}y$ .	
137231. No. 1.	137245. No. 17.
137232. No. 2.	137246. No. 18.
137233. No. 4.	137247. No. 20.
137234. No. 5.	137248. No. 22.
137235. No. 6.	137249. No. 23.
137236. No. 7.	137250. No. 24.
137237. No. 8.	137251. No. 25.
137238. No. 9.	137252. No. 26.
<b>137239.</b> No. 10.	137253. No. 28.
<b>137240.</b> No. 11.	137254. No. 29.
<b>137241.</b> No. 12.	<b>137255.</b> No. 30.
137242. No. 13.	137256. No. 31.
137243. No. 15.	137257. No. 33.
137244. No. 16.	137258. No. 34.
Nos. 137259 to 137303.	
2/30 Malling No. II × Northern Spy.	
<b>137259.</b> No. 1.	<b>137266.</b> No. 8.
<b>137260.</b> No. 2.	137267. No. 9.
<b>137261.</b> No. 3.	<b>137268.</b> No. 10
137262. No. 4.	137269. No. 11.
137263. No. 5.	137270. No. 12.
137264. No. 6.	137271. No. 13.
137265. No. 7.	137272. No. 14.

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137214 to 137458—Continued.	
137273. No. 15.	137289. No. 31.
<b>137274</b> . No. 16.	137290. No. 32.
137275. No. 17.	137291. No. 34.
<b>137276.</b> No. 18.	137292. No. 35.
137277. No. 19.	137293. No. 36.
137278. No. 20	137294. No. 37.
137279. No. 21.	137295. No. 38.
137280. No. 22.	137296. No. 39.
137281. No. 23.	137297. No. 40.
137282. No. 24.	137298. No. 41.
137283. No. 25.	137299. No. 42.
<b>137284.</b> No. 26.	<b>137300.</b> No. 43
137285. No. 27.	137301. No. 44.
137286. No. 28.	137302. No. 45.
137287. No. 29.	<b>137303.</b> No. 46.
137288. No. 30.	
Nos. 137304 to 137323.	
3/31 Malling No. II $\times$ Northern Spy.	
<b>137304.</b> No. 1.	<b>137314.</b> No. 12.
137305. No. 2.	<b>137315.</b> No. 13.
137306. No. 4.	<b>137316.</b> No. 14.
137307. No. 5.	<b>137317.</b> No. 15
137308. No. 6.	<b>137318.</b> No. 16.
137309. No. 7.	<b>137319.</b> No. 17.
137310. No. 8.	<b>137320.</b> No. 18.
137311. No. 9.	<b>137321.</b> No. 20.
137312. No. 10.	<b>137322.</b> No. 21.
137313. No. 11.	<b>137323.</b> No. 22.
137324. 7/30 Malling No. II Selfed, No	. 1.
Nos. 137325 to 137327.	
$4/30$ Northern $Spy \times Malling$ No. I.	
137325. No. 1.	
137326. No. 2.	
137327. No. 3.	
Nos. 137328 to 137345.	
7/31 Northern Spy $\times$ Malling No. I.	
137328. No. 1.	137337. No. 12.
137329. No. 3.	<b>137338.</b> No. 13.
137330. No. 5.	<b>137339.</b> No. 15.
137331. No. 6.	<b>137340.</b> No. 16.
137332. No. 7.	<b>137341.</b> No. 17.
137333. No. 8.	137342. No. 18.
137334. No. 9.	137343. No. 19.
137335. No. 10.	137344. No. 20.

137345. No. 22.

137336. No. 11.

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137214 to 137458—Continued.
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Nos	137346	to 1	37360
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137346.	No.	1.	137354.	No.	14.
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**137347.** No. 2. **137355.** No. 17.

137348. No. 3. 137356. No. 18.

**137349.** No. 6. **137357.** No. 22.

**137350.** No. 9. **137358.** No. 23. **137351.** No. 10. **137359.** No. 24.

137351. No. 10. 137359. No. 24. 137360. No. 25.

**137353.** No. 13.

Nos. 137361 to 137366. 3/30 Northern  $Spy \times Malling No. II.$ 

137361. No. 1. 137364. No. 5.

**137362.** No. 2. **137365.** No. 6.

137363. No. 4. 137366. No. 7.

Nos. 137367 to 137383.

8/31 Northern Spy  $\times$  Malling No. II.

**137367.** No. 1. **137376.** No. 12.

137368. No. 2. 137377. No. 13.

**137369.** No. 3. **137378.** No. 14.

137370. No. 4. 137379. No. 15.

137371. No. 5. 137380. No. 17.

137372. No. 7. 137381. No. 18.

137373. No. 8. 137382. No. 19.

**137374.** No. 10. **137383.** No. 20.

137375. No. 11.

Nos. 137384 to 137432.

### An 3/31 Northern $Spy \times Malling No. II.$

**137384.** No. 1. **137401.** No. 18.

**137385.** No. 2. **137402.** No. 19.

137386. No. 3. 137403. No. 20.

137387. No. 4. 137404. No. 21.

137388. No. 5. 137405. No. 22.

137389. No. 6. 137406. No. 23.

137390. No. 7. 137407. No. 24.

137391. No. 8. 137408. No. 25.

137392. No. 9. 137409. No. 27.

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**137393.** No. 10. **137410.** No. 28.

**137394**. No. 11. **137411**. No. 29.

137395. No. 12. 137412. No. 30.

**137396.** No. 13. **137413.** No. 31.

**137397.** No. 14. **137414.** No. 32.

**137398.** No. 15. **137415.** No. 33.

**137399.** No. 16. **137416.** No. 34.

137400. No. 17. 137417. No. 35.

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137214	to 137458—	Continued.

137418. No. 36.	137425. No. 44.
<b>137419.</b> No. 37.	137426. No. 45.
137420. No. 38.	137427. No. 47.
137421. No. 40.	137428. No. 48.
137422. No. 41.	<b>137429.</b> No. 49.
<b>137423.</b> No. 42.	137430. No. 50.
137424. No. 43.	137431. No. 51.
	137432. No. 52.

#### Nos. 137433 to 137458.

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An 4/31 Northern Spy × Malling No.	II.
137433. No. 1.	<b>137446.</b> No. 16.
137434. No. 2.	137447. No. 17.
<b>137435.</b> No. 3.	<b>137448.</b> No. 18.
137436. No. 4.	137449. No. 19.
<b>137437.</b> No. 6.	<b>137450.</b> No. 20.
137438. No. 7.	137451. No. 22.
<b>137439.</b> No. 8.	137452. No. 25.
137440. No. 9.	<b>137453.</b> No. 26.
137441. No. 10.	137454. No. 27.
<b>137442.</b> No. 11.	137455. No. 28.
137443. No. 12.	<b>137456.</b> No. 29.
137444. No. 14.	137457. No. 30.
137445. No. 15.	137458. No. 31.

## 137459. Oryza subulata Nees. Poaceae.

Grass.

From Argentina. Seeds presented by Lorenzo R. Parodi, Buenos Aires. Received April 4, 1940.

A perennial cultivated in the botanic garden of the University of Buenos Aires. For previous introduction see 76883.

## 137460 to 137473. Zea mays L. Poaceae.

Corn.

From Peru. Seeds presented through Dr. T. H. Goodspeed, University of California, Berkeley, California. Received May 14, 1940.

Unless otherwise stated seeds were collected from Kaira, Cuzco.

137460. No. 7. Cafe Clara. From Ayusbamba, Cuzco.

137461. No. 1. Cafe Obscura.

137462. No. 10. Ccallhua Blanca.

137463. No. 6. Chumpi-sara.

137464. No. 8. Ckello.

137465. No. 13. Ckello.

137466. No. 9. Granada. From Ayusbamba, Cuzco.

137467. No. 5. Kulli.

137468. No. 12. Paackay-sara.

137469. No. 4. Maiz Ploma. From Ayusbamba, Cuzco.

137470. No. 14. Roja.

137460 to 137473—Continued.

137471. No. 2. Sacsa. From Ayusbamba, Cuzco.

137472. No. 11. Sacsa.

137473. No. 3. Sacsa Clara. From Ayusbamba, Cuzco.

137474. Tabebuia palmeri Rose. Bignoniaceae.

From Mexico. Seeds presented by C. F. Edmunds, Los Mochis, Sinaloa. Received May 9, 1940.

137475. Ficus. Moraceae.

Fig.

From India. Cuttings presented by the Government Botanic Garden, Lal-Bagh, Bangalore, Government of Mysore. Received May 14, 1940.

Ganjam.

137476 to 137478. Solanum Tuberosum L. Solanaceae. Potato.

From Norway. Tubers presented by Aufin Turbibo, Balestrand, Bergen. Received May 15, 1940.

137476. Kers Pink.

137477. King George.

137478. Marius.

137479 and 137480. Chaenomeles Japonica (Thunb.) Lindl. Malaceae.

Dwarf Japan quince.

From the Netherlands. Plants purchased from J. Abbing and Zonen, Zeist. Received May 16, 1940.

137479. Lutescens.

137480. Sulphurea Perfecta.

137481 and 137482. SACCHARUM. Poaceae.

Sugarcane.

From India. Cuttings presented by T. S. Venkatraman, Imperial Sugarcane Station, Lawley Road, Coimbatore. Received May 16, 1940.

137481. Dhaulu.

137482. Kewali.

137483. Passiflora sp. Passifloraceae.

From Colombia. Seeds presented by Parra Rojas, Bogotá, through Harvey Berman Cleveland, Ohio. Received May 14, 1940.

137484. CENTAUREA sp. Asteraceae.

From Afghanistan. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received February 5, 1940.

No. 4572. From Shanbashak Pass, August 31, 1939. A plant 18 inches high, common in fields and collected for fodder.

137485 to 137488. OLEA EUROPAEA L. Oleaceae.

Olive.

From Portugal. Cuttings presented by Dr. Antonio G. Barjona de Freitas, Estação Agronómica Nacional, Alcobaca. Received May 20, 1940.

137485. Cordovil.

137487. Mancanilha.

137486. Galega.

137488. Verdeal.

137489 and 137490. Fragaria. Rosaceae.

Strawberry.

From Canada. Plants presented by the Central ExperimentalFarm, Ottawa. Received May 20, 1940.

137489. Borden.

137490. King.

# 137491. GLYCINE MAX (L.) Merr. Fabaceae

Soybean.

From Poland. Seeds presented by Dr. Oswald Kofler, Czortkow. Received May 21, 1940.

Early of Wilno. A brown-seeded variety developed by Dr. Jan Muszynski, Professor at the University of Wilno, Northeast Poland, north latitude 54° 40′. This variety resembles the Early Ogemaw or Ogema grown to a small extent in the northern United States and southern Canada.

# 137492. Paspalum notatum Fluegge. Poaceae.

Bahia grass.

From Costa Rica. Seeds presented by J. Alfredo Quiros, San José. Received May 17, 1940.

A tropical-American perennial grass used for forage and for erosion control. For previous introduction see 133433.

# 137493. LOLIUM PERENNE L. Poaceae.

Perennial ryegrass.

From South Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond. Received May 17, 1940.

Certified New Zealand Mother.

# 137494 to 137508.

From England. Plants purchased from Hillier & Sons, Winchester. Received May 23, 1940.

137494 to 137496. Rhododendron spp. Ericaceae.

#### 137494. RHODODENDRON PENTAPHYLLUM Maxim.

Fiveleaf azalea.

A deciduous shrub up to 25 feet high, with usually five elliptic-lanceolate leaves at the ends of the branches. The rose-pink flowers, 1 to 2 inches across, are solitary or in twos, appearing before or with the leaves, which turn orange or crimson in the autumn. Native to Japan.

For previous introduction see 131926.

137495. Rhododendron Tosaense Makino.

A semi-deciduous shrub 3 to 5 feet high, with lanceolate to oblanceolate leaves ½ to 1½ inches long and lilac-purple flowers, solitary or in clusters of 2 to 6. The leaves change to purple crimson in autumn. Allied to R. indicum. Native to Japan.

137496. Rhododendron Weyrichii Maxim.

A deciduous shrub up to 15 feet high, native to Japan and China. The broadly ovate to rhombic leaves, 1 to 3 inches long, are in clusters of 2 or 3 at the tips of the branchlets and turn vinous purple in autumn. The rotate-funnelform red flowers, 1 to 3 inches across, appear before or with the leaves.

For previous introduction see 117073.

137497 to 137508. Rubus spp. Rosaceae.

137497. Rubus amabilis Focke.

A raspberry with slightly prickly stems up to 6 feet high, pinnate leaves, the 7 to 9 leaflets ovate to ovate-lanceolate, incisely double-serrate, and solitary, white, nodding flowers 2 inches across followed by large, red, edible fruits. Native to western China.

137498. RUBUS SD.

A tall-climbing rubus, with leathery leaves variable in shape and large panicles of white flowers followed by small red fruits. Native to New Zealand.

For previous introduction see 125150.

137499. RUBUS BIFLORUS Smith.

A rambling shrub, with large leaves, woolly beneath, and subacid yellow berries about the size of a thimble. Native to the Himalayas.

For previous introduction see 136135.

137494 to 137508—Continued.

137500. Rubus cissoides var. Pauperatus T. Kirk.

Tataramoa. An attractive rambling shrub, with intricate branches covered with small spines and leaves reduced almost to prickly midribs. Native to New Zealand.

137501. Rubus deliciosus Torr.

Boulder raspberry.

For previous introduction see 30167.

137502. Rubus fruticosus L.

Blackberry.

For previous introduction see 110264.

137503. Rubus henryi Hemsl. and Kuntze.

A handsome evergreen species of graceful habit, with trailing shoots 10 to 15 feet long. The compound leaves, 4 to 6 inches long, are covered beneath with a white felt; the pink flowers are about 3/4 of an inch across; and the fruits are shining black. Native to central and western China.

For previous introduction see 59277.

137504. Rubus illecebrosus Focke.

A dwarf prickly undershrub, 2 to 4 feet high, with pinnate leaves made up of five to seven oblong-lanceolate doubly serrate leaflets, and small clusters of large white flowers nearly 2 inches across, followed by large, edible, scarlet fruits. Native

For previous introduction see 92297.

137505. Rubus lasiostylus Focke.

Woolly raspberry.

A wild raspberry from western China, with blue-white bristly stems, small pinnate leaves silvery beneath, magenta flowers, and rose-colored woolly fruits that are sweet but said to be of little use for eating.

For previous introduction see 99705.

137506. Rubus lineatus Reinw.

A stout shrub 10 feet high with palmate leaves and small red fruits.

For previous introduction see 121631.

137507. Rubus Parkeri Hance.

A climbing shrub, 6 to 15 feet high, native to central and western China at an altitude of approximately 2,000 feet. The small white flowers, in dense panicles, are followed by black fruits with few drupelets.

For previous introduction see 26273.

137508. Rubus spectabilis Pursh.

For previous introduction see 126839.

#### 137509 to 137547.

From France. Plants purchased from Pépinières Barbier & Cie., Orleans. Received May 23, 1940.

137509 to 137524. CHAENOMELES. Malaceae. Quince.

137509. Alba.

137517. Incendie.

137510. Alba Grandiflora.

137518. Macrocarpa.

137511. Atrococcinea.

137519. Maulei.

137512. Aurora.

137520. Nivea Extus Coccinea.

137513. Candidissima.

137521. Rosea Plena.

137514. Coquelicot.

137522. Sanguinea Plena.

137515. Ecarlata.

137523. Sargentii.

137516. Falconnet-Charlet.

137524. Umbilicata.

137509 to 137547—Continued.

137525 to 137530. Deutzia spp. Hydrangeaceae.

137525. X Deutzia carnea var. lactea (Lemoine) Rehder.

137526. X DEUTHA MAGNIFICA VAR. ERECTA (Lemoine) Rehder.

137527. X Deutzia magnifica var. formosa (Lemoine) Rehder.

137528.  $\times$  Deutzia magnifica (Lemoine) Rehder.

Gracillima.

For previous introduction see 132316.

137529. X DEUTZIA ROSEA var. CAMPANULATA (Lemoine) Rehder.

A variety with white flowers about 1 inch across.

For previous introduction see 132353.

137530. X DEUT IA ROSEA VAR. EXIMIA (Lemoine) Rehder.

A variety with the flowers slightly pinkish outside.

For previous introduction see 132323.

137531 to 137544. DIERVILLA spp. Caprifoliaceae.

137531. DIERVILLA CORAEENSIS f. ALBA VOSS.

Flowers yellowish white, changing to pale rose.

137532. DIERVILLA FLORIBUNDA VAR. VERSICOLOR (Sieb. and Zucc.) Rehder. Fol. Mary. Argent. Flowers greenish white at first, becoming red or crimson.

137533 to 137535. DIERVILLA FLORIDA (Bunge) Sieb. and Zucc.

137533. Received as Diervilla amabilis, now referred to the above species.

137534. Rosea.

137535. Rosea Variegata.

137536 to 137544. DIERVILLA.

137536. Received under the name "sieboldii," for which a place of publication has not been found.

For previous introduction see 136375.

137537. Received under the name "styriaca," for which a place of publication has not been found.

137538. Cameleon.

137539. Conquerant.

137540. Esperance.

137541. Floreal.

137542. Le Printemps.

137543. Messager.

137544. Praecox.

137545 to 137547. PHILADELPHUS. Hydrangeaceae.

137545. Fleur de Neige.

137546. Sutzmannii.

137547. Zeherii.

## 137548 to 137550.

From England. Plants purchased from L. R. Russell, Ltd., Richmond Nurseries, Windlesham, Surrey. Received May 24, 1940.

137548. Ceanothus divaricatus Nutt. Rhamnaceae.

An evergreen shrub up to 4 feet high, with ovate leaves about 1 inch long and lightblue or almost white flowers in slender panicles 1 to 4 inches long. Native to California. 137548 to 137550—Continued.

137549. Ceanothus. Rhamnaceae.

Brilliant.

137550. Chaenomeles japonica (Thunb.) Lindl. Malaceae. Dwarf Japan quince. Rosea.

For previous introduction see 137480.

# 137551 to 137556.

From the Netherlands. Plants purchased from the Royal Moerheim Nurseries, Dedemsvaart. Received May 24, 1940.

137551. ASTER THOMSONI C. B. Clarke. Asteraceae.

A laxly branched perennial aster, with slender, erect, flexuous, hairy stems up to 3 feet high; broad-ovate, coarsely toothed leaves 2 to 4 inches long, almost clasping at the base; and solitary flower heads about 2 inches across with numerous reddishpurple rays. Native to the Himalayan region at altitudes of 7,000 to 10,000 feet.

For previous introduction see 134445.

137552. Ceanothus. Rhamnaceae.

Topaz.

137553. DIERVILLA MIDDENDORFFIANA Carr. Caprifoliaceae.

For previous introduction see 43844.

137554 to 137556. PHILADELPHUS spp. Hydrangeaceae.

137554. × PHILADELPHUS LEMOINEI Lemoine.

Lemoine mockorange.

Boule de Neige.

137555. PHILADELPHUS PEKINENSIS VAR. BRACHYBOTRYS Koehne.

A variety, with the branches more grayish brown, the petioles usually green, and the leaves sparingly strigose, usually on both sides.

For previous introduction see 78149.

137556. × Philadelphus purpureo-maculatus Lemoine. Mockorange.

Nuage Rose.

137557. Trifolium subterraneum L. Fabaceae. Subterranean clover.

From Australia. Seeds purchased from F. H. Brunning Pty., Ltd., Melbourne. Received May 21, 1940.

Bacchus Marsh.

For previous introduction see 136403.

# 137558. Zea mays L. Poaceae.

Corn.

From Brazil. Seeds presented by F. G. Brieger, Professor of Genetics, Escola Superior de Agricultura, Piracicaba, São Paulo. Received May 24, 1940.

Diamantino. From a selfed ear, grown in 1938 at Piracicaba by Dr. Brieger, numbered "17-243-1938."

137559 and 137560. Triticum Aestivum L. Poaceae. Common wheat.

From Spain. Seed presented by the Estación de Cerealicultura, Palencia, through Miguel Echegaray, Agricultural Attaché, Spanish Embassy, Washington.

137559. Cana Maciza 2-578.

137560. Cana Gruesa P-597.

#### 137561 and 137562.

From Cuba. Bud sticks presented by Thomas R. Towns, Holguin. Received May 27, 1940.

137561. CITRUS AURANTIUM L. Rutaceae.

Seville orange.

A sour orange mutant thought to have possibilities as a rootstock; green-leaved form. See P. I. 132148 for a mutation of this species with variegated leaves.

137562. CITRUS SINENSIS (L.) Osbeck.

Orange.

Criolla Navel orange.

# 137563 to 137576. CITRUS spp. Rutaceae.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received May 25, 1940.

Unless otherwise stated the seeds were collected March 22 to 29, 1940.

137563. CITRUS LIMON (L.) Burm. f.

Lemon.

No. 5823. Batali Shikan. From Jahrum. Fruit somewhat elongate, 5 by 4 inches; rind smooth and yellow. A good lemon.

137564 to 137566. CITRUS SINENSIS (L.) Osbeck.

Orange.

137564. No. 5750. Naranj. From Niriz. Rind rough; juice pleasantly acid.

137565. No. 5751. Limue Shirin. From Niriz. Rind thin, smooth, gold to lemon yellow; juice insipid to slightly sweet.

137566. No. 5887. Naranj. From Shiraz, April 8, 1940. Juice pleasantly acid. Nos. 137567 to 137576 were from Jahrum.

137567. CITRUS sp.

No. 5752. Limue Khargi. Rind thin, smooth, and orange-colored; good lemon flavor.

137568. CITRUS sp.

No. 5821. Betkhani. Fruit size of medium orange; rind thin, loose, golden yellow; flesh divided easily into quarters; juice pleasantly, strongly acid.

137569. CITRUS sp.

No. 5822. Batabi Misri. Fruit size, shape, and color of grapefruit; rind rough and thick; juice agreeably acid.

137570. CITRUS Sp.

No. 5824. Furunj. Fruit about 3½ inches long; rind rough, thick, and orange yellow; flesh seedy, juice pleasantly acid.

137571. CITRUS sp.

No. 5884.  $Kadu\ Mul$ . Fruit rounded pyramidal,  $4\frac{1}{2}$  inches long; rind smooth, moderately thick, and yellow; flesh firm; juice pleasantly acid, milder than a lemon. A good keeper.

137572. CITRUS sp.

No. 5885. Balang. Fruit elongate-rounded, 4 by 5 inches; rind smooth, moderately thick, and yellow, used for marmalades and candying; flesh firm, very juicy, divisible into quarters, about the same acidity or slightly milder than a lemon. A good keeper.

137573. CITRUS Sp.

No. 5886. Shahpasand. Fruit pear-shaped, 4½ inches long; rind smooth, moderately thick, and yellow; juice about grapefruit acidity and flavor.

137574. CITRUS sp.

No. 5888. Fruit grapefruit-shaped,  $3\frac{1}{2}$  by 5 inches; rind slightly rough, moderately thick, and yellow; juice acid.

137575. CITRUS sp.

No. 5889. Misri Batabi. Fruit grapefruit-shaped, 4½ inches long; rind very rough, moderately thick, and yellow; juice pleasantly acid.

137563 to 137576—Continued.

137576. CITRUS Sp.

No. 5890. Bata' i Shikan. Fruit slightly elongate, 4 inches long; rind smooth, thin, and yellow; juice pleasantly acid, milder than a lemon.

# 137577 to 137581.

From Canada. Plants presented by Dr. M. B. Davis, Central Experimental Farm, Ottawa. Received May 28, 1940.

137577.  $\times$  Malus robusta Rehder. Malaceae. No. 5.

Cherry crab.

Apple.

137578 to 137581. MALUS SYLVESTRIS Mill.

137580. Ottawa. No. 466.

137578. Ottawa. No. 436.137579. Ottawa. No. 452.

137581. Ottawa. No. 322.

137582 to 137588. Fragaria. Rosaceae.

Strawberry.

From Canada. Plants presented by A. J. Porter, Honeywood Nursery, Parkside, Saskatchewan. Received May 29, 1940.

137582. Alaska.

137583. Dakota.

137584. Honeywood No. 1, Gem X Fairfax.

137585. Honeywood No. 2, Gem × Fairfax.

137586. Honeywood No. 5, Gem Seedling.

137587. Honeywood No. 6, Gem Seedling.

137588. Honeywood No. 8, Gem X Dakota.

137589. Platanus orientalis L. Platanaceae. Oriental planetree.

From the Union of Soviet Socialist Republics. Seeds presented by the Botanic Garden, Tiflis, Georgia. Received May 24, 1940.

137590 and 137591. DIERVILLA. Caprifoliaceae.

From the Netherlands. Plants purchased from the Homestead Nurseries, Boskoop. Received May 31, 1940.

137590. Groenewegii.

137591. Venosa Fol.

137592 to 137594. Deutzia spp. Hydrangeaceae.

From the Netherlands. Plants purchased from Byland Brothers Ltd., Boskoop. Received May 31, 1940.

137592 and 137593. X DEUTZIA LEMOINEI Lemoine.

An upright shrub up to 8 feet high, with lanceolate leaves  $1\frac{1}{2}$  to 4 inches long, and pure-white flowers  $\frac{5}{8}$  inch across, in erect panicles or corymbs up to 3 inches long.

137592. Flore-pleno.

**137593.** Boule de Rose.

For previous introduction see 134451.

137594. Deutzia sieboldiana Maxim.

Siebold deutzia.

This is the lowest growing of all the deutzias, of very compact habit, with small, white, loose flower panicles that are not very conspicuous. Native to Japan.

For previous introduction see 132597.

## 137595 and 137596.

From the Union of South Africa. Seeds presented by E. Percy Phillips, Chief, Division of Botany and Plant Pathology, Department of Agriculture and Forestry, Pretoria. Received June 3, 1940.

137595 and 137596-Continued.

137595. FICUS PRETORIAE Burtt-Davy. Moraceae.

Wonderboom. An evergreen tree up to 75 feet high, with wide-spreading branches, some of which finally touch the ground and put out roots from which new stems arise. The leaves are oblong to oblong-elliptic, mostly abruptly acuminate, rigid, entire, and rounded at the base, often somewhat glaucous below, up to  $3\frac{1}{2}$  inches long by  $1\frac{1}{2}$  inches wide. The spotted globose fruits, usually in threes, are  $\frac{1}{2}$  inch in diameter and are crowded toward the ends of branchlets. The fruits become reddish when mature and are said to be attractive to birds. Native to tropical Africa.

137596. OLEA VERRUCOSA (Roem. and Schult.) Link. Oleaceae.

For previous introduction see 119291.

# 137597 to 137603.

From Australia. Seeds presented by the New England Experiment Farm, Glen Innes. Received May 22, 1940.

137597 to 137599. Avena sativa L. Poaceae.

Oats.

**137597.** Cinerea W 2774. From Portugal.

137598. Crema W 2294. From Italy. 137599. Klein 69B. W 1957. From Argentina.

137600 to 137603. Triticum aestivum L. Poaceae. Common wheat.

**137600.** Argentine No. C 8681. **137601.** Argentine C 9655.

137602. Kleintron C 10817.

137603. Uruguay C 10834.

# 137604 and 137605.

From the Dutch East Indies. Seeds collected by the Fairchild-Archbold Expedition. Received April 10, 1940.

137604. Lansium domesticum Jack. Meliaceae.

Langsat.

Doekoe. A Malayan tree up to 40 feet high, with pinnate leaves composed of five to seven elliptic leaflets each 4 to 8 inches long. The fruits, borne in dense pendulous clusters, vary from oval to round and from 1 to 2 inches in diameter, velvety and straw-colored, with a thick leathery skin enclosing juicy aromatic flesh, and one to three large seeds. The seeds are extremely bitter. The best fruits are found in the village of Menteng, near Batavia, Java.

For previous introduction see 109408.

137605. (Undetermined.)

No. 188. From the hills back of Tahoena Harbor, Sangi Island, January 28, 1940. An ornamental vine bearing clusters of golden yellow fruits  $\frac{1}{2}$  inch in diameter, which turn red on ripening.

137606 to 137608. PISTACIA spp. Anacardiaceae.

From Turkey. Seeds purchased from Merrill N. Isely, Gazientep. Received May 27, 1940.

137606. PISTACIA Sp.

137607 and 137608. PISTACIA VERA L.

Pistachio.

137607. Kimiz.

137608. Boz, whitish-yellow.

#### 137609 to 137641.

From India. Seeds presented by the Lloyd Botanic Garden, Darjeeling. Received June 11, 1940.

137609. Anaphalis Royleana DC. Asteraceae.

A perennial herb 4 to 6 inches high, slightly woody at the base, native to the slopes of the Himalayas up to 15,000 feet altitude. The sessile, linear to oblong leaves are about 1 inch long and woolly beneath, and the small flower heads are densely white-tomentose.

For previous introduction see 99716.

137609 to 137641—Continued.

137610. Arisaema concinnum Schott. Araceae.

An arisaema, with a single leaf on an erect petiole 1 to 2 feet long, with 10 or more oval leaflets, gradually narrowed to each end, up to 1 foot long and 1 to  $2\frac{1}{2}$  inches broad. The scape is shorter than the petiole, and the spathe is convolute and tubular below; the tube 2 to 3 inches long,  $\frac{1}{2}$  to  $\frac{3}{4}$  inch in diameter. The blade, recurved at the mouth, is gradually narrowed above into a tapering pendent appendix. The spathe of the male plant is striated white and dark blue purple; that of the female plant white and green longitudinally, paler outside. Native to the Sikkim Himalayas at altitudes of 6,000 to 10,000 feet.

137611. Begonia laciniata Roxb. Begoniaceae.

137612. Boehmeria Platyphylla D. Don. Urticaceae.

A large shrub or small tree, native to eastern and southern India at altitudes up to 7,000 feet. It is said to yield good fiber. The reddish-brown wood is moderately hard.

For previous introduction see 64117.

137613. CLEMATIS CONNATA DC. Ranunculaceae.

For previous introduction see 111041.

137614. CREMANTHODIUM RENIFORME (DC.) Benth. Asteraceae.

137615. Curculigo capitulata (Lour.) Kuntze (Curculigo recurvata Ait.).

Amaryllidaceae.

A stemless tuberous-rooted perennial, native to tropical Asia. The lanceolate-plaited leaves, 1 to 3 feet long, are recurved, and the star-shaped drooping yellow flowers, about 1 inch across, are borne in dense heads on recurved stalks 3 inches long, covered with soft brown hairs.

For previous introduction see 99730.

137616. Cynoglossum denticulatum A. DC. Boraginaceae.

A hardy perennial, with small blue flowers in long, open, one-sided spikes, and stems  $1\frac{1}{2}$  to 2 feet high. Native to India, at altitudes up to 12,000 feet.

For previous introduction see 122084.

137617. Daphne sureil Smith and Cave. Thymelaeaceae.

For previous introduction see 133111.

137618. Dobinea vulgaris Buch.-Ham. Anacardiaceae.

A bushy shrub, with opposite, elliptic, acutely serrate leaves 4 to 6 inches long. The minute flowers are in lax panicles, the staminate are campanulate, the pistillate are apetalous. The narrow capsule has winged margins. Native to the Nepal Himalayas at altitudes of 4,000 to 7,000 feet.

For previous introduction see 93200.

137619. Epilobium origanifolium Lam. Onagraceae.

A very variable herbaceous perennial with stems usually 8 inches high, but often up to 2 feet. The opposite, ovate, nearly sessile leaves are usually only 1 inch long, but sometimes petioled and 3 inches long. The small purple to white flowers are axillary or gathered into spikes at the ends of the branches. It is native to the alpine slopes of the Himalayas in India at an altitude of about 12,000 feet.

For previous introduction see 93208.

137620. Eranthemum indicum (Nees) C. B. Clarke. Acanthaceae.

For previous introduction see 116586.

137621. Geranium Polyanthes Edgew. and Hook. f. Geraniaceae.

A perennial herb, with simple or branching stems up to 10 inches high, divided orbicular-reniform leaves about 2 inches in diameter, and umbels of 3 to 10 dark-

137609 to 137641-Continued.

purple flowers less than an inch across. Native to the Sikkim Himalayas at altitudes of 9,000 to 12,000 feet.

For previous introduction see 116589.

137622. Chirita urticaefolia D. Don. Gesneriaceae.

A herbaceous perennial, with stems up to  $1\frac{1}{2}$  feet high, elliptic, acuminate, serrate leaves 5 inches long, and large purplish flowers. Native to the temperate Himalayas at altitudes of 4,500 to 9,000 feet.

137623. Impatiens bicornuta Wall. Impatientaceae.

137624. Impatiens radiata Hook. f. Impatientaceae.

137625. Jasminum dispermum Wall. Oleaceae.

For previous introduction see 65258.

137626. LYCHNIS NUTANS Benth. Silenaceae.

A perennial lychnis, with elongate, usually branching stems, ovate elliptic-lanceolate, or orbicular leaves, and lax panicles of few flowers, usually white inside and purplish outside. Native to the temperate Himalayas at altitudes of 7,500 to 12,000 feet.

137627. Meconopsis napaulensis DC. Papaveraceae.

A stout perennial herb, 3 to 5 feet high, with the young parts clothed in softly villous golden hairs. The sinuate-lobed or pinnatifid leaves are 10 to 16 inches long, and the golden-yellow flowers, 2 to 4 inches across, are in elongated racemes. Native to the temperate Sikkim Himalayas at altitudes of 9,000 to 12,000 feet.

For previous introduction see 102319.

137628. Meconopsis Wallichii Hook. Papaveraceae.

Satinpoppy.

A beautiful hardy biennial from the mountains of Sikkim, India, where it raises its glorious pyramids of mauve-colored flowers to a height of 7 feet or more. In the winter the well-developed gray-green rosettes of leaves are very attractive. It is found at altitudes of 9,000 to 12,000 feet.

For previous introduction see 48322.

137629. Osmanthus suavis C. B. Clarke. Oleaceae.

137630. Pieris formosa (Wall.) D. Don. Ericaceae.

A Himalayan bush 15 to 20 feet high that bears large terminal clusters of white flowers resembling those of the lily-of-the-valley. The glossy green foliage, which persists throughout the winter, makes a very effective background for early-blooming flowers. Native to the eastern Himalayas at altitudes of 6,000 to 10,000 feet.

For previous introduction see 65263.

137631. PLECTRANTHUS STRIATUS Benth. Menthaceae.

An herb, with stems up to 1 foot high, small ovate, crenate leaves, and panicled cymes of small white flowers. Native to the temperate Himalayas at altitudes of 3,000 to 6,000 feet.

For previous introduction see 8266.

137632. Primula Geraniifolia Hook. f. Primulaceae.

A very slender primula, with acutely lobed orbicular leaves 2 to 3 inches in diameter and simple and superimposed whorls of lilac flowers. Native to the Himalayas between Sikkim and Bhotan at an altitude of about 10,000 feet.

For previous introduction see 128970.

137633. Sambucus adnata Wall. Caprifoliaceae.

A Himalayan relative of the elderberry that has clusters of fragrant white flowers about 10 inches in diameter, followed by red fruits. Native to Nepal and Sikkim at altitudes of 5,000 to 10,000 feet.

For previous introduction see 59668.

137634. Senecio mortoni C. B. Clarke. Asteraceae.

137609 to 137641—Continued.

137635. SORBUS CUSPIDATA (Spach) Hedl. Malaceae.

Mountain-ash.

A tree native to northern India at an altitude of about 6,000 feet, with elliptic to obovate doubly serrate simple leaves 3 to 8 inches long, densely white tomentose beneath. The small white flowers are borne in terminal corymbs 3 to 5 inches across and are followed by reddish fruits almost 1 inch in diameter.

For previous introduction see 93949.

137636. Spiraea Micrantha Hook. f. Rosaceae.

Spirea.

A very attractive shrub of rather lax habit, found in the eastern temperate Himalayas between 6,000 and 10,000 feet altitude. The narrowly ovate, doubly toothed leaves are sometimes 7 inches long, and the small pale-pink flowers are borne in very long spreading panicles.

For previous introduction see 99753.

137637. Swertia Chirayita (Roxb.) Karst. Gentianaceae.

A tall herbaceous plant, with stems 2 to 5 feet high and subsessile leaves 2 to 4 inches long. The lurid green-yellow flowers in large panicles are tubular, with purpleveined lobes  $\frac{1}{2}$  inch long; they have two glandular depressions at the base of each lobe, with a fringe of long white or pink hairs at the summit. Native to the temperate Himalayas at altitudes of 4,000 to 10,000 feet.

For previous introduction see 99755.

137638. SWERTIA PURPURASCENS (D. Don) Wall.

This species is very closely related to Swertia limaculata, from which it differs in having purple flowers with reflexed corolla lotes. It grows on the western Himalayas at altitudes ranging from 5,000 to 12,000 feet.

For previous introduction see 111095.

137639. Symplocos sp. Symplocaceae.

137640. VIBURNUM ERUBESCENS Wall. Caprifoliaceae.

A shrub or small tree, with slender, ash-colored branches, drooping panicles of white or yellowish-white flowers, and red ovoid fruits ¼ of an inch long. The very hard reddish wood is close and even-grained and could be used as a substitute for boxwood and for carving. Native to the temperate Himalayas at altitudes of 3,000 to 10,000 feet.

For previous introduction see 47827.

137641. Zanthoxylum oxyphyllum Edgeworth. Rutaceae.

For previous introduction see 60659.

#### 137642 to 137645.

From the Dutch East Indies. Seeds collected by the Fairchild-Archbold Expedition. Received April 19, 1940.

137642. Pandanus sp. Pandanaceae.

Screwpine.

No. 241. From Celebes. February 17, 1940.

137643. Pueraria phaseoloides (Roxb.) Benth. Fabaceae.

For previous introduction see 136644.

137644. Harpullia sp. Sapindaceae.

No. 251. From Gorontalo, Celebes, February 21, 1940. A tree with alternate pinnate leaves, having three to five alternate, elliptical, abruptly acuminate, entire leaflets and red and yellow pods.

137645. Crataeva sp. Capparidaceae.

No. 245. From the Marissa River, Gorontalo Province, February 23, 1940. The large fruit is reported to be edible.

#### 137646 to 137688.

From India. Seeds collected by Dr. and Mrs. R. R. Stewart, Gordon College, Rawal-pindi. Received June 3, 1940.

Collected in northern Kashmir in August 1939.

137646 to 137688-Continued.

137646. Androsace rotundifolia Hardw. Primulaceae.

No. 26. A small herbaceous perennial, with long-petioled, orbicular-cordate leaves, the radical ones having shallow-rounded crenate lobes. The few to many slender, leafless scapes, 1 to 6 inches high, bear umbles of small white or pink flowers. Native to the temperate Himalayas at altitudes of 5,000 to 11,000 feet.

137647. Androsace sp.

No. 36.

137648 to 137651. Anemone spp. Ranunculaceae.

137648. Anemone Rupestris Hook. f. and Thoms.

No. 9. Sulphur anemone.

137649. Anemone tetrasepala Royle.

No. 31. A large robust anemone, with long-petioled, leathery, reniform or cordate, deeply 5-lobed leaves 3 to 10 inches wide and white flowers in cymes 1 foot long. Native to the Himalayan region at altitudes of 8,000 to 10,000 feet.

For previous introduction see 122777.

137650. Anemone sp.

No. 32.

137651. Anemone sp.

No. 41.

137652 to 137655. AQUILEGIA spp. Ranunculaceae.

137652 and 137653. AQUILEGIA VULGARIS L.

European columbine:

137652. No. 30. Grown at 11,150 feet altitude. A sticky columbine.

137653. No. 13. From Burzit Pass, at 11,000 feet altitude. A sticky columbine. For previous introduction see 129016.

137654. AQUILEGIA Sp.

No. 22. A white columbine.

137655. AQUILEGIA Sp.

No. 44. From Kamri, at 13,400 feet altitude.

137656. ASTER HETEROCHAETA C. B. Clarke. Asteraceae.

No. 11.

137657. Caltha Palustris L. Ranunculaceae.

No. 14. Alba. From Gaspat Mountain above 8,000 feet altitude.

For previous introduction see 118573.

137658 and 137659. COLUTEA NEPALENSIS Sims. Fabaceae.

A deciduous shrub up to 10 feet high, with pinnate leaves of small oval leaflets and drooping racemes of 3 or 4 showy, yellow flowers. Native to the Himalayan region at 8,000 to 11,000 feet altitude.

137658. No. 8.

137659. No. 8-A.

137660. Daphne oleoides Schreb. Thymelaeaceae.

Olive daphne.

No. 5. From above Godhai, at 8,000 feet altitude.

For previous introduction see 133110.

137661. Delphinium sp. Ranunculaceae.

No. 34.

137662. Eremurus sp. Liliaceae.

No. 18

137646 to 137688-Continued.

137663. Fritillaria Roylei Hook. Liliaceae.

No. 15. From Burzil Chaubi, at 11,740 feet altitude. A fritillaria, with whorled or opposite linear-lanceolate leaves 2 to 4 inches long and solitary or few nodding flowers on stems 1 to 2 feet high. The flowers are  $1\frac{1}{2}$  to 2 inches long, campanulate, yellow green, tessellated with dull purple. Native to the Himalayan region at altitudes of 8,000 to 10,000 feet.

For previous introduction see 122856.

137664. Hedysarum cachemirianum Baker. Fabaceae. No. 17.

137665. HERACLEUM CANDICANS DC. Apiaceae.

No. 38. From near Gurikot.

137666. HERACLEUM Sp.

No. 47. From near Gurikot, at 9,000 feet altitude.

137667 and 137668. IRIS HOOKERIANA Foster. Iridaceae.

A hardy iris, up to 2 feet high, with erect, pale-green, strongly ribbed leaves, 2-flowered spathes, a slender perianth tube, and a bright-lilac limb  $1\frac{1}{2}$  to 2 inches long; blade dark lilac variegated with paler lilac; claw whitish with violet hairs and beard of white hairs tipped with yellow. Related to *Iris kumaoensis*. Native to the western Himalavan region.

137667. No. 19. From 11,150 feet altitude.

137668. No. 45. From Raj Diangan.

137669. Jaeschkea sp. Gentianaceae. No. 39.

137670. JUNIPERUS Sp. Pinaceae.

No. 35. From near Gurikot, at 9,000 feet altitude.

137671. Lactuca sp. Cichoriaceae.

137672. LINUM PERENNE L. Linaceae.

Perennial flax.

No. 43. A blue perennial flax 8 to 10 inches high. Native to western Tibet at altitudes of 9,000 to 13,000 feet.

137673. MECONOPSIS ACULEATA Royle. Papaveraceae.

No. 4. From Raj Diangan stream. A biennial Himalayan plant with hairy stems and rosettes of blunt-pointed leaves. The flowers, bright blue with golden yellow throats, are borne in spikelike racemes, the flowers opening from the top of the raceme downward. Native to the western Himalayas at altitudes of 11,000 to 15,000 feet.

For previous introduction see 122895.

137674. Oxytropsis thomsoni Bunge. Fabaceae.

No. 28.

No. 37.

137675. Parrotia Jacquemontiana Decaisne. Hamamelidaceae.

No. 16. Native to Kashmir at altitudes of 5,000 to 9,000 feet.

137676. Pedicularis siphonantha D. Don. Scrophulariaceae.

No. 27. An attractive perennial 1 foot high; flowers large, old rose, with a large white eye. Found growing in sod watered well by springs.

For previous introduction see 122909.

137677. Podophyllum emodi Wall. Berberidaceae.

No. 46. From Tragbal. Native to the interior ranges of the Himalayas, at altitudes of 9,000 to 14,000 feet from Sikkim to Hazara, descending to 6,000 feet in Kashmir.

For previous introduction see 122920.

137678. PRIMULA sp. Primulaceae.

No. 40. From Burzil, at 13,900 feet altitude. A snow primula.

137646 to 137688-Continued.

137679. Prunus armeniaca L. Amygdalaceae.

Apricot.

No. 20. From Gurikot, at 7,100 feet altitude. A sweet-flavored apricot, cultivated and almost naturalized in northwest India at altitudes up to 10,000 feet.

137680. Ribes nigrum L. Grossulariaceae.

European black currant.

No. 6. From Godhai. Native to the temperate western Himalayas from Kunawar to Kashmir at altitudes of 7,000 to 12,000 feet.

137681 to 137683. Rosa Webbiana Royle. Rosaceae.

Rose.

An erect shrub, with five to nine very small orbicular glabrous leaflets, large solitary pink flowers, and ovoid bright-red fruits. Native to the drier inner Himalayas from Kashmir to Kumaon at altitudes of 5,000 to 13,500 feet.

137681. No. 1.

137682. No. 3. From near Gurikot.

137683. No. 3-A. From Gilgit Roads.

For previous introduction see 54245.

137684. Salvia Hians Royle. Menthaceae.

No. 48. From Raj Diangan Pass. A viscid-hairy perennial herb 2 to 3 feet high, with cordate-toothed leaves 4 to 7 inches long, on petioles often 10 inches long. The blue flowers, 1 to 2 inches long, with inflated throats, are borne in large spreading panicles. Native to the western temperate Himalayas at altitudes of 8,000 to 11,000 feet.

For previous introduction see 122950.

137685. Scabiosa speciosa Royle. Dipsacaceae.

No. 42. From Kanri Bangalon. A tufted perennial up to 2 feet high, with oblong, pubescent leaves 2 inches long, pinnatifid at the base, and large, nearly flat heads of lavender to bright-mauve flowers. Native to the temperate Himalayas at altitudes of 7,000 to 11,000 feet.

137686. SERRATULA PALLIDA DC. Asteraceae.

No. 7. A hardy herbaceous perennial, with simple or branching stems 1 to 3 feet high, radical leaves, and corymbose heads of violet or white flowers 1 inch or more across. Native to the western Himalayas at altitudes of 6,000 to 8,000 feet.

137687. THALICTRUM PEDUNCULATUM Edgew. Ranunculaceae

No. 21.

137688. VIOLA sp. Violaceae

Violet.

No. 24. From Minimarg, at 9,000 feet altitude.

# 137689 and 137690.

From Brazil. Seeds presented by the Instituto Agronómico do Estado de São Paulo, Campinas. Received June 20, 1940.

137689. Myrciaria sp. Myrtaceae.

Cambuca.

137690. POUTERIA CAIMITO (Ruiz and Pav.) Radlk. Sapotaceae.

Abiu.

Abio Paulista. A Brazilian tree 15 to 20 feet high, with bright-green lanceolateobovate leaves 4 to 8 inches long, and bright-yellow, ovoid-ellipsoid edible fruits 2 to 4 inches long. These have a thick tough skin enclosing translucent flesh, which in flavor resembles that of the sapodilla (Achras zapota).

For previous introduction see 41003.

## 137691 to 137693.

From Indo-China. Seeds presented by M. Poilane, Lang Eram par Dongha et Khe Sanh, Province Quangtu, Annam. Received June 12, 1940.

137691. Crotalaria sp. Fabaceae.

137691 to 137693—Continued.

137692. Indigofera teysmanni Miquel. Fabaceae.

A small purple-flowered tree with hard durable wood. It grows rapidly, and is useful for shading young coffee plants.

For previous introduction see 29186.

137693. Tephrosia sp. Fabaceae.

137694. Castanospermum australe Cunn. and Fraser. Fabaceae.

Moreton Bay chestnut.

From Australia. Seeds presented by C. G. Savage, Director of Fruit Culture, Department of Agriculture, New South Wales. Received June 20, 1940.

A large ornamental leguminous tree, native to Queensland and New South Wales, where it is said to grow abundantly along rivers. The large evergreen leaves and the racemes of bright orange-yellow flowers make an attractive picture in any subtropical garden. The pod, 8 to 9 inches long, contains 3 to 5 large seeds, resembling chestnuts, that are poisonous.

For previous introduction see 45504.

# 137695 and 137696.

From Australia. Seeds presented by E. A. Southee, Principal, Hawkesbury Agricultural College, Richmond. Received June 20, 1940.

137695. Cucumis metuliferus E. Mey. Cucurbitaceae.

Cucumber.

Africa Horned Cucumber. This South African "wild cucumber" is native to the Kalahari Desert and the Belgian Congo. The plant is an annual creeper, much branched, and covered with bristly hairs. The dark-green leaves are similar to those of the ordinary cucumber, and the flowers are yellow. The gourdlike fruit when ripe is about 5 inches long and is covered with short hard spines. It is eaten in the same way as the ordinary cucumber.

For previous introduction see 65694.

137696. Cucumis sativus L.

Cucumber.

Bangalore.

## 137697 to 137703.

From South Australia. Seeds presented by the Waite Agricultural Institute, Glen Osmond. Received June 18, 1940.

137697. Bromus Catharticus Vahl. Poaceae.

Grass.

An annual or biennial grass, up to 2 feet high, which forms a large stool and spreads rapidly from the root divisions. It is native to South America and is a good forage grass.

For previous introduction see 130892.

137698. EHRHARTA CALYCINA J. E. Smith. Poaceae.

Perennial veldtgrass.

A heavy-yielding drought-resistant and nutritious grass that grows to a height of more than 4 feet and seeds profusely. Native to South Africa.

For previous introduction see 81943.

137699. Medicago truncatula Gaertn. Fabaceae.

Medic.

For previous introduction see 134760.

137700. STIPA NITIDA Summerh. and Hubb. Poaceae.

Grass.

A slender perennial grass up to 2 feet high. Native to South Australia.

137701. STIPA SCABRA Lindl.

Grass.

A perennial grass, typically with slender, tufted stems 1 to 2 feet high. Native to Australia.

137697 to 137703—Continued.

137702. Trifolium cernuum Brot. Fabaceae.

Clover.

An annual 1 foot high, with drooping heads of pale-purple flowers. It is native to Spain.

For previous introduction see 90727.

137703. TRIFOLIUM GLOMERATUM L.

Clover.

For previous introduction see 134771.

## 137704 to 137773.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 26, 1940.

137704 and 137705. ORYZA SATIVA L. Poaceae.

Rice.

137704. No. 5225. *Birinj*. From Saadababad, Kirman, December 22, 1939. Grown on alkaline soil and watered every evening. Good quality.

137705. No. 5229. Birinj-i-Champa. From Teserj, Kirman, December 24, 1939. Grown in alkaline soil, not grown in mud. Good quality.

137706 to 137710. PISTACIA spp. Anacardiaceae.

137706. PISTACIA TEREBINTHUS L.

False terebinth.

No. 5256. Bene. From Balvard, Kirman, December 31, 1939. A handsome tree, up to 30 feet high, with a trunk  $2\frac{1}{2}$  feet or more in diameter. The small ovoid fruits are  $\frac{1}{3}$  inch long. Native to Asia Minor.

For previous introduction see 137164.

137707 to 137710. PISTACIA VERA L.

Pistachio.

137707. No. 5411. Pista. From Kirman, Kirman, January 23, 1940. Selected from market stock.

137708. No. 5566. Pista. From Darzin, February 15, 1940.

137709. No. 5567. Pista-i-fandohki, "filbert pista." From Bahramabad. February 18, 1940.

137710. No. 5568. *Pistaebadami*, "almond pista." From Bahramabad, February 17, 1940.

137711 to 137731. Prunus spp. Amygdalaceae.

137711 to 137724. PRUNUS ARMENIACA L.

Apricot.

Zardalu is the vernacular name for the apricot in Iran.

137711. No. 5255. From Balvard, Kirman, December 31, 1939. The dried fruits are mildly acid; flesh apparently predominantly white; kernels bitter and sweet. Climate mild, the ground barely freezing.

137712. No. 5284. From Saidabad, Kirman, January 1, 1940. A bazaar sample.

137713. No. 5443. From Bam, January 26, 1940. Grown where there are mild winters.

137714. No. 5460. From Dehidisk, February 2, 1940. Fruit slightly acid; flesh white and yellow. Winters mild, and ground does not remain frozen.

137715. No. 5463. From Dehibakon, January 27, 1940. Grown where the winters are mild.

137716. No. 5501. From Tomogaon, February 5, 1940. Grown where the winters are mild.

137717. No. 5591. From Yezd, February 21, 1940.

137718. No. 5668. From Isfahan, March 5, 1940. Dried fruit globose, 1½ inches in diameter; translucent and gold; no fiber, not acid. Buds are crimson, opening pale pink. The ground probably does not remain frozen all day in winter.

137719. No. 5692. From Qumsheh, Isfahan, March 7. 1940. Said to be white-fleshed, with edible kernel. Buds are crimson red, opening pink. Grown where the winters are mild.

#### 137704 to 137773-Continued.

- 137720. No. 5701. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Dried fruit 1½ inches long; flesh white, sweet, and slightly acid; kernel edible. Flowers crimson in bud, opening pale pink. Grown where the winters are mild.
- 137721. No. 5702. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Said to have white flesh and a bitter kernel. Grown where there are mild winters.
- 137722. No. 5763. Zardalu-i-talkh. From Niriz, Fars, March 30, 1940. Seeds said to be bitter. Flowers are often pale pink and very fragrant.
- 137723. No. 5776. Zardalueshirin. From Niriz, Fars, March 30, 1940. A region where limes are grown. Trees often have pale-pink fragrant flowers. Seeds said to be edible.
- 137724. No. 5424. Alucha. From Bam, January 25, 1940. Fruit pleasantly acid. Dried fruit from market, said to be from Khorassan.

# 137725. PRUNUS CERASUS L.

Sour cherry.

No. 5311. Alubalu. From Saidabad, Kirman, January 1, 1940. Native trees 6 inches in diameter, healthy and well grown. Adapted to warm climate with ground barely freezing.

# 137726 to 137728. PRUNUS DOMESTICA L.

Common plum.

- 137726. No. 5263. Alucha. From Saidabad, Kirman, December 31, 1939. A local prune, said to be excellent when fresh. Grown where the winters are mild.
- 137727. No. 5666. Alu. From Isfahan, March 5, 1940. Dried fruits are globose, 1½ inches in diameter, much wrinkled, red black; flesh of prunelike consistency, somewhat acid.
- 137728. No. 5667. Alu. From Isfahan, March 5, 1940. Dried fruits globose, 1¼ inches in diameter; translucent, probably light red; pleasantly acid, and freestone.

#### 137729. Prunus Bokhariensis Schneid.

No. 5514. Alubokhara, Alucha. From Tomogaon, February 6, 1940, probably from the hills. Fruits globose, probably about 1½ inches in diameter when fresh. Sweet when dried.

#### 137730. PRUNUS Sp.

No. 5555. From Guragan, February 11, 1940, at 8,000 feet altitude. A dense, bushy, ornamental tree with green twigs, inconspicuous linear leaves about ½ inch long, and handsome pink flowers. A region where winters are mild.

# 137731. PRUNUS sp.

No. 5690. Alu. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Dried fruit prune-shaped, 2 inches long, red, and mildly acid.

#### 137732 to 137771. Triticum aestivum L. Poaceae.

Wheat.

- 137732. No. 5182. Gandum. From Isin, December 17, 1939, at 500 feet altitude. Said to be fall-sown and given little water.
- 137733. No. 5205. Gandum. From Bandar Abbas, December 20, 1939. Said to be fall-sown.
- 137734. No. 5206. *Gandum*. From Bandar Abbas, December 20, 1939. Imported from up country.
- 137735. No. 5221. Fasai Gandum. From Saadatabad, December 22, 1939, a frost-free region. Fall-sown.
- 137736. Bo. 5230. *Gandum-i-dauna*. From Teserj, Kirman, December 24, 1939. Said to be grown on a dry, alkaline soil.
- 137737. No. 5232. Gandum-i-Abi. From Teserj, Kirman, December 24, 1939. Said to be fall-sown and irrigated on an alkaline soil.
- 137738. No. 5233. From Teserj, Kirman, December 25, 1939. Said to be fall-sown and irrigated on alkaline soil.

# 137704 to 137773—Continued.

- 137739. No. 5234. *Gandum-i-fasai*. From Madenu, Kirman, December 25, 1939. Said to be fall-sown and irrigated on an alkaline soil.
- 137740. No. 5248. Gandum-i-rasmai. From Balvard, Kirman, December 30, 1939. Said to be fall-sown and irrigated. Region fairly temperate, unsuited for growing cotton.
- 137741. No. 5250. *Gandum-i-bahari*. From Balvard, Kirman, December 30, 1939. Said to be fall-sown and not irrigated.
- 137742. No. 5286. From Saidabad, Kirman, January 1, 1940. Said to be fall-sown and irrigated. Suitable for temperate cotton-growing climate.
- 137743. No. 5297. *Gandum-i-bame*. From Saidabad, Kirman, January 1, 1940. Said to be fall-sown and irrigated.
- 137744. No. 5361. Gandumi Andojird. From Chaharfarsakh, Kirman, January 9, 1940. A fall-irrigated wheat grown on the desert. Said to come from a mountain village, Andojird, where it thrives better than here.
- 137745. No. 5389. Gandum. From Khabis, Kirman, January 11, 1940. Adapted to alkaline soil and heat.
- 137746. No. 5419. Gandum. From Bam, January 25, 1940. Said to be fall-sown and irrigated.
- 137747. No. 5452. Gandum. From Dehidisk, February 1, 1940. Winter-sown and irrigated, winters are mild and snowless. An excellent wheat for bread making.
- 137748. No. 5474. Gandum. From Tomogaon, February 3, 1940. A variety cut back for fodder when 6 to 12 inches high; said to be cut 2 to 3 times before it is allowed to head. A region of no frost.
- 137749. No. 5499. Gandum. From Tomogaon, February 5, 1940. Winter-sown and irrigated.
- 137750. No. 5509. Gandumirishi. From Dusari, February 6, 1940. Fall-sown and irrigated.
- 137751. No. 5512. Gandumi Kutiur. From Dusari, February 6, 1940. Wintersown and irrigated.
- 137752. No. 5513. Gandumi Bedom. From Abbasabad, February 6, 1940. Winter-sown and irrigated.
- 137753. No. 5536. From Tomogaon, February 7, 1940. An irrigated variety
- 137754. No. 5536-A. *Gandumi Khurasani*. From Gurguran, February 10, 1940 at 8,000 feet altitude. Winter-sown and irrigated.
- 137755. No. 5541. From Guragan, February 10, 1940, at 8,000 feet altitude. Winter-sown and irrigated. Makes excellent flour.
- 137756. No. 5545. Gandumi Sulemani. From Guragan, February 10, 1940, at 8,000 feet altitude. Winter-sown and irrigated. Makes excellent flour.
- 137757. No. 5556. Gandumi Khilu. From Maskun, February 12, 1940, at 8,000 feet altitude. Winter-sown and irrigated.
- 137758. No. 5561. Gandum. From Darzin, February 14, 1940. Sown in the late fall and irrigated. Makes good flour.
- 137759. No. 5570. Gandumi Saman. From Bahramabad, Kirman, February 18, 1940. Winter-sown and irrigated. Makes good flour.
- 137760. No. 5606. Gandum. From Dehibala, Shirkah, February 22, 1940. Winter-sown and irrigated.
- 137761. No. 5617. Gandum. From Taft, February 23, 1940. Winter-sown and irrigated.
- 137762. No. 5644. Gandum. From Isfahan, February 27, 1940. Probably fall-sown and irrigated.
- 137763. No. 5673. Gandum. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Fall-sown and irrigated.

#### 137704 to 137773—Continued.

- 137764. No. 5703. Gandum. From Surmag, Fars, March 9, 1940, at 4,000 feet altitude. Said to be winter-sown and irrigated.
- 137765. No. 5705. Gandum. From Persepolis, Shiraz, March 11, 1940. Probably fall-sown and irrigated.
- 137766. No. 5731. Gandum. Jahrum, Fars, March 21, 1940. Winter-sown and irrigated.
- 137767. No. 5758. Gandum. From Niriz, Fars, March 29, 1940. Winter-sown and irrigated. Flour makes good bread. A citrus region.
- 137768. No. 5829. Gandum. From Dast Syin, Fars, April 9, 1940. Probably winter-sown and irrigated.
- 137769. No. 5831. Gandum rezakhani. From Kazerun, Fars, April 11, 1940. Grown where season is mild.
- 137770. No. 5835. Gandumi Sya Khosh. From Kazerun, Fars, April 11, 1940. Husk said to be black. Climate mild.
- 137771. No. 5841. Gandumioroji. From Kazerun, Fars, April 11, 1940. Climate mild with rainy growing season.
- 137772 and 137773. ZEA MAYS L. Poaceae.

Corn.

- 137772. No. 5708. Zaurat. From Persepolis, Fars, March 12, 1940. Probably quick maturing.
- 137773. No. 5217. Zorat. From Banda Abbas, December 21, 1939. Plants in field 4 feet high, often with two ears 6 inches long. Stands heat and alkaline soil.

# 137774. Gossypium raimondii Ulbrich. Malvaceae. Cotto

From the British West Indies. Seeds presented by R. A. Silow, Cotton Research Station, Trinidad. Received June 26, 1940.

W 4-6 Uns.

For previous introduction see 136908.

#### 137775 to 137902.

- From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 27, 1940.
  - 137775 to 137802. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon. Hinduana is the vernacular name for watermelon in Iran.
    - 137775. No. 5174. From Bandar Abbas, December 16, 1939. The seeds are roasted and sold.
    - 137776. No. 5189. From Isin, December 17, 1939. Tolerates heat and alkaline soil.
    - 137777. No. 5257. From Saidabad, Kirman, December 31, 1939. A market mixture; flesh yellow to pink and good texture. Seeds are sold roasted, along with Cucurbita seeds; appear to be of different stock from those of Afghanistan.
    - 137778. No. 5337. From Kirman, Kirman, January 4, 1940. Fruit globose, 12 inches in diameter; rind has alternate stripes of pea and black green, ½ inch thick; flesh apparently rose.
    - 137779. No. 5392. From Chaharfarsakh, Kirman, January 14, 1940. Fruit globose, 12 inches in diameter; rind pale green with stripes of darker color, ½ inch thick; flesh firm, yellow-tinted apricot, of good quality. Adapted to hot date-growing country.
    - 137780. No. 5338. From Kirman, Kirman, January 4, 1940. Fruit elongate 18 by 10 inches; rind grass green, ¾ inch thick; flesh rose.
    - 137781. No. 5353. From Kirman, Kirman, January 5, 1940. Fruit globose, 12 inches in diameter; rind black green, ½ inch thick; flesh yellow near rind, then rose, of good texture, and not very sweet. Apparently a good keeper.
    - 137782. No. 5365. From Khabis, Kirman, January 10, 1940. Grown in very hot date region.
    - 137783. No. 5390. From Khabis, Kirman, January 12, 1940. Said to be from the Khorassan District; probably adapted to great heat.

137784. No. 5440. From Bam, January 26, 1940. Grown in a hot date region.

137785. No. 5464. From Dehidisk, February 2, 1940.

137786. No. 5485. From Tomogaon, February 4, 1940. Grown in a hot date region.

137787. No. 5527. From Tomogaon, February 7, 1940. Fruits globose up to 4 inches in diameter; rind pale green, blotched with darker stripes. Flavor bitter, but fruit to be eaten by camels.

137788. No. 5542. From Guragan, February 10, 1940, at 8,000 feet altitude.

137789. No. 5562. From Darzin, February 14, 1940.

137790. No. 5604. From Dehibala, Shirkuh, February 22, 1940, at 9,000 feet altitude. Probably grown where the summer climate is mild.

Nos. 137791 to 137795. From Yezd, Kirman, February 20 to 24, 1940.

137791. No. 5580. Probably adapted to great heat.

137792. No. 5627. Fruit subglobose, 9 inches long; rind grass green, ribbed and mottled darker; flesh red.

137793. No. 5628. Fruit subglobose, 9 inches long; rind sea green with deeply indented ribs; flesh red.

137794. No. 5629. Fruit globose, 8 inches in diameter; rind black green; flesh red.

137795. No. 5630. Fruit globose, 9 inches in diameter; rind dark green, ribbed and mottled with darker green; flesh red.

137796. No. 5650. From Isfahan, March 1, 1940.

137797. No. 5688. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Probably grown where summers are mild and soil nonalkaline.

137798. No. 5709. From Persepolis, Fars, March 12, 1940.

137799. No. 5715. From Shiraz, Fars, March 15, 1940.

137800. No. 5730. From Jahrum, Fars, March 21, 1940. Grown in date region

137801. No. 5753. From Niriz, Fars, March 29, 1940. Grown in a citrus area.

137802. No. 5762. From Niriz, Fars, March 29, 1940. Grown in a citrus area.

137803 to 137833. Cucumis melo L. Cucurbitaceae. Muskmelon.

Kharbuza is the vernacular name for muskmelon in Iran.

137803. No. 5188. From Isin, December 17, 1939. Tolerant of heat and alkaline soil.

137804. No. 5285. From Saidabad, Kirman, January 1, 1940. A mixture.

137805. No. 5324. From Kirman, Kirman, January 3, 1940. A mixture.

137806. No. 5387. From Khabis, Kirman, January 11, 1940. Adapted to hot date-growing region.

137807. No. 5849. From Kazerun, Fars, April 11, 1940. Grown in a date region.

137808. No. 5449. From Dehidisk, February 1, 1940.

137809. No. 5469. From Dehidisk, February 2, 1940. Grown under mild winters and hot summers.

137810. No. 5477. From Tomogaon, February 4, 1940. A very hot date-growing area.

137811. No. 5492. From Tomogaon, February 5, 1940. Grown in a hot date region.

137812. No. 5548. From Guragan, February 10, 1940, at 8,000 feet altitude.

137813. No. 5563. From Darzin, February 14, 1940.

Nos. 137814 to 137819. From Yezd, February 21, 1940.

137814. No. 5588. Said to be a mixture adapted to great heat.

137815. No. 5593. Khiyar-i-shang. Fruit said to be long.

137816. No. 5595. Fruit nearly globose, 8 inches in diameter; rind not netted; flesh very sweet. From the hill district nearby.

137817. No. 5596. Fruit elongated, 12 inches long; rind heavily netted. Adapted to great heat.

137818. No. 5597. Fruit elongate, 10 inches long; rind netted. Adapted to great heat.

137819. No. 5598. Rind smooth and unnetted. Adapted to great heat.

137820. No. 5605. From Dehibala, Shirkuh, February 22, 1940, at 9,000 feet altitude. Probably grown in mild summer climate.

137821. No. 5622. Kharbuza garmak. From Taft, February 23, 1940. Region of hot summers.

137822. No. 5634. From Isfahan, February 27, 1940. Fruit elongate, with rounded ends, 14 by 6 inches; rind pale yellow, heavily netted; flesh cream,  $2\frac{1}{2}$  to 3 inches thick, crisp and sweet. A good keeper.

137823. No. 5651. From Isfahan, March 2, 1940.

137824. No. 5689. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Summers probably mild and soil nonalkaline.

137825. No. 5734. Khiyar Chambar. From Jahrum, Fars, March 22, 1940. From a date-growing region.

137826. No. 5744. From Jahrum, Fars, March 25, 1940. From a date-growing region.

137827. No. 5769. From Niriz, Fars, March 30, 1940. From a citrus-limit region.

137828. No. 5772. *Khiyarain*. From Niriz, Fars, March 30, 1940. Said to be 3 feet long and yellow, with sour flesh.

Nos. 137829 to 137833. From Shiraz, Fars, April 2 to 4, 1940.

137829. No. 5798. From a citrus-limit region.

137830. No. 5799. Said to be long; from a citrus-limit region.

137831. No. 5807. *Kharbuzueisfahani*. Said to be long and yellow; from a citrus-limit belt.

137832. No. 5811. Kharbuzaetalbi. Said to be a round melon that reaches the size of 6 pounds. From a citrus-limit belt.

137833. No. 5820. From a citrus-limit belt.

137834 to 137858. Cucumis sativus L. Cucurbitaceae. Cucumber.

137834. No. 5332. Khiyor-i-chambar. From Kirman, Kirman, January 4, 1940. Said to be a long Chinese type (Indian Tar).

137835. No. 5335. Khir-i-sabz. From Kirman, Kirman, January 4, 1940. Said to be about 10 inches long.

137836. No. 5398. Khiyar-i-balang. From Kirman, Kirman, January 21, 1940. A local cucumber.

137837. No. 5850. Khiyarze. From Kazerun, Fars, April 11, 1940. Said to be a long thin cucumber. From a date-growing region.

137838. No. 5396. Khiyor-i-chambar. From Chaharfarsakh, Kirman, January 15, 1940. Fruit said to be long and thin.

137839. No. 5677. Khiyar-i-sabz. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Said to be 12 inches long. Summer probably mild.

137840. No. 5429. Khiyar-i-sabz. From Bam, January 25, 1940. Said to be 1 foot long. From a date-growing region.

137841. No. 5430. Khiyor-i-balang. From Bam, January 25, 1940. Said to be at least 2 feet long. A hot, date-growing country.

137842. No. 5487. Khiyar. From Tomogaon, February 4, 1940. Grown in a hot climate, probably in the mountain district.

- 137843. No. 5516. Khiyar-i-ghaitan. From Tomogaon, February 6, 1940. A wild desert plant; fruit 1½ inches long; rind greenish yellow splashed with green.
- 137844. No. 5529. Khiyar. From Tomogaon, February 8, 1940.
- 137845. No. 5549. Khiyar. From Guragan, February 10, 1940, at 8,000 feet altitude.
- 137846. No. 5587. Khiyar-i-balang. From Yezd, February 21, 1940. Said to be a short form, 6 inches long, and adapted to much heat.
- 137847. No. 5609. Khiyar. From Dehibala, Shirkuh, February 22, 1940, at 9,000 feet altitude. Fruits said to be long. Summers probably mild.
- 137848. No. 5620. Khiyar-i-balang. From Taft, February 23, 1940. Said to be a long variety.
- 137849. No. 5623. Khiyar-i-shang. From Taft, February 23, 1940. A long variety grown in a hot climate.
- 137850. No. 5663. Khiyar-i-balang. From Isfahan, March 4, 1940. Said to be a long variety.
- 137851. No. 5664. From Isfahan, March 4, 1940. Said to be a short variety.
- 137852. No. 5723. Balang. From Jahrum, March 20, 1940. From a date-growing region.
- 137853. No. 5757. Balang. From Niriz, Fars, March 29, 1940. Said to be a long variety, grown in a warm region.
- 137854. No. 5780. Khiyari-i-sabz. From Niriz, Fars, March 30, 1940. A long cucumber, 12 inches long.
- 137855. No. 5793. Khiyarze. From Shiraz, Fars, March 31, 1940. Said to be a long and thin variety.
- 137856. No. 5801. Khiyar-i-balang. From Shiraz, Fars, April 2, 1940. Said to be 12 inches long. Grown in the citrus-limit zone.
- 137857. No. 5815. Khiyar-i-sabz. From Shiraz, Fars, April 3, 1940. Said to be a short variety. Grown in the citrus-limit belt.
- 137858. No. 5880. Balang. From Bushire, Fars, April 15, 1940. Fruit yellow-green, 6 inches long. Good quality.
- 137859 to 137864. Cucurbita Maxima Duchesne. Cucurbitaceae. Squash
  - 137859. No. 5293. *Kadu*. From Balvard, Kirman, January 1, 1940. Fruit elongate, 9 by 15 inches, rind gray green and unribbed; flesh yellow, 2 inches thick, and insipid.
  - 137860. No. 5288. Kadu. From Saidabad, Kirman, January 1, 1940. Adapted to cotton country.
  - 137861. No. 5613. From Taft, February 23, 1940. Said to be globose. Grown where summers are hot.
  - Nos. 137862 to 137864 from Eglit, Fars, March 8, 1940, at 6,000 feet altitude.
  - 137862, No. 5681. Kaduerussi, "Russian Kadu." Fruit 15 by 8 inches; rind orange red to paler, splotched with green, pinkish-white incomplete rib lines and heavily indented ribs; flesh orange, 2 inches thick, tender and insipid.
  - 137863. No. 5693. Kaduerussi. Probably like No. 5681.
  - 137864. No. 5699.
- 137865 to 137883. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae. Cushaw. Nos. 137865 to 137869 from Saidabad, Kirman, December 28 and 29, 1940.
  - 137865. No. 5240. Fruit elongate, 14 by 7 inches; rind salmon pink and unribbed; flesh greenish yellow, 1½ inches thick, and insipid.
  - 137866. No. 5241. Fruit flattened, 12 by 7 inches; rind occasional deep ribs, attractive pale salmon pink; flesh yellow, 2 inches thick, fairly sweet.
  - 137867. No. 5243. Fruit subglobose, 12 inches long; rind creamy white, deeply irregularly ribbed; flesh 1½ inches thick, orange, and insipid.

- 137868. No. 5245. Kadu. Fruit elongate, 12 by 7 inches; rind salmon pink with broken stripes of pink; flesh 2 inches thick, yellow, and insipid.
- 137869. No. 5246. Kadu. Fruit 12 by 10 inches; rind salmon with faintly indented ribs; flesh 1¼ inches thick, yellow, and insipid.
- 137870. No. 5247. Kadu. From Balvard, Kirman, December 30, 1939. Fruit subglobose, 14 inches long; rind salmon red with irregular stripes of white and large blotches of gray green, ribs faintly indented; flesh orange yellow, 2 inches thick; flavor fair.
- 137871. No. 5292. Kadu. From Balvard, Kirman, January 1, 1940. Fruit flattened, 15 by 10 inches; rind red orange splashed with paler color, ribs deeply indented; flesh orange yellow, 2 inches thick, and insipid.
- 137872. No. 5373. From Khabis, Kirman, January 11, 1940. Fruit pear-shaped, 15 inches long; rind buff brown, spotted and blotched with paler brown, irregularly and deeply ribbed; flesh deep orange, 1¼ inches thick, and sweet. Said to keep 1 year. Adapted to much heat and alkaline soil.
- 137873. No. 5322. Kadu Khorasani. From Kirman, Kirman, January 3, 1940. Fruit subglobose, 12 inches long; rind salmon buff, deeply ribbed; flesh 2 inches thick, orange, and sweet.
- 137874. No. 5323. Kadui Khorasani. From Kirman, Kirman, January 3, 1940. Fruit gourd-shaped, 18 inches long; rind buff orange, ribbed; flesh orange, sweet.
- 137875. No. 5408. Kadue Tukhmimurghi. From Kirman, Kirman, January 22, 1940. Fruits ornamental, egg-shaped, 2 to 3 inches long; rind yellow.
- 137876. No. 5488. From Tomogaon, February 4, 1940.
- 137877. No. 5572. From Yezd, Kirman, February 20, 1940. Fruit ornamental, flattened, 3½ by 5 inches; rind bright orange clouded with paler orange, smooth and unribbed.
- 137878. No. 5592. From Yezd, February 21, 1940. Fruit round and white. Adapted to great heat.
- 137879. No. 5631. From Yezd, February 24, 1940. Fruit ornamental, ovoid, 4 inches long; shell hard, lemon yellow, well preserved.
- 137880. No. 5642. From Isfahan, February 27, 1940. Fruit round, white.
- 137881. No. 5722. Kadue Murabba. From Shiraz, Fars, March 16, 1940. Fruit elongated, 12 by 9 inches; rind golden brown, heavily ribbed; flesh 1½ inches thick, yellow orange, tender, and rather sweet.
- 137882. No. 5795. Halua Kadu. From Shiraz, Fars, April 2, 1940. Fruit round and yellow. Grown in the citrus-limit area.
- 137883. No. 5844. From Kazerun, Fars, April 11, 1940. From date-growing region.
- 137884 to 137902. Cucurbita Pepo L. Cucurbitaceae. Pumpkin.
  - 137884. No. 5244. Kadu. From Saidabad, Kirman, December 29, 1939. Fruit globose, 8 inches in diameter; rind orange red, with rib stripes of salmon; ribs faintly indented; flesh 1¼ inches thick, greenish yellow and insipid.
  - 137885. No. 5175. Kadu. From Bandar Abbas, December 16, 1939. Seeds roasted and sold.
  - 137886. No. 5253. Kadu. From Balvard, Kirman, December 31, 1939. Fruit egg-shaped, size of goose egg; rind canary yellow, smooth; said to be edible when tender.
  - 137887. No. 5294. Kadu. From Balvard, Kirman, January 1, 1940. Fruit globose, 12 inches in diameter; rind red orange and deeply ribbed; flesh 2 inches thick, orange yellow; good flavor but not very sweet.
  - 137888. No. 5403. Kadu. From Kirman, Kirman, January 21, 1940. Fruit elongate, 12 by 5 inches; rind pale yellow and smooth; flesh pale yellow, 11/4 inches thick. Eaten when young.
  - 137889. No. 5465. Kadu. From Dehidisk, February 2, 1940.

137890. No. 5493. From Tomogaon, February 5, 1940. From a hot, date-growing area.

137891. No. 5534. Kaduerunu. From Gurguran, February 10, 1940, at 8,000 feet altitude.

137892. No. 5535. Kaduehalui. From Gurguran, February 10, 1940, at 8,000 feet altitude.

137893. No. 5558. *Kadu*. From Maskun, February 12, 1940, at 8,000 feet altitude.

137894. No. 5593. From Yezd, February 21, 1940. Adapted to great heat.

137895. No. 5619. Kadu. From Taft, February 23, 1940. Fruit elongate.

137896. No. 5656. Kadu. From Isfahan, March 3, 1940.

137897. No. 5682. Kadu. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Fruit subglobose, 10 inches long; rind canary yellow, smooth; flesh pale orange, 2 inches thick, tender, not very sweet.

137898. No. 5683. Kadu. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Fruit subglobose, 8 inches long; rind orange red, nearly smooth and unnetted; flesh pale orange, 1¾ inches thick, tender, and not very sweet.

137899. No. 5761. Kadu. From Niriz, Fars, March 29, 1940. From a citrus area.

137900. No. 5796. Kaduedaraz. From Shiraz, Fars, April 2, 1940. From a citrus area.

137901. No. 5805. Kadue Amerikai, "American pumpkin." From Shiraz, Fars, April 3, 1940. From a citrus-limit belt.

137902. No. 5808. Kaduegird. From Shiraz, Fars, April 3, 1940. Fruit globose. From a citrus-limit belt.

# 137903. CROTALARIA VITELLINA Ker. Fabaceae.

From Indo-China. Seeds collected by D. T. Fleming of Maui, Hawaii, in North Annam. Presented to the United States Plant Introduction Garden, Coconut Grove, Florida, by Dr. David Fairchild, July 13, 1939. Numbered June 27, 1940.

A slender evergreen shrub, 8 to 10 feet high, native to Brazil.

For previous introduction see 107800.

# 137904 to 137907. Hordeum spp. Poaceae.

Barley.

From Australia. Seeds presented by the Experiment Farm, Department of Agriculture Glen Innes, New South Wales. Received June 27, 1940.

137904. Нопрешм sp.

Chevalier  $\times$  Peatland Bulk F4.

137905. HORDEUM Sp.

Peatland  $\times$  Goodwill F2.

137906. HORDEUM Sp.

Peatland  $\times$  Pryor F2.

137907. Hordeum sp.

 $Peatland \times Trabut F2.$ 

# 137908 to 137930.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received June 28, 1940.

137908 to 137917. Amygdalus spp. Amygdalaceae.

137908 to 137914. Amygdalus persica L.

Peach.

137908. No. 5254. Shoftadu, Hulu, Shalil. From Balvard, Kirman, December 31, 1939. A local mixture. Climate mild.

879385-50-5

137909. No. 5262. From Saidabad, Kirman, December 31, 1939. A local mixture. Climate mild.

137910. No. 5444. Shaftalu. From Bam, January 26, 1940.

137911. No. 5448. Hulu. From Dehidisk, February 1, 1940. Climate mild.

137912. No. 5700. Hulu. From Eglit, Fars, March 8, 1940, at 6,000 feet altitude. Dried fruit halves 3 inches across; flesh white, freestone; flavor unlike our peaches. Winter mild.

137913. No. 5546. *Hulu*. From Guragan, February 10, 1940, at 8,000 feet altitude. Seeds edible. No snow and ground barely freezes at this season.

137914. No. 5565. *Hulu*. From Mahun, February 16, 1940. Fruit very large; flesh (dried) white; seeds edible; season very late.

137915. Amygdalus sp.

No. 5312. From Saidabad, Kirman, January 1, 1940. A wild scrubby tree on the mountains. Fruit edible. Winters mild.

137916. Amygdalus sp.

No. 5446. Badam-i-talkh. From Dehidisk, January 31, 1940. An attractive, dense, leafless shrub growing best where underground water is near. Flowers said to be white. Winters mild.

137917. Amygdalus sp.

No. 5741. Badam-i-kuhi. From Jahrum, Fars, March 24, 1940. The wild fruits are collected from the Elburs Mountains on a limestone range at about 10,000 feet altitude. They are boiled to remove the bitterness and then eaten. Tree ornamental, but used as rootstocks for cultivated almonds in the desert. Winters mild.

137918 and 137919. Corylus avellana L. Betulaceae.

Filbert.

137918. No. 5242. Fandohk. From Saidabad, Kirman, December 28, 1939. Said to be from the north. Kernels usually fill the shell; flavor good. Undoubtedly stands freezing.

137919. No. 5586. Fandokh. From Yezd, February 21, 1940. Said to be from the north.

137920 to 137923. FICUS CARICA L. Moraceae.

Common fig-

137920. No. 5626. Aujir. From Taft, February 23, 1940. Dried fruits 1 to 1¼ inches across; flesh white and fairly sweet.

137921. No. 5785. Aujir Alan. From Niriz, Fars, March 30, 1940. Trees xerophytic, up to about 5 feet high, growing on an unirrigated limestone mountain. Fruit sweet. Winter rain said to be about 12 inches.

137922. No. 5786. Aujir-i-wasat. From Niriz, Fars, March 30, 1940. Trees about 5 to 6 feet high; planted on the steep slope of a limestone mountain, and not irrigated. Winter rain 12 inches, none in summer. The fruit is sweet.

137923. No. 5787. Aujir-i-siya. From Niriz, Fars, March 30, 1940. Trees small, up to 5 or 6 feet high, growing on a steep talus of a limestone mountain, unirrigated. Rainfall said to be 12 inches in the winter only. Fruit not dried, said to be good when fresh.

137924. Punica granatum L. Punicaceae.

Pomegranate.

No. 5445. Auar. From Bam, January 26, 1940. Fruits are very sweet. Grown in a hot date-growing region.

137925. Rubus sp. Rosaceae.

No. 5370. From Chaharfarsakh, Kirman, January 10, 1940. Fruit dry but apparently small, with bloom. Adapted to hot date-growing regions.

137926. Rubus sp.

No. 5442. From Dehivakri, January 28, 1940. Bush, spreading, 6 feet high, growing along watercourses. A heavy bearer. Winters mild.

137908 to 137930-Continued.

137927. Rubus sp.

No. 5825. From Maskun, Kirman, February 12, 1940. Vine up to 20 feet high, fructiferous, very thrifty, probably from the coldest part of the mountain range, ground probably seldom frozen all day.

137928. VITIS sp. Vitaceae.

No. 5789. Aujur. From Niriz, Fars, March 30, 1940. Vine growing wild in a mountain ravine. Rainfall 12 inches, coming in winter. Fruit sweet.

137929. VITIS sp.

No. 5790. Aujur. From Niriz, Fars, March 30, 1940. A wild xerophyte, growing in the limestone mountain ravines. About 12 inches of winter precipitation; ground barely freezes in the winter. Fruit sweet.

137930. VITIS sp.

No. 5791. Aujur. From Niriz, Fars, March 30, 1940. A wild xerophyte said to be the same as No. 5790, but dried differently. Winters mild.

137931. Carica microcarpa Jacq. Papayaceae.

From Venezuela. Seeds presented by Dr. Henry Pittier, Ministry of Agriculture, Caracas. Received June 24, 1940.

A small tree, with a smooth trunk, large palmate leaves, the lobes entire, and small, pale greenish-yellow flowers followed by berries the size of large almonds. Native to South America.

137932. Ficus iteophylla Miquel. Moraceae.

From Africa. Seeds purchased from the Department of Agriculture, Zaria, Nigeria. Received June 26, 1940.

A tree, native to tropical Africa, with small, sweet, edible figs that are a good food for birds. The tree yields a soft, nearly clear, sticky gum that does not harden and that hangs in pencil-like strings. The young leaves are said sometimes to be used for fodder in northern Nigeria.

137933 to 137935. MEDICAGO SATIVA L. Fabaceae.

Alfalfa

From Australia. Seeds presented by the Waite Agriculture Research Institute, Glen Osmond, South Australia. Received June 17, 1940.

137933. Tusmore creeping type, open-pollinated seed. (1939) LC. 65.

137934. Victorian creeping type, open-pollinated seed. (1939) LC. 66.

137935. Mixed pasture types, interpollinated. (1940 seed) LC. 67.

137936. SORGHUM VULGARE Pers. Poaceae.

Sorghum.

From Colombia. Seeds presented by R. E. Kepler, formerly of Bogotá. Received June 29, 1940.

Maiz Millo.

137937. Ochroma lagopus Swartz. Bombacaceae.

Balsa.

From Hawaii. Presented by L. W. Bryan, Board of Commissioners of Agriculture and Forestry, Hilo, through Col. R. H. Montgomery, Coconut Grove, Florida. Received May 16, 1940. Numbered in June 1940.

For previous introduction see 94196.

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# Plant Inventory No. 144

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. September 1950



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORA-TION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, 1 JULY 1 TO SEPTEMBER 30, 1940 (Nos. 137938 to 139272)

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# INTRODUCTORY STATEMENT

This inventory, No. 144, lists the plant material (Nos. 137938 to 139272) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1940. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

Paul G. Russell,

Botanist.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.



#### INVENTORY

137938. ANNONA PALUDOSA Aubl. Annonaceae.

From Florida. Plants presented by Dr. David Fairchild; originally from Merrits Island. Numbered July 15, 1940.

An evergreen small tree, with oblong-acute leaves 6 to 8 inches long; small greenish flowers, and yellow, ovoid, edible fruits about 2 inches long. Native to French Guiana.

137939. COIX LACRYMA-JOBI var. MA-YUEN (Romanet) Stapf. Poaceae. Adlay.

From Costa Rica. Seeds presented by Dr. Alexander F. Skutch, Curator of the Department of Botany, National Museum of Costa Rica, San José. Received July 15, 1940.

For previous introduction see 66792.

137940. IPOMOEA BATATAS (L.) Poir. Convolvulaceae.

Sweetpotato.

From the Bahamas. Tubers presented by the American Consul, J. W. Dye, Nassau. Received July 8, 1940.

Solomon.

For previous introduction see 132062.

137941 to 137943.

From Mexico. Material presented by Christian Halbinger, "El Troquel," Mexico City. Received July 9, 1940.

137941. ZEPHYRANTHES sp. Amaryllidaceae.

(Seeds.)

137942. Nothoscordum sp. Liliaceae.

(Bulbs.)

137943. (Undetermined.)

Sabadilla. Said to belong to the Liliaceae; very poisonous to animals. (Roots.)

137944. PHAEDRANASSA CARMIOLI Baker. Amaryllidaceae.

From Costa Rica. Bulbs presented by Austin Smith, Zarcero. Received April 19, 1939.

A bulbous plant up to 2 feet high, with 1 to 3 oblanceolate leaves up to 15 inches long appearing at flowering time, and umbels of 6 to 10 scarlet flowers about 2 inches long. Originally described from Costa Rica but may not be native there. Collected at an altitude of 4,500 feet.

137945 to 138007.

From the Dutch East Indies and the Philippine Islands. Material collected by the Archbold-Fairchild Expedition. Numbered in July, 1940.

Unless otherwise stated all material is from the Dutch East Indies, and was received as seeds.

137945. ALOCASIA ZEBRINA Baker. Araceae.

No. 73. Plants collected on Lake Bulusan trail on Volcano Bulusan, Sorsogon Camarine Sur, Luzon, Philippine Islands, November 8, 1939. An attractive species, with petioles marked with bands of green. Native to the Philippine Islands.

137946 and 137947. ANTIDESMA MONTANUM Blume. Euphorbiaceae.

From the Botanic Garden, Buitenzorg, Java, April 7, 1940. A tree up to

# 137945 to 138007—Continued

40 feet high, with softly tomentose branchlets, native to the Malay Peninsula. The oblong to elliptic-lanceolate leaves are 4 to 6 inches long, and the inconspicuous flowers are followed by edible red subglobose fruits, 1/10 inch long, borne in spikes 3 inches long; the taste is tart and slightly bitter.

137946. No. 275.

137947. No. 276. Differs from 137946 in having larger fruits marked with gray.

For previous introduction see 101243.

137948. ARECA sp. Phoenicaceae.

Palm.

No. 48. Plant collected on the slope of Bulusan Volcano, National Forest Park, Philippine Islands, November 8, 1939. A small tree about 15 feet high, with a slender trunk, pinnate leaves, and ovoid crimson fruits about 1 inch in diameter borne in compact clusters.

137949. ARTOCARPUS sp. Moraceae.

No. 267. Taop. From Sibang, Bali, March 25, 1940. A tree with attractive leaves 4 feet long and 2 inches wide, some entire and some deeply lobed on the same tree. The bright yellow fruit is 7 to 8 inches long, covered with curved soft spines 1 inch long; the 40 seeds, ¾ inch across, are arranged around a core, and each seed is surrounded by a soft white aril composed of many fine fibers. The latex is very sticky.

137950. AZADIRACHTA INDICA (L.) Juss. Meliaceae.

Neem tre

No. 264. From Gilmanoek, Bali, March 18, 1940. A large handsome tropical Indian tree, with long spreading branches and small fragrant white flowers. The timber is hard and is not eaten by termites. The tree is suited to the seacoast as well as to the interior. The leaves and fruits are used medicinally, and the seeds contain an oil that is used for rheumatism.

For previous introduction see 73095.

137951. BARRINGTONIA RACEMOSA (L.) Roxb. Lecythidaceae.

No. 55. Plants collected at Gubat, Sorsogon Province, Luzon, Philippine Islands, November 8, 1939. A small tree, with racemes of attractive white flowers; suited to the seashore.

137952. CAPPARIS sp. Capparidaceae.

No. 3418. From Paloe, Celebes, March 24, 1940. A scandent vine, with obovate, acuminate leaves 4 inches long and 2 inches wide. The inconspicuous flowers are in long pendent sprays, and the red fruits, 1/5 inch long and 1/5 inch wide, resemble small bell peppers.

137953. CHISOCHETON sp. Meliaceae.

No. 3461. From Masamba, Celebes, April 18, 1940. A small tree, with compound alternate leaves up to 36 inches long; the six pairs or more of opposite leaflets are up to 12 inches long and prominently veined beneath. The red globose fruits, 2 inches in diameter, are widely spaced on a raceme 2 to 3 feet long, and contain three seeds about ¾ inch long, flattened ovate, with an orange spot at the end.

137954. CLERODENDRUM MINAHASSAE Teijsm. and Binn. Verbenaceae.

No. 205. From the slopes of the volcano Soepoetan, February 8, 1940. An attractive shrub; the flower with a red calyx about 2 inches across, and petals  $\frac{1}{2}$  inch wide makes a striking contrast with the turquoise blue fruits.

137955. CORDIA SUBCORDATA Lam. Boraginaceae.

No. 280. From the Institute of Fisheries in Batavia, Java, April 10, 1940. A tree up to 50 feet high, with subcordate leaves 5 to 6 inches long and short terminal and lateral cymes of large, orange, campanulate flowers. The soft, light, durable wood is used for cabinet work, exhibiting wavy ribbons of

# 137945 to 138007—Continued

light and dark brown when polished. Native to the Hawaiian and other tropical islands.

For previous introduction see 83956.

137956. CORDIA sp.

No. 255. From Corontola Bay, Celebes, March 3, 1940. A shrub or small tree, with smooth, coriaceous, ovate, entire leaves, lighter green below than above; the thin-skinned, flesh-colored berries are egg-shaped, ¾ by 1 inch, with a sharp point at the apex, and contain a sticky substance that, because of the raphides in it, makes the fruits unfit to eat.

## 137957. CORDIA DICHOTOMA Forst. f.

No. 3422. From Paloe, Celebes, March 25, 1940. An attractive small sprawling tree, the dark-green leaves spirally alternate, almost oval, irregularly but not deeply lobed along the apical half of the margin. The small, fragrant, white flowers are in large clusters, and the round pinkish fruits are % inch in diameter.

#### 137958. CORYPHA ELATA Roxb. Phoenicaceae.

Palm.

No. 258. From the National Monument of Bali, Saint Nicholas Bay, March 12, 1940. A tall palm, up to 60 feet high, with a spirally ridged trunk and lunate, fan-shaped leaves 8 to 10 feet across, made up of 80 to 100 sword-shaped segments. Native to Burma and Bengal.

For previous introduction see 122837.

137959. CROTALARIA sp. Fabaceae.

No. 197. From Sangi Island, January 31, 1940.

137960. Dracaena sp. Liliaceae.

No. 3454. From Makassar, Bonthean Road, Celebes, April 13, 1940. An interesting, coarse-branched pandanlike plant with leaves up to 25 inches long and 2 inches broad, spirally and very closely arranged on the end of the branches, which are about 1½ to 2 inches in diameter and have prominent leaf scars. The small, round fruits, red when ripe, are in large upright clusters.

#### 137961. EUGENIA CURRANII C. B. Robinson. Myrtaceae.

Lipoti.

No. 3438. From Koro River, Gimpoe, Celebes, April 3, 1940. A handsome vigorous tree, native to the Philippine Islands, about 30 feet high, with a gnarled trunk and tortuous branches and dark-green, shining leaves. The fruits are in clusters of 20 to 50 on the bare boughs or between the leaves on the large twigs; the individual fruit is about the size of a grape, with thin, smooth, dark-red skin and white, dry, crisp flesh, with a flavor like that of the crabapple. The seed is comparatively large. The fruit is probably best suited for making preserves and jelly.

For previous introduction see 80865.

137962 to 137968. Ficus spp. Moraceae.

Fig.

137962. FICUS sp.

No. 217. Plants collected in swampy land along the coast of Minahasa, February 15, 1940. A small tree that branches from near the base. The leaves are very hispid, like those of F. hispida L., and the pear-shaped fruits, 1½ inches long, turn red when ripe and have sandpaperlike skin with brown spots.

137963. FICUS sp.

No. 265. From Bonkase, Bali, March 18, 1940.

137964. FICUS sp.

No. 271. From a wood trail off the highway between Kabat and

# 137945 to 138007—Continued

Banjoewangi, Java, March 18, 1940. A large-fruited fig with small, lightgreen leaves, and juicy fruits, 2 inches in diameter.

137965. FICUS sp.

No. 3411. From Paloe, Celebes, March 22, 1940. A pendulous tree up to 60 feet high, with yellow-green leaves, lighter green underneath, up to 8 inches long and 31/2 inches broad. The orange-colored, jug-shaped fruits, % inch in diameter, are borne in the axils of the leaves.

137966. Figure sp.

No. 3419. From Paloe at Tondo, Celebes, March 24, 1940. A large, sprawling tree of open habit, which tends to spread like the banyan tree of India. The glossy, thick, leathery leaves are up to 10 inches long and 3½ inches broad. The fruits, yellow covered with a thick white fuzz, are fleshy, 2 by 1¾ inches, and usually borne in pairs in the axils of the leaves, from two to six pairs per branch.

137967. FICUS sp.

No. 3431. From Koelawi, Celebes, March 30, 1940.

137968. FICUS BENJAMINA L.

No. 3467. From Makele, Celebes, March 21, 1940. A large tree, with very dark-green, acuminate, brittle leaves 3½ inches long and 2 inches broad, and red fruits with inconspicuous yellow dots scattered over the surface, borne in closely joined pairs in the axils of the leaves; much eaten by birds.

137969. GARCINIA sp. Clusiaceae.

No. 272. Badoeng. From the side of the road leading to Besuki temple, Bali, March 23, 1940. A tall tree with glossy, acuminate leaves 5 inches long and 1½ inches wide. The dull-orange fruit, ovoid with a protruding tip, and 2 inches in diameter, has a smooth, thick skin, with the stem sunken in the top of the fruit. The pulp is divided into six translucent segments, with some segments seedless and others with a thin flat seed shaped like an almond kernel.

137970. GNETUM GNEMON L. Gnetaceae.

No. 262. Malindjo. From a market at Banghalan, Madoera, March 16, 1940. An evergreen shrub or small tree extending from the Khasi Hills of India southward to Singapore and Java. The sessile orange-colored fruits are about 1 inch long and are eaten by the natives. The leaves are eaten boiled like spinach, and the bark is said to furnish a strong bast fiber.

For previous introduction see 45152.

137971. IMPATIENS sp. Impatientaceae.

Snapweed.

No. 3433. From Lindoe trail, Koelawi, Celebes, March 29, 1940.

137972. IMPATIENS Sp.

No. 3434. From Lindoe trail, Koelawi, Celebes, March 29, 1940. A balsam plant with numerous large bright-orange flowers borne singly on long stems beyond the leaves.

137973. LICUALA sp. Phoenicaceae.

Palm.

No. 3470. From Celebes. This species is common locally. The leaves have spiny petioles 6 to 8 feet long, and the leaflets are cut almost, if not entirely, to the center.

137974. MELOTHRIA sp. Cucurbitaceae.

No. 3447. Pawn Shop Vine. From Donggala, Celebes, April 5, 1940. A small climbing vine, with palmate, five-lobed, light-green, rough leaves up to 3 inches long. The small fruits, % inch in diameter, are three in a

## 137945 to 138007-Continued

cluster, green, with watermelon stripes when immature but bright red when ripe. The seeds are small, numerous, white, and tick-shaped.

137975. MELOTHRIA sp.

No. 3443. From Donggala, Celebes, April 5, 1940. An ornamental climbing vine, with tendril bearing fuzzy, palmate, five-lobed leaves, and attractive bright-red fruits 1½ inches long and ½ inch in diameter. The small, greenish-yellow, flattened seeds resemble ticks and are surrounded by cream-colored pulp.

137976. MURRAYA PANICULATA (L.) Jack. Rutaceae.

No. 230. Plants collected on Lembek Island, Minahassee, Celebes, February 18, 1940. An attractive shrub with dark shiny leaves and fragrant white flowers resembling orange blossoms.

For previous introduction see 115888.

137977. Musa sp. Musaceae.

No. 3406. From Kebon, Kepi, Celebes, March 20, 1940. A tall banana up to 15 feet in height, of stoloniferous habit, with the trunk 8 inches in diameter at the base, and with leaves up to 10 feet long, with a strong purplish cast on the under side. The fruits resemble those of *Musa errans*, but the bunch hangs down almost vertically, and is compactly arranged much as in *Gros Michel*. The fruit is thin-skinned, with sparse, creamy pulp filled with flattened, round, irregular seeds.

137978. MUSA sp.

No. 3407. From Kebon, Kepi, Celebes, March 20, 1940. A tall banana up to 15 feet, with a stout stem 12 inches in basal diameter, the stalk and petiole washed with mahogany brown. The leaves are broader than those of most bananas, and the flower bracts are creamy white. The short, sticky, thick-skinned fruit has a rather long neck, and the stalk hangs down nearly vertically with the fruits standing out almost at right angles. The orange-colored flesh is filled with very numerous, flattened, round, irregular seeds. There are 12 to 20 hands per stalk (stem) and 8 to 15 fruits in a hand.

137979. PHAEOMERIA SPECIOSA (Blume) Koord. Zingiberaceae.

No. 281. Hondje. Fruit bought on the market at Buitenzorg, Java, April 7, 1940. A very striking species from Java, with great pinnate leaves rising from the ground to a height of 12 feet; the leaflets are about 2 feet long. The under surface of the leaflets is a lovely bronze-claret color, making the plant, when seen against the sunlight, a wonderfully beautiful thing. It is usually propagated by rhizome cuttings.

For previous introduction see 93316.

137980. PHAEOMERIA Sp.

No. 3436. Lotus Blossom Ginger. From Koro River, Gimpoe, Celebes, April 3, 1940. A beautiful flowering plant, with light-green leaves 2 feet long, 5 inches broad, alternate on a stalk reaching 12 feet high. The flowers arise from the rhizome underground, with the first petals very broad, pink, waxy, tipped with a red beak; later a head emerges composed of numerous watermelon-pink bracts tipped with white and is in the shape of a rounded cone. The individual flowers at the base of the bract open in rows and are tipped with very dark red. The black seeds, enclosed in a rounded fruit about 1¼ inches in diameter, are embedded in a sour, edible pulp.

137981. PIPER sp. Piperaceae.

No. 3427. From Koelawi, Celebes, March 30, 1940. A creeping vine, with dark-green, ovate-acuminate leaves 5 inches long, 2½ inches broad; the stem is angular-jointed, with creeping tendrils that adhere to surface of tree trunk. Small oblong clusters of round red fruits, ¼ inch in diameter, are fairly thickly distributed along the cluster stem; each fruit has a small

## 137945 to 138007—Continued

individual stem and one small, round, white seed surrounded by a watery pulp.

137982. PLEOMELE ANGUSTIFOLIA (Roxb.) N. E. Brown. Liliaceae.

No. 56. Plants collected in Bulusan National Forestry Park, Philippine Islands, November 8, 1939. A tree with small flowers in hanging clusters.

137983. PLEOMELE Sp.

No. 3458. From Masamba, Celebes, April 17, 1940. A small, loose-branched tree resembling a small-leaved pandan, with alternate, acuminate leaves up to 8 inches long by 1½ inches broad. The fruits are borne in candelabralike clusters, which are pendent when the fruit is ripe; the individual fruits are round, 1 inch in diameter, orange, and enclose an ivory-colored, semiopaque seed.

137984. Pongamia sp. Fabaceae.

No. 3437. From Koro River, Gimpoe, Koelawi, Celebes, April 3, 1940. An attractive tree, with dark, glossy, green, pinnate leaves 4 inches long. The fragrant, purplish, pea-shaped flowers, ½ inch long, are borne in spikes up to 10 inches long.

137985. PREMNA sp. Verbenaceae.

No. 196. Plants collected on the seashore of Bai van Dago, Sangi Island, January 31, 1940. A shrub with smooth and black shiny leaves.

137986. PREMNA sp.

No. 250. Plants collected on the shell sand beach, Marissa, Celebes.

137987. PTEROCARPUS sp. Fabaceae.

No. 3456. From Senkang, Palipo Road, Celebes, April 15, 1940. A large beautiful tree, with compound, alternate leaves up to 12 inches long; the oblong-acuminate leaflets are about  $3\frac{1}{2}$  inches long. The fragrant, yellow flowers are in large dense clusters.

137988 and 137989. SALAKKA EDULIS Reinw. (Zalacca edulis Schult.). Phoenicaceae. Palm.

137988. No. 260. Tjotjor, Birds Beak. From Madoera Island, March 16, 1940.

137989. No. 269. Trotjor. From Madura Island, March 23, 1940.

For previous introduction see 94098.

137990. SCHEFFLERA sp. Araliaceae.

No. 3428. From Koelawi, Celebes, March 30, 1940. A lovely scandent vine, with palmate leaves up to 20 inches across; the seven dark-green individual leaflets are attached to a central point by separate petioles 6 to 10 inches long. The round fruits are ¼ inch in diameter, yellow turning to red, then black when mature, and are borne on very large, rather stiff sprays, once branched, in small clusters of four to six along the branches.

137991. Sesbania sp. Fabaceae.

No. 3439. From Gimpoe, Loelawi, Celebes, April 3, 1940.

137992. Spondias mombin L. Anacardiaceae.

Yellow mombin.

No. 282. From the Botanic Garden, Buitenzorg, Java.

For previous introduction see 72709.

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137993. SPONDIAS Sp.

No. 3451. From Tana, Mea, Donggala, Celebes, April 6, 1940. An ornamental medium-sized tree, with compound, whorled, alternate leaves about 12 inches long; the light glossy green leaflets are 4 inches long. The bright-

## 137945 to 138007—Continued

red ovate fruits, ½ inch long, are in numerous clusters from the axils of the leaves near the end of the branch.

# 137994. STERCULIA sp. Sterculiaceae.

No. 62. Plants collected at the Cadwallader Gibson Concession, Tandoc, Carmarines Sur, Luzon, Philippine Islands, November 12, 1939. A small tree, with handsome fruits resembling scarlet velvet when ripe, bright yellow when immature.

#### 137995. TABERNAEMONTANA sp. Apocynaceae.

No. 3417. From Paloe, Celebes, March 23, 1940. A bushy shrub up to 10 feet high, with opposite, light-green, glabrous leaves, prominently veined beneath, 4 inches long, 1½ inches broad. The flowers are white, five-petaled, with a trumpet-shaped tube about 1 inch long and 1 inch across, and occur in dense clusters. The orange-colored fruits, borne in pairs, resemble a pair of horns somewhat flattened at base, 2 inches long and % inch wide, and when open expose the seeds covered by an orange pulp.

#### 137996 TABERNAEMONTANA Sp.

No. 3450. From Pina-dopa, Posso, Celebes, March 15, 1940. A small, spreading tree up to 35 feet high, with oblong acuminated, thick leaves ½ by 3½ inches, with milky juice in the veins; the large, white-petaled flowers are trumpet-shaped. The large orange fruits are irregularly ovate, with four or five prominent veins running parallel to the axis of fruit. The dried latex from the stem or fruit is of the consistency of chewing gum and can be chewed.

## 137997. TEPHROSIA sp. Fabaceae.

No. 3455. From Sindjar, Malino Road, Celebes, April 13, 1940. A small shrub, with compound leaves up to 10 inches long, and leaflets up to  $3\frac{1}{2}$  inches long and  $1\frac{1}{2}$  inches wide; the white, fragrant flowers are  $1\frac{1}{2}$  inches long.

#### 137998. TRICHOSANTHES sp. Cucurbitaceae.

No. 263. From Kabata, eastern Java, March 18, 1940. A rampant vine, with palmately lobed rough leaves, 6 inches across, and brilliant dark lacquer-red, ovoid fruits 6 inches long, thick-walled with yellow flesh and a rather small cavity that is filled with a slimy, deep dark-green mass of pulp enclosing numerous seeds \( \frac{3}{2} \) inch long that look like brown melon seeds.

#### 137999. TRICHOSANTHES sp.

No. 270. From Banghi, Bali, March 23, 1940. A showy vine resembling No. 137998, except that the leaves are thinner and the fruit about one-half as large, perhaps a shade darker, and has more of a point. The pulp is intensely bitter.

#### 138000. TRICHOSANTHES sp.

No. 3453. From Tana, Mea, Donggala Road, Celebes, April 6, 1940. A strong-growing vine, with dark-green leaves up to 9 inches long and 7 inches broad, with one tendril at each leaf axis. The round brilliant-red fruits, up to 4 inches in diameter, are woody, gourdlike, and enclose a brownish black pulp in which are embedded numerous oblong, flattened brownish-black seeds ½ inch long.

#### 138001. BRYONOPSIS LACINIOSA (L.) Naud. Cucurbitaceae.

No. 3465. From Makele, Celebes, April 19, 1940. A slender, cucurbitaceous vine, with attractive leaves. The yellow fruits are the size and shape of pecans.

For previous introduction see 31577.

#### 137945 to 138007—Continued

138002. Uvaria sp. Annonaceae.

No. 274. From the scrubby vegetation that covers the dry peninsula of Tafelnoek, Bali, March 27, 1940. A small shrub, with soft-hairy, ovate, acuminate leaves, 3 inches long, cordate at base. The orange-red fruit clusters, not more than 2 inches across, are composed of separate fruitlets ¾ inch long, resembling tiny papaws.

#### 138003. UVARIA sp.

No. 3457. From Masamba, Celebes, April 17, 1940. A large vine, with velvety leaves 6 inches long and 2½ inches wide. The salmon-pink fruits, 3 inches long and 1¼ inches wide, 20 in a cluster, contain numerous grayish-black, oblong, flattened seeds up to ¾ inch long.

## 138004. UVARIA sp.

No. 3445. From Donggala, Celebes, April 5, 1940. A small tree, with light-green leaves up to 8 inches long and 2 inches broad. The black, oblong fruits, attached by a small stem to the swollen knob at the end of the branch, number about 50 in clusters 3 to 5 inches in diameter.

138005. VERSCHAFFELTIA SPLENDIDA Wendl. Phoenicaceae.

No. 277. From the Buitenzorg Botanical Gardens, Java, April 8, 1940.

For previous introduction see 97281.

138006. ZINGIBER sp. Zingiberaceae.

No. 187. Plants collected at Port Lebak, Mindanao, Philippine Islands, in a shady forest at low altitude, January 25, 1940. An attractive species with flower heads borne as side shoots from the tall, large-leaved, decorative plants. The flowers are purple red, with about 40 individual flowers in a head.

# 138007. ZINGIBER SYLVATICUM Elmer.

No. 61. Plants collected along the railroad track to the camp of Cadwallader Gibson Concession, Tandoc, Camarines Sur, Luzon, Philippine Islands, November 12, 1939. An ornamental species, with pretty orange berries borne in clusters of slender hanging stems.

#### 138008 to 138402.

From China. Seeds collected by Peter Liu. Received July 12, 1940.

138008 to 138018. ULMUS MACROCARPA Hance. Ulmaceae.

Elm.

From Hsieh Chu Yuan Garden, Summer Palace, Peiping, Chihli. 138008. (No number). 138014. 386-F.

138009. 386-A. 138015. 386-G. 138010. 386-B. 138016. 386-H.138011. 386-C. 138017. 386-I. 386-D. 138018. 386-J. 138012.

138013. 386-E.

For previous introduction see 64463.

138019 to 138402. ULMUS PUMILA L.

Chinese elm.

Unless otherwise stated these were received as Black Elm.

Nos. 138019 to 138045 from Temple of Heaven Grounds, Peiping, Chihli, April 23, 1940.

138019. No. 1.

138020. No. 2.

138021. No. 3.

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138008 to 138402—Continued
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138022. No. 4.

138023. No. 5.

138024. No. 6.

138025. No. 7.

138026. No. 8.

138027. No. 9.

138028. No. 10.

138029. No. 11.

138030. No. 12. A tall-growing tree, with a trunk about 12 feet high.

138031. No. 14.

138032. No. 15.

138033. No. 16. A dwarf, low-growing tree.

138034. No. 17. A tall-growing tree, with a trunk 5 inches in diameter and 15 feet high.

138035. No. 18.

138036. No. 19.

138037. No. 20.

138038. No. 21.

138039. No. 22.

138040. No. 23.

138041. No. 24.

138042. No. 25. A tree, with a trunk 8 inches in diameter and 8 feet high.

138043. No. 26. White Elm.

138044. No. 27. White Elm.

138045. No. 28. White Elm.

Nos. 138046 to 138051. From Hsiao Chu Tien, near Peiping, April 24, 1940.

138046. No. 29.

138048.

138049. No. 32.

138047. No. 30. White Elm.

No. 31. White Elm.

138050. No. 33. 138051. No. 34.

Nos. 138052 to 138062. From She Cha Peng, near Peiping, April 24, 1940.

138052. No. 35.

138058. No. 41.

138053. No. 36. White Elm.

138059. No. 42.

138054. No. 37. White Elm.

138060. No. 43.

138055. No. 38.

138061. No. 44.

138056. No. 39.

138062. No. 45.

138057. No. 40.

Nos. 138063 to 138068. From Hu Chia Lou, near Peiping, April 24; 1940.

138063. No. 46.

138064. No. 47. A dwarf, or low-growing tree.

138065. No. 48.

138066. No. 49.

## 138008 to 138402—Continued

138067. No. 50.

138068. No. 51.

Nos. 138069 and 138070. From San Ching Chia Fen, near Peiping, April 25, 1940.

138069. No. 52.

138070. No. 53.

Nos. 138071 to 138076. From Tieh Chiang Ying, near Peiping, April 25, 1940.

 138071.
 No. 54.
 138074.
 No. 57.

 138072.
 No. 55.
 138075.
 No. 58.

 138073.
 No. 56.
 138076.
 No. 59.

Nos. 138077 to 138083. From Chao Kung Kou, near Peiping, April 25, 1940.

 138077.
 No. 60.
 White Elm.
 138081.
 No. 64.

 138078.
 No. 61.
 138082.
 No. 65.

 138079.
 No. 62.
 138083.
 No. 66.

138080. No. 63. White Elm.

Nos. 138084 to 138100. From Pao Hua Ssu, near Peiping, April 25, 1940.

138084. No. 67. 138093. No. 76. No. 68. White Elm. 138085. 138094. No. 77. No. 69. 138095. No. 78. 138086. 138087. No. 70. 138096. No. 79. 138088. No. 71. 138097. No. 80. 138089. No. 72. 138098. No. 81.

138090. No. 73. 138099. No. 82. 138091. No. 74. 138100. No. 83.

138092. No. 75.

Nos. 138101 and 138102. From Wu Lou, near Peiping, April 25, 1940.

138101. No. 84.

138102. No. 85.

Nos. 138103 to 138108. From Tao Fen, near Peiping, April 26, 1940.

 138103.
 No. 86.
 138106.
 No. 89.

 138104.
 No. 87.
 138107.
 No. 90.

 138105.
 No. 88.
 138108.
 No. 91.

Nos. 138109 to 138119. From near the White Cloud Temple, near Peiping, April 26, 1940. White Elm.

138109. No. 92. 138115. No. 98. No. 93. 138110. 138116. No. 99. No. 94. No. 100. 138111. 138117. 138112. No. 95. 138118. No. 101.

138113. No. 96. 138119. No. 102.

138114. No. 97.

## 138008 to 138402—Continued

Nos. 138120 to 138131. From Shih Fang Yuan, near Peiping, April 26, 1940.

138120. No. 103. White Elm.

138121. No. 104. White Elm.

138122. No. 105. White Elm.

138123. No. 106. White Elm.

138124. No. 107. Red Elm. A common elm in this region.

138125. No. 108. Red Elm.

138126. No. 109. White Elm.

138127. No. 110. White Elm.

138128. No. 111. White Elm.

138129. No. 112. Red Elm.

138130. No. 113. White Elm.

138131. No. 114. White Elm.

Nos. 138132 to 138136. From Yang Fang Tien, near Peiping, April 26, 1940.

138132. No. 115. Red Elm. 138135. No. 118.

138133. No. 116. Red Elm. 138136. No. 119. Red Elm.

138134. No. 117.

Nos. 138137 to 138150. From Hao Chia Wan, outside Hsi Chih Men Gate, Peiping, April 27, 1940.

138137. No. 120. 138144. No. 127. Red Elm.

**138138.** No. 121. 138145. No. 128. Red Elm.

 138139.
 No. 122.
 138146.
 No. 129.
 White Elm.

 138140.
 No. 123.
 138147.
 No. 130.
 White Elm.

138141. No. 124. 138148. No. 131.

138142. No. 125. Red Elm. 138149. No. 132.

138143. No. 126. Red Elm. 138150. No. 133.

Nos. 138151 to 138166. From Pai Shih Chiao, outside Hsi Chih Men Gate, Peiping, April 27, 1940.

138151. No. 134. 138159. No. 142.

138152. No. 135. 138160. No. 143. White Elm.

**138153.** No. 136. **138161.** No. 144. White Elm.

138154. No. 137. 138162. No. 145. White Elm. 138155. No. 138. 138163. No. 146. Red Elm.

138155. No. 138. 138163. No. 146. Red Elm

 138156.
 No. 139.
 138164.
 No. 147.
 Red Elm.

 138157.
 No. 140.
 138165.
 No. 148.
 Red Elm.

138158. No. 141. 138166. No. 149. Red Elm.

Nos. 138167 to 138177. From 5 Pagoda Temple, outside of Hsi Chih Men Gate, Peiping, April 27, 1940.

138167. No. 150. White Elm. 138170. No. 153. White Elm.

138168. No. 151. White Elm. 138171. No. 154. Red Elm.

138169. No. 152. White Elm. 138172. No. 155. Red Elm.

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138008 to 138402—Continued
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138173. No. 156. Red Elm. 138176. No. 159.

138174. No. 157. 138177. No. 160.

138175. No. 158.

Nos. 138178 to 138181. From Hsieh Chu Yuan, Summer Palace, Peiping, April 29, 1940.

138178. No. 161. 138180. No. 163.

138179. No. 162. 138181. No. 164.

Nos. 138182 to 138215. From Black Hill, Summer Palace, Peiping, April 29, 1940.

138182. No. 165. White Elm. 138199. No. 182. White Elm.

138183. No. 166. 138200. No. 183.

138184. No. 167. 138201. No. 184.

138185. No. 168. White Elm. 138202. No. 185. 138186. No. 169. Red Elm. 138203. No. 186.

138187. No. 170. 138204. No. 187. White Elm.

138188. No. 171. Red Elm. 138205. No. 188.

138189. No. 172. Red Elm. 138206. No. 189.

138190. No. 173. 138207. No. 190.

138191. No. 174. 138208. No. 191.

138192. No. 175. 138209. No. 192. Red Elm.

138193. No. 176. 138210. No. 193.

138194. No. 177. Red Elm. 138211. No. 194.

138195. No. 178. Red Elm. 138212. No. 195. Red Elm.

138196. No. 179. 138213. No. 196. 138197. No. 180. White Elm. 138214. No. 197.

138198. No. 181. 138215. No. 198.

138216. No. 199. White Elm. From West Summer Palace Gate, Peiping, April 29, 1940.

Nos. 138217 to 138248. From Jade Fountain, Peiping, April 30, 1940.

138217. No. 200. White Elm. 138231. No. 214.

138218. No. 201. 138232. No. 215.

138219. No. 202. 138233. No. 216. Red Elm.

138220. No. 203. 138234. No. 217.

138221. No. 204. White Elm. 138235. No. 218. White Elm.

 138222.
 No. 205.
 138236.
 No. 219.

 138223.
 No. 206.
 138237.
 No. 220.

138224. No. 207. 138238. No. 221.

138225. No. 208. White Elm. 138239. No. 222.

138226. No. 209. 138240. No. 223. White Elm.

138227. No. 210. 138241. No. 224. 138228. No. 211. Red Elm. 138242. No. 225.

138229. No. 212. 138243. No. 226. Red Elm.

138230. No. 213. 138244. No. 227.

# 138008 to 138402—Continued

138245. No. 228. 138247. No. 230.

138246. No. 229. 138248. No. 231. White Elm.

Nos. 138249 to 138254. From Mao-lin-chu, outside Fu Cheng Men Gate, Peiping, May 1, 1940. White Elm.

138249. No. 232. 138252. No. 235.

138250. No. 233. 138253. No. 236.

138251. No. 234. 138254. No. 237.

Nos. 138255 to 138261. From Yang Fang Tien, southwest of Fu Cheng Men Gate, Peiping, May 1, 1940.

138255. No. 238. Red Elm. 138259. No. 242. White Elm.

138256. No. 239. Red Elm. 138260. No. 243. White Elm.

138257. No. 240. 138261. No. 244. White Elm.

138258. No. 241. White Elm.

Nos. 138262 to 138268. From Huang Ting Tze, southwest of Fu Cheng Men Gate, Peiping, May 1, 1940.

138262. No. 245. White Elm. 138266. No. 249.

138263. No. 246. White Elm. 138267. No. 250.

138264. No. 247. 138268. No. 251.

138265. No. 248.

Nos. 138269 to 138274. From Chung Hsing Ssu, outside Fu Cheng Gate, Peiping, May 1, 1940.

138269. No. 252. 138272. No. 255. Red Elm.

138270. No. 253. Red Elm. 138273. No. 256. Red Elm.

138271. No. 254. Red Elm. 138274. No. 257. Red Elm.

Nos. 138275 to 138279. From Yao Wang Miao, outside Fu Cheng Men Gate, Peiping, May 1, 1940.

138275. No. 258. White Elm. 138278. No. 261. Red Elm.

138276. No. 259. White Elm. 138279. No. 262. Red Elm.

138277. No. 260. White Elm.

Nos. 138280 to 138303. From Wang Hai Lou, outside of Fu Cheng Men Gate, Peiping, May 2, 1940.

138280. No. 263. Red Elm. 138292. No. 275.

138281. No. 264. 138293. No. 276.

138282. No. 265. 138294. No. 277.

138283. No. 266. 138295. No. 278.

138284. No. 267. 138296. No. 279.

138285. No. 268. Red Elm. 138297. No. 280.

138286. No. 269. 138298. No. 281.

138287. No. 270. 138299. No. 282.

138288. No. 271. 138300. No. 283.

138289. No. 272. 138301. No. 284.

138290. No. 273. Red Elm. 138302. No. 285.

138291. No. 274. 138303. No. 286.

#### 138008 to 138402-Continued

Nos. 138304 and 138305. From Man Tou Liu, outside Fu Cheng Men Gate, Peiping, May 2, 1940.  $Red\ Elm$ .

138304. No. 287.

138305. No. 288.

138306. No. 289. Red Elm. From Tiao Yu Tai, outside Fu Cheng Men Gate, Peiping, May 2, 1940.

Nos. 138307 to 138326. From Liang Kuo Ch'ang, outside Fu Cheng Men Gate, Peiping, May 3, 1940.

138307. No. 290. White Elm. 138317. No. 300. Red Elm.

138308. No. 291. White Elm. 138318. No. 301.

138309. No. 292. 138319. No. 302.

138310. No. 293. White Elm. 138320. No. 303. Red Elm.

138311. No. 294. 138321. No. 304. White Elm.

138312. No. 295. 138322. No. 305. Red Elm. 138313. No. 296. Red Elm. 138323. No. 306.

138314. No. 297. Red Elm. 138324. No. 307. White Elm.

138315. No. 298. White Elm. 138325. No. 308. White Elm.

138316. No. 299. Red Elm. 138326. No. 309. Red Elm.

Nos. 138327 to 138340. From Mu Hsu Ti, outside Fu Cheng Men Gate, Peiping, May 3, 1940.

138327. No. 310. Red Elm. 138334. No. 317.

138328. No. 311. Red Elm. 138335. No. 318. Red Elm.

138329. No. 312. Red Elm. 138336. No. 319. Red Elm.

138330. No. 313. 138337. No. 320. White Elm. 138331. No. 314. White Elm. 138338. No. 321. Red Elm.

138332. No. 315. Red Elm. 138339. No. 322.

138333. No. 316. 138340. No. 323. Red Elm.

Nos. 138341 to 138354. From Yuan Tung Kuan, near Peiping, May 4, 1940.

138341. No. 324. Red Elm. 138344. No. 327. Red Elm.

138342. No. 325. Red Elm. 138345. No. 328. Red Elm.

138343. No. 326.

Nos. 138346 to 138354. White Elm.

138346. No. 329. 138351. No. 334.

138347. No. 330. 138352. No. 335.

 138348.
 No. 331.
 138353.
 No. 336.

 138349.
 No. 332.
 138354.
 No. 337.

138350. No. 333.

Nos. 138355 to 138365. From Feng Huang Tsui, near Peiping, May 4, 1940.

138355. No. 338. White Elm. 138359. No. 342. White Elm.

138356. No. 339. White Elm. 138360. No. 343. Red Elm.

138357. No. 340. White Elm. 138361. No. 344. White Elm. 138358. No. 341. Red Elm. 138362. No. 345. White Elm.

#### 138008 to 138402—Continued

138363. No. 346. White Elm. 138365. No. 348. White Elm.

138364. No. 347. White Elm.

Nos. 138366 to 138395. From San Li Ho, near Peiping, May 5, 1940.

138366. No. 349. Red Elm. 138381. No. 364. White Elm.

138367. No. 350. Red Elm. 138382. No. 365. White Elm.

138368. No. 351. 138383. No. 366. White Elm.

**138369.** No. 352. Red Elm. **138384.** No. 367. White Elm.

138370. No. 353. Red Elm. 138385. No. 368. Red Elm.

138371. No. 354. White Elm. 138386. No. 369. Red Elm.

138372. No. 355. White Elm. 138387. No. 370.

138373. No. 356. 138388. No. 371. White Elm.

138374. No. 357. White Elm. 138389. No. 372. White Elm.

138375. No. 358. White Elm. 138390. No. 373. Red Elm.

138376. No. 359. White Elm. 138391. No. 374. White Elm.

138377. No. 360. Red Elm. 138392. No. 375. White Elm.

138378. No. 361. Red Elm. 138393. No. 376. Red Elm.

**138379.** No. 362. 138**394.** No. 377. Red Elm.

138380. No. 363. Red Elm. 138395. No. 378. White Elm.

Nos. 138396 to 138402. From Na Kuo Ch'ang, near Peiping, May 5, 1940.

138396. No. 379. White Elm. 138400. No. 383. White Elm.

138397. No. 380. Red Elm. 138401. No. 384. White Elm.

138398. No. 381. Red Elm. 138402. No. 385.

138399. No. 382.

For previous introduction see 116704.

#### 138403 to 138406.

From Canada. Seed presented by R. M. MacVicar, Department of Agriculture, Central Experimental Farm, Ottawa. Received July 3, 1940.

138403 to 138405. AGROPYRON TRACHYCAULUM (Link) Malte. Poaceae. Wheatgrass.

138403. Fyra Strain.

138404. Grazier Strain.

138405. Mecca Strain.

For previous introduction see 127512.

138406. Bromus sp. Poeaceae.

Grass.

Parkland Brome Grass.

138407. PIGAFETTIA ELATA (Mart.) Wendl. Phoenicaceae. Palm.

From the Dutch East Indies. Plants collected by the Archbold-Fairchild Expedition, Minahasa, Celebes. Numbered in July, 1940.

No. 220.

For previous introduction see 98504.

138408 and 138409. SACCHARUM. Poaceae.

Sugarcane.

From Cuba. Cuttings presented by Referico Posy, Havana. Received July 13, 1940.

138408. Medina Luna 3-18.

138409. Medina Luna 3-34.

# 138410 to 138415. SACCHARUM. Poaceae.

Sugarcane.

From Honolulu. Cuttings presented by the Experiment Station, Hawaiian Sugar Planters' Association. Received July 18, 1940.

138410. Molokai 4730.

138411. Molokai 4826.

138412. Molokai 5193.

138413. Molokai 5549.

138414. Molokai 5698.

138415. 31-1389. POJ 2878  $\times$  26C-270.

138416. CAESALPINIA SPINOSA (Mol.) Kuntze. (Caesalpinia pectinata Cav.) Caesalpiniaceae. Tara.

From Peru. Seeds presented by R. W. Frey, Bureau of Agricultural Chemistry and Engineering, through A. F. Sievers, Division of Drug and Related Plants, Bureau of Plant Industry. Received July 19, 1940.

Tara. A tall upright spiny shrub or small tree, often used as a hedge in Peru. The foliage is deep green, with the leaflets smooth and polished on the upper surface. The greenish-yellow flowers, in cylindrical open spikes, are not very conspicuous, but the pods are produced in large clusters and the exposed surfaces show bright scarlet for a long time before maturing. The pods contain a high percentage of tannin.

For previous introduction see 65915.

# 138417 to 138450. Carthamus tinctorius L. Asteraceae.

Safflower.

From India. Seeds presented by B. P. Pal, Imperial Economic Botanist, New Delhi. Received July 18, 1940.

138434. I. P. Type No. 18.
138435. I. P. Type No. 19.
138436. I. P. Type No. 20.
138437. I. P. Type No. 21.
138438. I. P. Type No. 22.
138439. I. P. Type No. 23.
138440. I. P. Type No. 24.
138441. I. P. Type No. 25.
138442. I. P. Type No. 26.
138443. I. P. Type No. 27.
138444. I. P. Type No. 28.
138445. I. P. Type No. 29.
138446. I. P. Type No. 30.
138447. I. P. Type No. 31.
138448. I. P. Type No. 32.
138449. I. P. Type No. 33.
138450. I. P. Type No. 34.

138451. Theobroma sp. Sterculiaceae.

From Brazil. Seeds presented by the Bureau of Entomology and Plant Quarantine, United States Department of Agriculture, Washington, D. C. Received July 18, 1940.

138452. Carissa grandiflora (E. Mey.) DC. Apocynaceae.

Carissa.

From Florida. Growing at the Plant Introduction Garden, Coconut Grove. Numbered July 25, 1940.

Seedlings of the Gifford variety, P. I. 131889.

For previous introduction see 99404.

138453 and 138454. TRITICUM AVESTIVUM L. Poaceae.

Common wheat.

From Australia. Seeds presented by H. Wenholz, Department of Agriculture, Sydney, New South Wales. Received July 29, 1940.

138453. Garra. C 3955.

138454. Hofed 1.

138455. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by Dr. R. A. Silow, Plant Geneticist, Cotton Research Station, Trinidad. Received July 29, 1940.

Red Sea Island. C. B. 1404.

138456 to 138461. DIGITARIA spp. Poaceae.

Grass.

From the Union of South Africa. Seeds presented by W. P. May, Officer in Charge, Rietondale Pasture Research Station, Pretoria. Received July 22, 1940.

138456. DIGITARIA sp.

Goha Hills Strain No. 20.

138457. DIGITARIA Sp.

Goha Hills Strain No. 21.

138458. DIGITARIA Sp.

N'Gamiland Strain (mixed).

138459. DIGITARIA Sp.

Rust der Winter Strain.

138460. DIGITARIA SMUTSII Stent.

For previous introduction see 133901.

138461. DIGITARIA SWAZILANDENSIS Stent.

For previous introduction see 111108.

138462. Trifolium alexandrinum L. Fabaceae. Berseem.

From India. Seeds presented by B. P. Pal, Imperial Economic Botanist, Imperial Agricultural Research Institute, New Delhi. Received July 24, 1940.

For previous introduction see 137021.

138463 to 138469. LILIUM spp. Liliaceae.

Lily.

From India. Seeds presented by Mrs. P. Kohli, Baramula, Kashmir. Received July 24, 1940.

138463. LILIUM BAKERIANUM Coll. and Hemsl.

A herbaceous perennial with purple-tinged white bulbs, slender erect stems 3 feet high, scattered linear-lanceolate leaves, and one to six fragrant nodding, bell-shaped, creamy, white flowers 2 to 3 inches across, spotted red brown on the inside. Native to Burma and western China.

For previous introduction see 133353.

#### 138464. LILIUM GIGANTEUM Wall.

Giant lily.

A Himalayan lily, with bulbs that grow close to the surface in rich black mold, at altitudes of 7,500 to 9,000 feet, where they are covered with snow from November to April. The plants are 6 to 9 feet high, and the smooth hollow stems are used for musical pipes. The handsome cordate leaves, shining dark green above and paler beneath, are 10 to 12 inches long on petioles of equal length; both become smaller near the apex.

For previous introduction see 129244.

#### 138465. LILIUM NEPALENSE D. Don.

Lily.

A showy lily, native to the central Himalayas, with a slender erect stem 2 to 3 feet long, leafy to the inflorescence. The glossy, bright-green leaves, 4 to 6 inches long, are oblong-lanceolate and five-ribbed. The flowers, 4 to 5 inches long, are greenish yellow outside and yellow within and flushed, except in the upper third, with purplish black.

For previous introduction see 133114.

#### 138466. LILIUM OCHRACEUM Franch.

A rare and beautiful lily from Burma, not hardy except in the most favorable districts; it is an admirable cool greenhouse plant. This is a very variable species, producing flowers that range in color from deep golden yellow to pale yellow stained in varying degrees with deep wine purple.

For previous introduction see 133354.

#### 138467. LILIUM POLYPHYLLUM D. Don.

A lily with a stoloniferous white pink-tinged bulb, a green stem 4 to 5 feet high, and fairly numerous scattered linear to oblong-lanceolate leaves 2 to 8 inches long. The fragrant nodding flowers, 2 to 12 in a lax umbel or raceme, are dull yellowish green outside, marble-white-spotted, and streaked with purple within, and are 2 to 3 inches across.

For previous introduction see 133116.

#### 138468. LILIUM WALLICHIANUM Schult. f.

Wallich lily.

A lily 4 to 6 feet high, with linear leaves 6 to 9 inches long, and usually solitary, creamy waxy-white, fragrant flowers 9 inches long that are golden yellow to the base inside and green outside.

For previous introduction see 133117.

# 138469. LILIUM THOMSONIANUM (D. Don) Lindl. (L. roseum Wall.). Thomson lily.

A bulbous plant, with an erect stem more than a foot high and narrow grasslike leaves, mostly crowded at the base of the stem. The pale-mauve or rosy, bell-shaped, drooping flowers with deep-purple anthers are more than an inch long and in a terminal raceme containing 8 to 10 flowers.

For previous introduction see 126543.

#### 138470 to 138472.

From South America. Seeds presented by John J. Hamilton, Washington, D. C. Received July 29, 1940.

From Puerto Montt, Chile.

138470. GREIGIA SPHACELATA (Ruiz and Pav.) Regel. Bromeliaceae.

#### 138470 to 138472—Continued

138471 and 138472. VICIA FABA L. Fabaceae.

Broadbean.

138471. No. 1.

138472. No. 2.

138473 to 138477. HEVEA BRASILIENSIS (H.B.K.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Haiti. Seeds presented by H. F. Loomis, Port-au-Prince. Received July 30, 1940.

138473. No. 20.

138476. No. 76.

138474. No. 54.

138477. No. 87.

138475. No. 58.

For previous introduction see 136897.

# 138478. OLEA LAURIFOLIA Lam. Oleaceae.

From the Union of South Africa. Seeds presented by the Division of Plant Industry, Department of Agriculture, Pretoria. Received July 31, 1940.

For previous introduction see 9123.

# 138479 to 138482. Gossypium. Malvaceae.

Cotton.

From Egypt. Seeds from Oman. Received August 1, 1940. Received without name of donor.

138479. Ashmouni.

138481. Giza 12.

138480. Giza 7.

138482. Sakha 4.

#### 138483. INOCARPUS EDULIS Forst. Fabaceae.

From the Society Islands. Seeds presented by the Jardin des Plantes, Papeete, Tahiti. Received June 13, 1939.

For previous introduction see 38135.

# 138484. Scilla sibirica Andr. Liliaceae.

From Turkey. Bulbs presented by Hanna Boutros, Mersine. Received August 3, 1940.

#### 138485 and 138486.

From Asia. Seeds collected by the Archbold-Fairchild Expedition. Numbered in July, 1940.

# 138485. ONCOSPERMA sp. Phoenicaceae.

Palm.

No. 3403. From Doembaya, Forontola, Celebes, Dutch East Indies, March 8, 1940. A large spiny-stemmed palm up to 90 feet high, with pinnate leaves 16 to 20 feet long, the midrib spiny. The very numerous purplish-black fruits, about 1 inch in diameter, are borne on a spectacular branched orange inflorescence.

138486. ZINGIBER SYLVATICUM Elmer. Zingiberaceae.

Ginger.

No. 61. From Tandoc, Camarines Sur, Luzon, Philippine Islands, November 28, 1939. An ornamental ginger, with attractive orange fruits borne in clusters with slender drooping stems.

# 138487. PSIDIUM sp. Myrtaceae.

From Mexico. Seeds presented by Thos. Hall, Hermosillo, Sonora. Received August 3, 1940.

138488. HEVEA BRASILIENSIS (H.B.K.) Muell. Arg.

Euphorbiaceae. Para rubbertree.

From Haiti. Seeds presented by H. F. Loomis, Port-au-Prince. Received August 6, 1940.

For previous introduction see 138477.

138489. ACER sp. Aceraceae.

From Iran. Seeds collected by Walter Koelz, Tehran. Received July 3, 1940.

No. 5467. Kahakom. From Dehidisk, February 2, 1940. A small, dense, attractive tree, growing on dry slopes.

#### 138490 to 138502.

From Iran. Seeds and bulbs presented by Walter Koelz, agent, Bureau of Plant Industry, United States Department of Agriculture. Received July 3, 1940.

138490. CLEMATIS sp. Ranunculaceae.

No. 5394. From Chaharfarsakh, Kirman, January 15, 1940. A weak shrub, 4 feet high, found growing at the edge of an orange garden.

138491. GENTIANA sp. Gentianaceae.

Gentian.

No. 5765. From Niriz, Fars, March 30, 1940, at an altitude of about 10,000 feet. A biennial or perennial, in clumps 8 to 10 inches high, with deep-blue flowers, whitish within and often fragrant.

138492. IRIS sp. Iridaceae.

No. 5881. From Eglit, Fars, March 8, 1940. A rare iris, about 4 inches high, with broad, white-veined leaves. The flowers, up to 3 inches across, are mother-of-pearl and blue purple with paler edges. The falls have yellow centers and are marked with deep purple.

138493. IRIS sp.

No. 5882. From Takhto Jamshid, Fars, March 12, 1940, on a dry mountain slope. A wild iris, in clumps up to 18 inches high, with grasslike leaves and small purple flowers 1 inch across.

138494. MALVA sp. Malvaceae.

No. 5735. From Jahrum, Fars, March 22, 1940. A garden weed, either prostrate or erect and 18 inches high, with rose-colored flowers.

138495. MALVA sp.

No. 5866. From Bushire, Fars, April 14, 1940. A prostrate plant, in mats often 3 feet across, with pale-pink flowers.

138496. Muscari sp. Liliaceae.

No. 5872. From Shiraz, Fars, April 6, 1940. A plant about 8 inches high, often growing on walls and roofs; flowers purplish blue.

138497. NARCISSUS sp. Amaryllidaceae.

No. 5874. Narghiz. From Kazerun, Fars, April 11, 1940. A fall-blooming, cultivated narcissus; the fragrant flowers have yellow cups. Said to be wild in the Jamalbarez Mountains.

138498. Papaver sp. Papaveraceae.

Poppy.

No. 5833. From Kazerun, Fars, April 11, 1940. A poppy about 4 feet high, with white or dull-purple flowers about 4 inches across.

138499. RHEUM sp. Polygonaceae.

No. 5321. Rupas. From Kirman, Kirman Province, January 3, 1940. A wild species from dry mountain areas.

138500. TYPHA sp. Typhaceae.

# 138490 to 138502—Continued

No. 5220. From Teserj, Kirman, December 24, 1939. A plant 6 feet high, with leaves  $\frac{1}{2}$  to  $\frac{1}{4}$  inch wide and spikes about 8 inches long.

138501. VIOLA sp. Violaceae.

Violet.

No. 5550. From Cheshmaeduzdan, February 8, 1940. A rare, tiny plant, about 1 inch high, growing among stones on a dry plain, damp in winter but dry all summer. The flowers are small and lavender.

138502. VIOLA sp.

Violet.

No. 5819. Banafsh. From Shiraz, Fars, April 4, 1940. A violet from the garden of the British Consulate. Said to have purple, fragrant flowers.

138503. Axonopus purpusii (Mez) Chase. Poaceae. Grass.

From Venezuela. Plants collected in Barcelona by A. G. Sandoval, Soil Conservation Service, United States Department of Agriculture. Received August 7, 1940.

138504. VALLARIS SOLANACEA (Roth) Kuntze. Apocynaceae.

From Florida. Plant presented in 1926 by the Royal Palm Nurseries, Oneco. Numbered August 10, 1940.

A handsome large woody vine, with deep-green shining foliage, native to India. In Florida the creamy-white cup-shaped flowers, about % inch across, are usually produced twice a year, in March and April and again in September and October.

# 138505. JACARANDA SAGRAEANA DC. Bignoniaceae.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received August 6, 1940.

A tropical tree, with bipinnate leaves, the leaflets oval-rhomboid, and lax terminal panicles of bluish flowers. Native to Cuba.

# 138506. Aloe Longibracteata Pole Evans. Liliaceae.

From New Zealand. Seeds presented by A. Wilkinson, Nelson. Received April 13, 1933. Numbered August 12, 1940.

A stemless aloe, with a dense spreading rosette of 20 to 30 very fleshy, triangular-lanceolate leaves 4 to 8 inches long, dark green above or reddish with pale-green spots or stripes, and light green below. The leaf margins are beset with short deltoid horny teeth. The deep-pink flowers, nearly 2 inches long, are in dense racemes on a branched inflorescence  $2\frac{1}{2}$  feet high. Native to the Transvaal at an altitude of about 6,000 feet.

#### 138507 to 138688.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received July 1, 1940.

138507 to 138509. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

138507. No. 5197. Bamia. From Isin, December 18, 1939. The green pods are about 6 inches long.

138508. No. 5400. Bamia. From Kirman, Kirman, January 21, 1940. An assortment from the local market.

138509. No. 5814. Bamia. From Shiraz, Fars, April 3, 1940. A very rare variety in that section of the country.

138510. ALLIUM ASCALONICUM L. Liliaceae.

Shallot.

No. 5273. From Saidabad, Kirman, December 31, 1939.

For previous introduction see 116715.

138511 to 138526. ALLIUM CEPA L. Liliaceae.

Onion.

Piyaz is the vernacular name for onion in Iran.

138511. No. 5186. From Isin, December 17, 1939. A white, globose onion; both alkaline and heat-tolerant.

138512. No. 5306. From Saidabad, Kirman, January 1, 1940. The onions on the market were flat and of the three common colors.

138513. No. 5341. From Kirman, Kirman, January 4, 1940. Said to be a flat, red sort.

138514. No. 5369. From Khabis, Kirman, January 10, 1940.

138515. No. 5416. From Bam, January 25, 1940. A mild onion, flattened to globuse; yellow and white.

138516. No. 5507. From Tomogaon, February 5, 1940.

138517. No. 5528. From Tomagaon, February 7, 1940. A dry, sweet onion, with extraordinary mildness, flat, ranging from very small to about 3 inches in diameter; red, white, and yellow.

138518. No. 5551. From Guragan, February 10, 1940.

138519. No. 5590. From Yezd, February 21, 1940. Flat to semiglobose; red and white; unusually tender and not too strong.

138520. No. 5600. From Dehibala, Shirkuh, February 22, 1940. Flat, very tender but strong onion; red or white.

138521. No. 5636. From Isfahan, February 27, 1940. A red, flat variety.

138522. No. 5679. From Eglit, Fars, March 8, 1940. A flat, white onion up to 4 inches in diameter and very strong.

138523. No. 5713. From Shiraz, Fars, March 15, 1940. The onions seen on the market were globose, red, and rather mild.

138524. No. 5739. From Jahrum, Fars, March 24, 1940. A green onion, rather strong.

138525. No. 5768. From Niriz, Fars, March 30, 1940. A flat, red, rather strong variety.

138526. No. 5846. From Kazerun, Fars, April 11, 1940.

138527 to 138537. ALLIUM PORRUM L. Liliaceae.

Leek.

138527. No. 5207. Gandana. From Bandar, Abbas, December 20, 1939.

138528. No. 5270. Gandana or Tare. From Saidabad, Kirman, December 31, 1939.

138529. No. 5320. Gandana or Tare. From Kirman, Kirman, January 3, 1940.

138530. No. 5378. Gandana. From Khabis, Kirman, January 11, 1940.

138531. No. 5583. Tare. From Yezd, February 20, 1940.

138532. No. 5635. Tare. From Isfahan, February 27, 1940.

138533. No. 5680. Tare. From Eglit, Fars, March 8, 1940.

138534. No. 5781. Gandana. From Niriz, Fars, March 30, 1940.

138535. No. 5809. Gandana. From Shiraz, Fars, April 3, 1940.

138536. No. 5840. Gandana. From Kazerun, Fars, April 11, 1940.

138537. No. 5870. Gandana. From Bushire, Fars, April 15, 1940.

138538 and 138539. ALLIUM spp. Liliaceae.

138538. ALLIUM sp.

No. 5560. From Maskun, February 12, 1940. An allium  $3\frac{1}{2}$  to 4 feet high, with umbel 2 inches across.

138539. ALLIUM sp.

No. 5775. From Niriz, Fars, March 30, 1940. An allium about 2 feet high, with a head about  $2\frac{1}{2}$  inches across.

138540 to 138555. Beta vulgaris L. Chenopodiaceae.

Chokondas is the vernacular name for the beet in Iran.

138540. No. 5199. From Bandar Abbas, December 20, 1939.

138541. No. 5264. From Saidabad, Kirman, December 31, 1939.

138542. No. 5325. From Kirman, Kirman, January 3, 1940. Red and globose; turns yellow when cooked; tender and sweet.

138543. No. 5379. From Khabis, Kirman, January 11, 1940. Roots are purple red outside and yellow inside; sweet, not fibrous. Tops good for potherb.

138544. No. 5414. From Bam, January 25, 1940. A fine quality beet, flattened to globose; red or yellow, no fiber.

138545. No. 5483. From Tomogaon, February 4, 1940. Used only as greens.

138546. No. 5574. From Yezd, Kirman, February 20, 1940. Red and yellow outside, flesh yellow to pale red. Globose with a diameter about 5 inches.

138547. No. 5603. From Dehibala, Ehirkuh. Flat, yellow and red purple.

138548. No. 5618. From Taft, February 23, 1940. Flat, yellow to red purple, and 6 inches in diameter. No fiber, tender and low in sugar.

138549. No. 5639. From Isfahan, March 3, 1940. Semiglobose, red purple inside; often fibrous and rather sweet.

138550. No. 5686. From Eglit, Fars, March 8, 1940. Flat, purple inside and out; no fiber, very hard to cook, and rather low in sugar.

138551. No. 5707. Shakari. From Persepolis, March 12, 1940.

138552. No. 5717. From Shiraz, Fars, March 15, 1940. Semiglobose, reddish throughout, and no fiber.

138553. No. 5737. From Jahrum, Fars, March 23, 1940.

138554. No. 5749. From Niriz, Fars, March 28, 1940. Rough, globose to semiglobose, reddish outside and yellow inside; free from fiber.

138555. No. 5834. From Kazerun, Fars, April 11, 1940.

138556 to 138567. CAPSICUM FRUTESCENS L. Solanaceae.

Common redpepper.

138556. No. 5190. Filfil. From Isin, December 17, 1939. Fruit 2 to 3 inches in diameter, red, hot, and tender-skinned. A bushy perennial 4 feet high.

138557. No. 5210. Filfil-i-surkh. From Banda Abbas, December 20, 1939. Fruit 2 inches by 1 inch, red, and rather mild. Probably from upcountry.

138558. No. 5316. Filfil-i-hind. From Saidabad, Kirman, January 1, 1940. An elongated, bullnose, red, hot pepper, about 2 inches long.

138559. No. 5329. Filfil-i-hind. From Kirman, Kirman, January 4, 1940. A red, hot pepper about 2½ inches long.

138560. No. 5383. Filfil-i-farangi. From Khabis, Kirman, January 11, 1940. A rare, spicy pepper in that section of the country.

138561. No. 5437. Filfil-i-hind. From Bam, January 26, 1940. A small, crimson pepper with a diameter of 1 inch, hot.

- 138562. No. 5439. Filfil-i-hind. From Bam, January 26, 1940. A small, scarlet pepper, hot.
- 138563. No. 5578. Filfil-i-hind. From Yezd, February 20, 1940. Red; hot.
- 138564. No. 5657. Filfil-i-farangi. From Isfahan, March 4, 1940. A red, sweet pepper about 4 inches long.
- 138565. No. 5726. Filfil-i-hind. From Jahrum, Fars, March 20, 1940. A red, rather mild pepper about 1½ inches long.
- 138566. No. 5756. Filfil-i-hind. From Niriz, Fars, March 29, 1940. An elongated, red, hot pepper.
- 138567. No. 5818. Filfil-i-hind. From Shiraz, Fars, April 4, 1940. A red, hot pepper, 1½ inches long.

138568. CUCUMIS MELO L. Cucurbitaceae.

Muskmelon.

No. 5851. Dak. From Kazerun, Fars, April 11, 1940. Said to be a green cucumber.

For previous introduction see 137833.

138569 to 138583. DAUCUS CAROTA L. Apiaceae.

Carrot.

- 138569. No. 5200. Gajas. From Banda Abbas, December 20, 1939. Said to be of mixed sorts.

  138570. No. 5348. Havii-i-siya. From Kirman Kirman January 5, 1940.
- 138570. No. 5348. *Havij-i-siya*. From Kirman, Kirman, January 5, 1940. Said to be the long black-purple variety; often a foot long and smooth.
- 138571. No. 5395. From Chaharfarsakh, Kirman, January 15, 1940. Found wild in gardens, up to 4 feet long.
- 138572. No. 5418. *Havij*, *Gajar*, or *Zardak*. From Bam, January 25, 1940. Roots pale yellow to red purple; tender and sweet.
- 138573. No. 5484. *Havij*. From Tomogaon, February 4, 1940. Roots pale yellow or purplish and 8 inches by 1 inch; good quality.
- 138574. No. 5530. Havij. From Tomogaon, February 8, 1940.
- 138575. No. 5581. *Havij*. From Yezd, Kirman, February 20, 1940. Carrots are smooth, yellow, 15 inches long with a diameter of 4 inches. Tender, no fiber, not strong, but rather low in sugar.
- 138576. No. 5610. Zardak. From Dehibala, Shirkuh, February 22, 1940. Remarkably smooth, pale yellow to a purplish tone; very tender, but not very strong and does not contain much sugar.
- 138577. No. 5659. Zardak. From Isfahan, March 4, 1940. Well formed, up to 15 inches long; smooth, deep yellow, no fiber, rather low in sugar.
- 138578. No. 5685. Tavij. From Eglit, Fars Province, March 8, 1940. Irregular and rooty formed, purplish, without fiber, tender, and low in sugar.
- 138579. No. 5719. Zardak. From Shiraz, Fars, March 15, 1940. Well shaped, about 1 foot long, yellow-orange, rather sweet.
- 138580. No. 5732. Nargisi. From Jahrum, Fars, March 21, 1940.
- 138581. No. 5754. Narkasi. From Niriz, Fars, March 29, 1940. A yellow, free from fiber, carrot that contains very little sugar.
- 138582. No. 5836. Narghizi. From Kazerun, Fars, April 11, 1940.
- 138583. No. 5328. Havij or Gajar. From Kirman, Kirman, January 4, 1940. Said to be of the long, yellow variety.
- 138584 to 138598. LACTUCA SATIVA L. Cichoriaceae. Garden lettuce.

Kahu is the vernacular name for lettuce in Iran.

138584. No. 5194. From Isin, December 17, 1939. Planted in the alkaline soil of the gardens; said to make a loose head.

138585. No. 5276. From Saidabad, Kirman, January 1, 1940.

138586. No. 5318. From Kirman, Kirman, January 1, 1940.

138587. No. 5381. From Khabis, Kirman, January 11, 1940.

138588. No. 5441. From Bam, January 26, 1940.

138589. No. 5490. From Tomogaon, February 4, 1940.

138590. No. 5537. From Guragan, February 10, 1940.

138591. No. 5575. From Yezd, Kirman, February 20, 1940.

138592. No. 5649. From Isfahan, March 1, 1940. Small, but longleaved variety.

138593. No. 5696. From Eglit, Fars Province, March 8, 1940.

138594. No. 5718. From Shiraz, Fars, March 15, 1940. Longleaved with purplish tips.

138595. No. 5728. From Jahrum, Fars Province, March 20, 1940. A Costype of lettuce, with a diameter of 18 inches and red-tipped leaves. Little milk, sweet, and tasty.

138596. No. 5779. From Niriz, Fars, March 30, 1940. A Cos type of lettuce, 15 inches long, green, and tender; no particular flavor.

138597. No. 5812. From Shiraz, Fars, April 3, 1940.

138598. No. 5883. From Bushire, Fars, April 14, 1940. Leafy, green, exceptionally good.

138599 to 138616. LAGENARIA LEUCANTHA (Duchesne) Rusby.
Cucurbitaceae. Calabash gourd.

138599. No. 5187. Kadu azar. From Isin, December 17, 1939.

138600. No. 5215. From Bandar Abbas, December 21, 1939.

138601. No. 5216. *Kadu-i-auzar*. From Bandar Abbas, December 21, 1939. Bottle-shaped; 20 inches long.

138602. No. 5249. *Kadui Mandel*. From Balvard, Kirman, December 20, 1939. 14 inches high; said to be edible.

138603. No. 5303. Kadui Kaliani. From Saidabad, Kirman, January 1, 1940. Said to be an ornamental sort with an inflated knob on the neck.

138604. No. 5372. *Kadui doghabi*. From Khabis, Kirman, January 11, 1940. One foot long, with a short, thick neck.

138605. No. 5399. Kadueka'iani. From Kirman, Kirman, January 21, 1940.

138606. No. 5479. From Tomogaon, February 4, 1940.

138607. No. 5480. From Tomogaon, February 4, 1940.

138608. No. 5531. From Tomogaon, February 8, 1940.

138609. No. 5569. From Bahramabad, Kirman, February 18, 1940. Ornamental; 16 inches long.

138610. No. 5589. From Yezd, February 21, 1940.

138611. No. 5624. From Taft, February 23, 1940. Said to be of edible sort.

138612. No. 5661. Kadu Kalyani. From Isfahan, March 4, 1940. Said to be edible.

138613. No. 5691. Kaduekalyani. From Eglit, Province of Fars, March 8, 1940.

138614. No. 5746. From Jahrum, Fars, March 25, 1940.

138615. No. 5767. From Niriz, Fars Province, March 30, 1940.

138616. No. 5792. Kaduekelyani. From Eglit, Fars, March 9, 1940. One foot long, probably edible when tender.

138617 to 138631. Lycopersicon esculentum Mill. Solanaceae. Tomato. Goj-i-farangi is the vernacular name for tomato in Iran.

138617. No. 5309. From Saidabad, Kirman, January 1, 1940. Flat, red, 2 inches in diameter.

138618. No. 5331. From Kirman, Kirman, January 4, 1940. Said to be red.

138619. No. 5362. From Chaharbarsakh, Kirman, January 9, 1940. Wellgrown, spreading, 7 feet across; red, globose.

138620. No. 5422. From Bam, January 25, 1940. Red, flat, 3 inches long.

138621. No. 5435. From Bam, January 25, 1940. Mixture of red and yellow sorts.

138622. No. 5476. From Tomogaon, February 3, 1940.

138623. No. 5552. From Guragan, February 10, 1940. Globose, red, 2 inches in diameter.

138624. No. 5594. From Yezd, February 21, 1940. Small, red, 2 inches or larger in diameter.

138625. No. 5654. From Isfahan, March 2, 1940.

138626. No. 5684. From Eglit, Fars, March 8, 1940. Flat, 3½ inches in diameter, red.

138627. No. 5687. From Eglit, Fars, March 8, 1940.

138628. No. 5716. From Shiraz, Fars, March 15, 1940. Said to be red.

138629. No. 5788. From Niriz, Fars, March 30, 1940.

138630. No. 5839. From Kazerun, Fars, April 11, 1940.

138631. No. 5539. From Guragan, February 10, 1940.

138632 to 138651. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

138632. No. 5191. Muli. From Isin, December 19, 1939.

138633. No. 5213. Muli. From Bandar Abbas, December 21, 1939.

Nos. 138634 to 138651. Torob is the vernacular name for radish in Iran.

138634. No. 5277. From Saidabad, Kirman, January 1, 1940. Possibly has a black root.

138635. No. 5295. From Saidabad, Kirman, January 1, 1940.

138636. No. 5296. From Saidabad, January 1, 1940.

138637. No. 5330. From Kirman, Kirman, January 4, 1940.

138638. No. 5346. From Kirman, Kirman, January 5, 1940.

138639. No. 5371. From Khabis, Kirman, January 10, 1940. Long, white, 1 foot by 6 inches.

138640. No. 5425. From Bam, January 25, 1940.

138641. No. 5438. From Bam, January 26, 1940.

138642. No. 5491. From Tomogaon, February 4, 1940.

138643. No. 5576. From Yezd, Kirman, February 20, 1940. Globose, black, 4 inches across.

138644. No. 5641. From Isfahan, February 27, 1940. Said to be a small, globose, red spring radish, such as is now on the market.

138645. No. 5678. From Eglit, Fars, March 8, 1940. Said to be medium-sized, black-and-white winter radish.

138646. No. 5720. From Shiraz, Fars, March 15, 1940.

138647. No. 5806. From Shiraz, Fars, April 3, 1940.

138648. No. 5743. From Jahrum, Fars, March 25, 1940.

138649. No. 5777. From Niriz, Fars, March 30, 1940. Said to be mixed black-and-white winter sorts.

138650. No. 5838. From Kazerun, Fars, April 11, 1940.

138651. No. 5855. From Bushire, Fars, April 14, 1940.

138652 to 138665. Solanum melongena L. Solanaceae.

Eggplant.

Benjan is the vernacular name for eggplant in Iran.

138652. No. 5178. From Isin, Laristan, December 17, 1939. Purple, elongated, about 1 foot long.

138653. No. 5304. From Saidabad, Kirman, January 1, 1940.

138654. No. 5350. From Kirman, Kirman, January 5, 1940. Round, purple.

138655. No. 5386. From Khakis, Kirman, January 11, 1940. From 8 to 10 inches long, elongated, purple. Said to be perennial here for several years.

138656. No. 5406. From Chabarfersakh, Kirman, January 16, 1950. Purple, 6 by 3 inches.

138657. No. 5407. From Kirman, Kirman, January 22, 1940. Said to be globose, purple sort, 8 inches long.

138658. No. 5489. From Tomogaon, February 4, 1940.

138659. No. 5543. From Guragan, February 10, 1940. 10 inches long.

138660. No. 5652. From Isfahan, March 2, 1940. Long, purple sort.

138661. No. 5742. From Jahrum, Fars, March 24, 1940.

138662. No. 5773. From Niriz, Fars, March 30, 1940.

138663. No. 5802. From Shiraz, Fars, April 2, 1940.

138664. No. 5803. From Shiraz, Fars, April 2, 1940. Said to be white egg sort.

138665. No. 5832. From Kazerun, Fars, April 11, 1940.

138666 and 138667. SOLANUM sp. Solanaceae.

138668 to 138684. SPINACIA OLERACEA L.

138666. No. 5351. Arusac. From Kirman, Kirman, January 5, 1940. Said to be a fruit of a wild herb, used medically.

138667. No. 5736. From Jahrum, Fars, March 22, 1940. Garden weed, yellow fruits.

Chenopodiaceae.

Common spinach.

Isfinaj is the vernacular name for spinach in Iran.

138668. No. 5385. From Khabis, Kirman, January 11, 1940.

138669. No. 5402. From Kirman, Kirman, January 21, 1940.

138670. No. 5402-A. From Kirman, Kirman, January 21, 1940.

138671. No. 5577. From Yezd, Kirman, February 20, 1940. Young.

138672. No. 5611. From Dehibala, Shirkuh, February 22, 1940. Small.

138673. No. 5638. From Isfahan, February 27, 1940. Used as greens.

138674. No. 5211. Palak. From Bandar Abbas, December 21, 1939.

138675. No. 5475. From Tomogaon, February 3, 1940.

138676. No. 5475-A. Possibly different from No. 5475.

138677. No. 5375. From Khabis, Kirman, January 11, 1940.

138678. No. 5426. From Bam, January 25, 1940.

138679. No. 5724. From Jahrum, Fars, March 20, 1940.

138680. No. 5714. From Shiraz, Fars, March 15, 1940.

138681. No. 5800. From Shiraz, Fars, April 2, 1940.

138682. No. 5724-A. From Jahrum, Fars.

138683. No. 5614. From Taft, February 23, 1940. Small but well flavored.

138684. No. 5614-A. From Taft.

138685 to 138688. Trigonella foenum-graecum L. Fabaceae. Fenugreek.

138685. No. 5740. Shamlil. From Jahrum, Fars, March 24, 1940. Used as greens.

138686. No. 5660. Shamlil. From Isfahan, March 4, 1940.

138687. No. 5804. Shamlil. From Shiraz, Fars, April 4, 1940.

138688. No. 5204. Shambiri. From Bandar Abbas, December 20, 1939. Used as potherbs.

# 138689. LIGUSTRUM CILIATUM Blume. Oleaceae.

From Japan. Seeds collected by Dorsett & Morse, Mowiayama Mountain, near Sapporo, Hokkaido. Received November 9, 1929. Numbered August 14, 1940.

A hardy shrub, up to 6 feet high, with black fruits. Native to Japan. For previous introduction see 72875.

# 138690. GERBERA ANANDRIA (L.) Schultz Bip. Asteraceae.

From the Union of Soviet Socialist Republics. Seeds presented by the Mountain-Taiga Station, Far Eastern Branch of the Academy of Sciences, Voroshilov-Ussuriaky. Received December 3, 1937. Numbered August 14, 1940.

# 138691. ALBIZZIA KALKORA (Roxb.) Prain. Mimosaceae.

From North Carolina. Seeds presented by William A. Knight, Biltmore Forest, Biltmore. Received December 12, 1939. Numbered August 14, 1940.

An ornamental small tree, with finely pinnated leaves and flowers with pale pink tassels. Not very common.

# 138692. PTYCHOSPERMA sp. Phoenicaceae.

Palm.

From Maryland. Plants growing at the Plant Introduction Garden, Glenn Dale. Numbered August 14, 1940.

# 138693. HEDERA NEPALENSIS var. SINENSIS (Tobl.) Rehd. Araliaceae.

From Maryland. Plants growing at the Plant Introduction Garden, Glenn Dale. Numbered August 14, 1940.

Plants originally received from the Arnold Arboretum, Jamaica Plain, Massachusetts.

#### 138694 to 138775.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received July 2, 1940.

138694. AVENA sp. Poaceae.

Grass.

No. 5519. From Tomogaon, February 6, 1940.

138695. AVENA sp.

No. 5863. From Bushire, Fars, April 14, 1940. A weed found in grainfields and elsewhere; grows up to 3 feet high.

138696. Gossypium. Malvaceae.

Cotton.

No. 5368. Pambaifilistani. From Khabis, Kirman, January 10, 1940. Said to be a naturalized American sort that grows about 3 feet high.

138697. HIPPOCREPIS sp. Fabaceae.

No. 5858. From Bushire, Fars, April 14, 1940. A prostrate, ephemeral clover that grows in the winter rainy season.

138698 to 138729. Hordeum spp. Poaceae.

Barley.

138698 to 138716. HORDEUM VULGARE L.

Jau is the vernacular name for barley in Iran.

138698. No. 5195. From Isin, Laristan, December 17, 1939. Said to be fall-sown, watered little.

138699. No. 5227. From Teserj, Kirman, December 24, 1939.

138700. No. 5228. From Teserj, Kirman, December 24, 1939.

138701. No. 5251. From Balvard, Kirman, December 30, 1939. Said to be sown around January 15; irrigated.

138702. No. 5252. From Balvard, Kirman, December 30, 1939.

138703. No. 5222. From Saadatabad, Kirman, December 22, 1939.

138704. No. 5259. From Saidabad, Kirman, December 31, 1939.

138705. No. 5363. From Chaharfarsakh, Kirman, January 9, 1940.

138706. No. 5364. From Chaharfarsakh, Kirman, January 9, 1940.

138707. No. 5388. From Khabis, Kirman, January 11, 1940.

138708. No. 5410. From Kirman, Kirman, January 23, 1940. A sample from the market, contains "Jaui siya," black barley.

138709. No. 5421. From Bam, January 25, 1940.

138710. No. 5447. From Dehidesk, February 1, 1940.

138711. No. 5473. From Tomogaon, February 3, 1940. Now 2 inches high; irrigated.

138712. No. 5510. From Dusari, February 6, 1940. Winter sown; irrigated.

138713. No. 5511. From Abbasabad, January 6, 1940.

138714. No. 5557. From Maskun, February 12, 1940.

138715. No. 5561. From Darzin, February 14, 1940.

138716. No. 5571. From Bahramabad, Kirman, February 18, 1940.

138717. HORDEUM DISTICHON L.

No. 5706. From Persepolis, Fars, March 11, 1940.

138718 to 138720. HORDEUM VULGARE L.

138718. No. 5608. From Dehibala, Shirkuh, February 22, 1940.

138719. No. 5615. From Taft, February 23, 1940.

138720. No. 5616. From Taft, February 23, 1940.

133721. HORDEUM DISTICHON L.

No. 5662. From Isfahan, March 4, 1940.

138722. HORDEUM VULGARE L.

No. 5703. From Surmag, Fars, March 8, 1940.

138723 to 138725. Hordeum distichon L.

138723. No. 5729. From Jarhum, Fars, March 21, 1940.

138724. No. 5830. From Dast Arjin, Fars, April 9, 1940.

138725. No. 5766. From Niriz, Fars, March 30, 1940.

138726. HORDEUM VULGARE L.

No. 5672. From Eglit, Fars, March 8, 1940.

138727. HORDEUM DISTICHON L.

No. 5671. From Eglit, Fars, March 8, 1940.

138728 and 138729. HORDEUM VULGARE L.

138728. No. 5862. Jaoesiya. From Bushire, Fars, April 14, 1940. Very rare; winter-sown.

138729. No. 5877. From Bushire, Fars, April 15, 1940. A beardless form of the local barley.

138730 to 138732. LINUM USITATISSIMUM L. Linaceae.

Flax.

138730. No. 5201. Bargesh. From Bandar Abbas, December 20, 1939. Oil crop.

138731. No. 5268. Ketane. From Saidabad, Kirman, December 31, 1939. Oil crop.

138732. No. 5522. From Tomogaon, February 7, 1940. Oil plant.

138733. MEDICAGO LACINIATA (L.) Mill. Fabaceae.

Medic.

No. 5859. From Bushire, Fars, April 14, 1940. An ephemeral, prostrate plant, dying down during the hot, dry summer.

138734. MEDICAGO LITTORALIS Rhode. Fabaceae.

Medic.

No. 5860. From Bushire, Fars, April 14, 1940. (Same note as for No. 5859.)

138735 to 138741. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

Yonje is the vernacular name for alfalfa in Iran.

138735. No. 5278. From Saidabad, Kirman, January 1, 1940.

138736. No. 5367. From Khabis, Kirman, January 10, 1940.

138737. No. 5417. From Bam, January 25, 1940. Said to be cut seven times, at height of about 4 feet.

138738. No. 5468. From Dehidisk, February 2, 1940.

138739. No. 5472. From Tomogaon, February 3, 1940.

138740. No. 5694. From Eglit, Fars Province, March 8, 1940.

138741. No. 5817. From Shiraz, Fars, April 3, 1940. Said to be cut five times a year, and to last 7 years.

138742. MEDICAGO HISPIDA Gaertn. Fabaceae.

Medic.

No. 5868. From Bushire, Fars Province, April 15, 1940.

For previous introduction see 123924.

138743. MELILOTUS ALBA Desr. Fabaceae.

White sweetclover.

No. 5564. From Darzin, February 15, 1940. Taken from the crops of several sand grouse.

138744. MELILOTUS INDICA (L.) All. Fabaceae.

Sweetclover.

No. 5861. From Bushire, Fars, April 14, 1940. An ephemeral plant, from 8 to 12 inches high, growing in winter rainy season and dying down during the hot dry summer.

138745 to 138747. PANICUM MILIACEUM L. Poaceae. Broomcorn millet.

138745. No. 5179. Arzan. From Isin, December 17, 1939. Common grain.

138746. No. 5269. Arzan. From Saidabad, Kirman, December 31, 1939.

138747. No. 5676. Arzan. From Eglit, Fars Province, March 8, 1940.

138748 and 138749. SORGHUM VULGARE Pers. Poaceae. Sorghum.

138748. No. 5183. Zorat. From Isin, December 17, 1939. Receives very little water.

138749. No. 5224. Zaurakisufed. From Saadatabad, Kirman, December 22, 1939.

138750 to 138752. Trifolium suaveolens Willd. Fabaceae.

Fragrant clover.

138750. No. 5585. Yonje. From Yezd, February 20, 1940. Adapted to a hot desert climate.

138751. No. 5643. Yonje. From Isfahan, February 27, 1940. Adapted to a hot climate and winter frost.

138752. No. 5653. Shabdar. From Isfahan, March 2, 1940. An annual or biennial clover.

138753. TRIFOLIUM sp. Fabaceae.

Clover.

No. 5302. From Balvard, Kirman, January 1, 1940. A low, creeping clover that grows in shallow watercourses. Said to be eaten only by horses.

138754 to 138763. VICIA FABA L. Fabaceae.

Broadbean.

Bakla is the vernacular name for the broadbean in Iran.

138754. No. 5198. From Bandar Abbas, December 20, 1939.

138755. No. 5307. From Saidabad, Kirman, January 1, 1940.

138756. No. 5319. From Kirman, Kirman, January 3, 1940.

138757. No. 5344. From Kirman, Kirman, January 4, 1940.

138758. No. 5436. From Bam, January 25, 1940.

138759. No. 5494. From Tomogaon, February 5, 1940.

138760. No. 5607. From Dehibala, Shirkuh, February 22, 1940.

138761. No. 5721. From Shiraz, Fars, March 15, 1940. Food crop, sown in fall.

138762. No. 5727. From Jahrum, Fars, March 20, 1940.

138763. No. 5759. From Niriz, Fars, March 29, 1940.

138764. VIGNA CYLINDRICA (Stickm.) Skeels. Fabaceae.

Catiang.

No. 5265. Lobia. From Saidabad, Kirman, December 31, 1939.

138765 to 138775. VIGNA SINENSIS (Torner) Hassk. Fabaceae. Cowpea.

Lobia is the vernacular name for cowpea in Iran.

138765. No. 5209. From Bandar Abbas, December 20, 1939.

138766. No. 5374. From Khabis, Kirman, January 11, 1940.

138767. No. 5376. From Khabiz, Kirman, January 11, 1940.

138768. No. 5434. From Bam, January 25, 1940.

138769. No. 5456. From Dehidisk, February 1, 1940.

138770. No. 5457. From Dehidisk, February 1, 1940.

138771. No. 5482. From Tomogaon, February 4, 1940.

138772. No. 5533. From Tomogaon, February 8, 1940.

138773. No. 5547. From Guragan, February 10, 1940.

138774. No. 5745. From Jahrum, Fars, March 25, 1940.

138775. No. 5760. From Niriz, Fars, March 29, 1940.

#### 138776 to 138783.

From South America. Seeds received from Bernardo Rosengurrt, Monzon Heber, Estación Jackson, Soriano, Uruguay. Received July 31, 1940.

138776. Adesmia bicolor (Poir.) DC. Fabaceae.

For previous instruction see 92333.

138777. ADESMIA LATIFOLIA Vog. Fabaceae.

138778. CALAMAGROSTIS VIRIDI-FLAVESCENS (Poir.) Steud. Poaceae. Grass. For previous introduction see 02333.

138779. LOLIUM MULTIFLORUM Lam. Poaceae.

Italian ryegrass.

For previous introduction see 133475.

138780. Panicum decipiens Nees. Poaceae.

Grass.

138781. SETARIA ONURUS (Willd.) Griseb. Poaceae.

Grass.

For previous introduction see 62038.

138782. Sporobolus Pseudo-Airoides Parodi. Poaceae.

Grass.

138783. Trifolium polymorphum Poir. Fabaceae.

#### 138784 to 138849.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received July 3, 1940.

138784. Acacia sp. Mimosaceae.

No. 5237. From Madenu, Kirman, December 26, 1939. A bushy, wide-spreading xerophytic tree, up to 10 feet high, with crimson pods.

138785. ALTHAEA ROSEA (L.) Cav. Malvaceae.

Hollyhock.

No. 5290. Khatni. From Saidabad, Kirman, January 1, 1940. Plant about 4½ feet high; flowers single, cerise, 2½ inches across.

138786. ARTEMISIA sp. Asteraceae.

No. 5235. Dormane or jaz. From Dadenu, Kirman, December 25, 1939. Bush 18 inches high, with very few leaves.

138787. ARUNDO DONAX L. Poaceae.

Giant reed.

No. 5359. From Fuz, Kirman, January 8, 1940. Found in clumps along a stream; 15 feet high.

138788. ATRAPHAXIS sp. Polygonaceae.

No. 5450. Paten. From Dehidisk, February 1, 1940. A dense shrub about 3 feet high; small leaves; browse plant.

138789 to 138791. BERBERIS spp. Berberidaceae.

138789. Berberis sp.

No. 5503. Zareshk. From Tomogaon, February 5, 1940. Well-formed bush up to 8 feet high; fruit crimson; used for jams.

138790. BERBERIS Sp.

No. 5665. Zareshk. From Isfahan, March 5, 1940. Fruit red black when dry, used as medicine on local market.

138791. Berberis sp.

No. 5271. Zereshk. From Saidabad, Kirman, December 31, 1939. Found in dry foothills; grows in clumps up to 10 feet high.

138792 and 138793. AMMI COPTICUM L. (Carum copticum (L.) Benth. and Hook.) Apiaceae.

138792. No. 5180. Auzmuda. From Isin, December 17, 1929.

138793. No. 5313. Zeman. From Saidabad, Kirman, January 1, 1940.

For previous introduction see 126266.

138794 and 138795. CELOSIA spp. Amaranthaceae.

138794. CELOSIA sp.

No. 5305. Tajikhurus. From Saidabad, Kirman, January 1, 1940.

138795. CELOSIA Sp.

No. 5508. From Tomogaon, February 5, 1940.

138796. CERCIS sp. Caesalpiniaceae.

No. 5345. Arkawan. From Kirman, Kirman, January 4, 1940. A dense, bushy attractive tree about 15 feet high; flowers rose, large for the genus.

138797. CORDIA MYXA L. Boraginaceae.

Sebeste

No. 5352. Gefistan or narfistan. From Kirman, Kirman, January 5, 1940. An evergreen tree grown in gardens in warm places.

138798 to 138803. CORIANDRUM SATIVUM L. Apiaceae. Coriander.

138798. No. 5640. Gishniz. From Isfahan, February 27, 1940. Spice and leaves used as relish.

138799. No. 5725. Gishniz. From Jahrum, Fars, March 20, 1940.

138800. No. 5223. Gishniz. From Saadatabad, Kirman, December 22, 1939.

138801. No. 5523. Gishniz. From Tomogaon, February 7, 1940. A green plant used for flavoring.

138802. No. 5310. Gishniz. From Saidabad, Kirman, January 1, 1940. Leaves and seeds used as a condiment.

138803. No. 5192. Gishniz. From Isin, December 17, 1939.

138804. CYMBOPOGON SCHOENANTHUS (L). Spreng. Poaceae. Camel-hay. No. 5236. From Madenu, Kirman, December 25, 1939. Growing along dry gulches in clumps up to 15 feet.

138805. Elaeagnus angustifolia L. Elaeaganaceae. Russian-olive.

No. 5279. Sinjit. From Saidabad, Kirman, January 1, 1940. Cultivated for fruit, sold dried.

138806, Eruca sativa Mill. Brassicaceae. Rocket salad.

No. 5612. Mandab. From Taft, February 23, 1940. A strong bushy plant up to 2½ feet high, bearing pods heavily; oil from seeds used as lubricant.

138807 and 138808. FOENICULUM VULGARE Mill. Apiaceae. Fennel

138807. No. 5203. Zira. From Bandar Abbas, December 20, 1939.

138808. No. 5431. Badion. From Bam, January 25, 1940.

138809. Fraxinus sp. Oleaceae.

Ash.

No. 5669. Zabanigunjushk. From Isfahan, March 6, 1940. A small, fastgrowing tree planted along watercourses.

138810 to 138812. Helianthus annuus L. Asteraceae. Common sunflower.

138810. No. 5266. Nimroz Gardan or Guli Khurskid. From Saidabad, Kirman, December 31, 1939.

138811. No. 5453. Rozgardan, anjuja. From Dehidisk, February 1, 1940. 138812. No. 5481. Rozgardan. From Tomogaon, February 4, 1940.

138813. HERACLEUM sp. Apiaceae.

Cow-parsnip.

No. 5343. Golfar. From Kirman, Kirman, January 4, 1940. Said to be a wild plant used for flavoring.

138814. Iris sp. Iridaceae.

No. 5771. From Niriz, Fars, March 30, 1940, at an altitude of about 10,000 feet. Growing in clumps, with grasslike leaves and small blue-purple flowers, 1 inch long.

138815. JUNIPERUS sp. Pinaceae.

No. 5559. From Maskun, February 12, 1940, at an altitude of 8,000 feet. A large tree 4 feet in diameter, growing on dry slopes.

138816. KOELERIA PHLEOIDES (Vill.) Pers. Poaceae.

No. 5867. From Bushire, Fars, April 15, 1940. A low, bushy grass, 14 inches high, growing in winter rainy season.

138817. LAWSONIA INERMIS L. Lythraceae.

Henna.

No. 5412. From Kirman, Kirman, January 23, 1940.

138818. MENTHA sp. Menthaceae.

No. 5342. Marze. From Kirman, Kirman, January 4, 1940. Said to be a potherb.

138819 to 138822. OCIMUM spp. Menthaceae.

138819 and 138820. OCIMUM BASILICUM var. GLABRATUM Benth.

138819. No. 5193. Rehun. From Isin, Laristan, December 17, 1939, at an altitude of 500 feet. A rather attractive plant, with large flowers; ornamental for its scented leaves.

138820. No. 5308. Rehun. From Saidabad, Kirman, January 1, 1940. Used as a condiment; attractive also because of its fragrant leaves.

138821. Ocimum basilicum var. majus Benth.

No. 5413. Rehun. From Kirman, Kirman, January 23, 1940.

138822. OCIMUM BASILICUM var. ANISATUM Benth.

No. 5783. Rehun. From Niriz, Fars, March 30, 1940. 138823. Pennisetum dichotomum (Forsk.) Delile. Poaceae.

Grass.

No. 5219. From Saadatabad, Kirman, December 23, 1939. Growing in clumps 3½ feet high at the edge of shallow gulches in the desert. Browsed by sheep and goats.

138824. Petroselinum crispum (Mill.) Nym. (P. hortense Hoffmann). Parsley.

No. 5289. Jafri. From Saidabad, Kirman, January 1, 1940.

138825 and 138826. Petunia spp. Solanaceae.

138825. PETUNIA sp.

No. 5291. Atlase. From Saidabad, Kirman, January 1, 1940. A bushy, open plant 1 foot high.

138826. PETUNIA sp.

No. 5409. Atlase. From Kirman, Kirman, January 23, 1940. A low, spreading plant, about 1 foot high.

138827. Rhus sp. Anacardiaceae.

No. 5466. Samak. From Bam, January 25, 1940. Used to flavor meats.

138828 to 138835. Rosa spp. Rosaceae.

Rose.

138828. Rosa sp.

No. 5356. From Dehibala, Kirman, January 7, 1940. A dense bush found along a dry mountain stream, with clusters of small white fragrant flowers  $1\frac{1}{2}$  inches across.

138829. Rosa sp.

No. 5599. From Dehibala, Shirkuh, February 22, 1940, at an altitude of 9,000 feet. A heavily armed shrub, with thin graceful basal branches in small clusters.

138830. Rosa sp.

No. 5360. From Fuz, Kirman, January 8, 1940. A cultivated rose 3 feet high, with scented leaves.

138831. Rosa sp.

No. 5553. From Guragan, February 11, 1940.

138832. Rosa sp.

No. 5554. From Maskun, February 11, 1940. An open bush found growing at edge of a watered garden; flowers in clusters of 3 and 5.

138833. Rosa sp.

No. 5391. From Chahasfarsakh, Kirman, January 14, 1940. A rambler up to 8 feet high, with clusters of attractive fruits. The leaves become red and shiny.

138834. Rosa sp.

No. 5357. From Fuz, Kirman, January 8, 1940. A rambler about 10 feet high, with fruits in clusters. Flowers said to be yellow and 2 inches across.

138835. Rosa sp.

No. 5366. From Chahasfarsakh, Kirman, January 9, 1940. A cultivated bush, 4 feet high, with shiny leaves.

138836. Schismus barbatus (L.) Thell. Poaceae.

Grass

No. 5864. From Bushire, Fars, April 14, 1940. A low bushy grass growing in the winter rainy season and dying down during the hot dry summer.

138837 to 138839. Sesamum indicum L. Pedaliaceae.

Sesame

138837. No. 5298. Kunjit. From Saidabad, Kirman, January 1, 1940. Oil plant.

138838. No. 5498. Kunjit. From Tomogaon, February 5, 1940. Oil plant.
 138839. No. 5711. Kunjit. From Persepolis, Fars, March 12, 1940. Oil plant.

138840. DESCURAINIA SOPHIA (L.) Prantl. Brassicaceae.

No. 5280. Khakishir. From Saidabad, Kirman, January 1, 1940. A wild plant, whose seeds are used as a medicine for mild stomach disorders.

138841. Solanum sp. Solanaceae.

No. 5521. Rofas. From Tomogaon, February 7, 1940. Used as a medicine.

138842 to 138844. TRIFOLIUM SUAVEOLENS Willd. Fabaceae.

Fragrant clover.

138842. No. 5816. Shabdar. From Shiraz, Fars, April 3, 1940. An annual fodder crop.

138843. No. 5697. Shabdar. From Eglit, Fars, March 8, 1940. An annual fodder plant; cut once.

138844. No. 5695. Shabdar. From Eglit, Fars, at an altitude of 6,000 feet, March 8, 1940. An annual fodder plant that is said to be cut 7 times.

138845. VITEX sp. Verbenaceae.

No. 5177. From Isin, Laristan, December 17, 1939. A well-branched shrub about 7 feet high, growing on border of field.

138846 to 138848. ZIZIPHUS MAURITIANA Lam. Rhamnaceae. Indian jujube.

138846. No. 5196. Konar. From Isin, December 18, 1939. A large, handsome tree or bush in dry regions, where it is much eaten by goats.

138847. No. 5470. Kolar. From Cheshmaedozi, February 2, 1940. Shrub or small tree; fruit eaten by birds.

138848. No. 5500. Kular. From Tomogaon, February 5, 1940. A well-formed, dense, spreading tree up to 2 feet in diameter. Fruit ½ to 5% inches long, honey brown, eaten by birds.

138849. ZIZIPHUS sp.

No. 5272. Anab. From Saidabad, Kirman, December 31, 1939. Said to be used medicinally.

#### 138850 to 138862.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond, South Australia. Received August 15, 1940.

138850. ATRIPLEX STIPITATA Benth. Chenopodiaceae.

Collected at Koonamore Vegetation Reserve.

138851. ATRIPLEX VESICARIA Heward. Chenopodiaceae.

Collected at Pallamana.

An erect bushy shrub, covered throughout with a scaly tomentum. The very small, oblong-lanceolate leaves are less than 1 inch long. Native to South Australia.

For previous introduction see 134843.

138852. DANTHONIA SEMIANNULARIS (Labill.) R. Br. Poaceae.

Wallaby grass.

Collected at the Waite Institute.

For previous introduction see 134846.

138853. Eucalyptus gracilis F. Muell. Myrtaceae.

Collected from Perth, Western Australia.

138854. EUCALYPTUS MACROCARPA Hook.

Obtained from Perth, Western Australia.

A stout evergreen shrub or small tree up to 15 feet high, with thick, rigid, cordate, glaucous leaves 6 inches long, and large, solitary, brilliant-orange or crimson flowers.

For previous introduction see 135478.

138855. EUCALYPTUS MICROCARPA Maiden. Myrtaceae.

Collected at Yudnapinna.

## 138850 to 138862—Continued

A large tree, with gray or white bark, lanceolate coriaceous leaves 4 inches long, and panicles made up of clusters of three to seven small flowers followed by very small subcylindrical fruits.

For previous introduction see 90698.

138856. EUCALYPTUS OLEOSA F. Muell. Myrtaceae.

Obtained from the Forest Department, Perth, Western Australia.

For previous introduction see 48994.

138857. Kochia Georgei Diels. Chenopodiaceae.

Collected at Pallamana.

138858. KOCHIA SEDIFOLIA F. Muell. Chenopodiaceae. Summer-cypress. Collected at Renmark.

For previous introduction see 106717.

138859. MEDICAGO TRUNCATULA var. TRIBULOIDES (Desr.) Burnat. Fabaceae. "Barrel Medic."

For previous introduction see 135858.

138860. PAPPOPHORUM NIGRICANS R. Br. Poaceae.

Grass.

138861. Schismus barbatus (L.) Thell. Poaceae.

Grass.

For previous introduction see 138836.

138862. SIDA INTRICATA F. Muell. Malvaceae.

138863. SOLANUM MAGLIA Schlecht. Solanaceae. Nightshade.

From Chile. Tubers presented by the Ministry of Agriculture, Santiago. Received August 29, 1940.

A wild species, native to Chile, with oblong tubers about  $1\frac{1}{2}$  inches long. The tubers are said to have a bitter taste.

For previous introduction see 136429.

#### 138864 to 138954.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received July 3-4, 1940.

138864 to 138868. Anethum graveolens L. Apiaceae. Dill.

138864. No. 5202. Melk. From Bandar Abbas, December 20, 1939. Spice.

138865. No. 5428. Metokh. From Bam, January 25, 1940. Spice.

138866. No. 5282. Shebet. From Saidabad, Kirman, January 1, 1940. Used as a condiment.

138867. No. 5748. Shevet. From Jahrum, Fars, March 25, 1940. Potherb. 138868. No. 5764. Shabat. From Niriz, Fars, March 30, 1940. Potherb.

138869 and 138870. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

138869. No. 5334. Badamizamini (earth almond). From Kirman, Kirman, January 4, 1940. Said to be from India.

138870. No. 5655. Badamizamini. From Isfahan, March 3, 1940.

138871 to 138902. Brassica spp. Brassicaceae.

138871. Brassica oleracea var. botrytis L. Cauliflower.

No. 5813. Kilamigul. From Shiraz, Fars, April 3, 1940. White, solid, 10 inches in diameter.

138872 to 138874. Brassica oleracea var. capitata L. Cabbage.

#### 138864 to 138954—Continued

- 138872. No. 5794. Kalamifich or Kalamirumi. From Shiraz, Fars, April 2, 1940. Flat, 1 foot in diameter.
- 138873. No. 5733. Kalamisar. From Jahrum, Fars, March 21, 1940.
- 138874. No. 5333. Kilamifich. From Kirman, Kirman, January 4, 1940. Flat, about 8 inches in diameter.
- 138875 to 138879. Brassica oleracea var. gongylodes L. Kohlrabi.
  - 138875. No. 5847. Kalamsar. From Kazerun, Fars, April 11, 1940.
  - 138876. No. 5797. Khalamishari or kalami. From Shiraz, Fars, April 2, 1940. Globose, green, mild in flavor.
  - 138877. No. 5755. Kalmisar. From Niriz, Fars, March 29, 1940. Globose, green, mild in flavor, and tender. Said to weigh almost 6 pounds.
  - 138878. No. 5582. Kilamigomri. From Yezd, Kirman, February 20, 1940. Globose, 4 to 5 inches in diameter, pale green.
  - 138879. No. 5336. Kilamigomri. From Kirman, Kirman, January 4, 1940. Round, green, 6 inches in diameter.
- 138880 to 138898. Brassica RAPA L.

Turnip.

- Shelgam is the vernacular name for turnip in Iran.
- 138880. No. 5810. From Shiraz, Fars, April 3, 1940. Semiglobose; mixed red and white.
- 138881. No. 5842. From Kazerun, Fars, April 11, 1940.
- 138882. No. 5778. From Niriz, Fars, March 30, 1940. Said to be globose; red and white.
- 138883. No. 5738. From Jahrum, Fars, March 23, 1940.
- 138884. No. 5698. From Eglit, Fars, March 8, 1940, at an altitude of 6,000 feet. Said to be white and also red purple.
- 138885. No. 5658. From Isfahan, March 4, 1940. Globose, white and red purple.
- 138886. No. 5621. From Taft, February 23, 1940. Flat, up to 9 inches across; very tender, not very strong, almost tasteless.
- 138887. No. 5579. From Yezd, Kirman, February 20, 1940. Globose, white, red.
- 138888. No. 5539. From Gurgan, February 10, 1940. Globose and white, early.
- 138889. No. 5532. From Tomogaon, February 8, 1940.
- 138890. No. 5506. From Tomogaon, February 5, 1940. Roots elongated, 8 inches long and 1½ inches in diameter, white to purple, white-fleshed; very rare.
- 138891. No. 5505. From Tomogaon, February 5, 1940. An early white variety.
- 138892. No. 5461. (2-months turnip.) From Dehidisk, February 2, 1940.
- 138893. No. 5433. From Bam, January 25, 1940.
- 138894. No. 5377. From Khabis, Kirman, January 11, 1940. A white variety.
- 138895. No. 5349. From Kirman, Kirman, January 5, 1940. A flat, red variety.
- 138896. No. 5347. From Kirman, Kirman, January 5, 1940. A flat, white variety.
- 138897. No. 5300. From Saidabad, Kirman, January 1, 1940. A white variety.

# 138864 to 138954-Continued

138898. No. 5212. From Bandar Abbas, December 21, 1939. A small, globose, red variety.

138899 to 138902. Brassica spp. Brassicaceae.

138899. No. 5214. From Bandar Abbas, December 21, 1939. A potherb, adapted to alkaline soil.

138900. No. 5299. Shelgam. From Saidabad, Kirman, January 1, 1940.

138901. No. 5340. Khardil. From Kirman, Kirman, January 4, 1940. Seeds used for seasoning.

138902. No. 5184. *Khandal*. From Islin, December 17, 1939. A potherb. 138903 to 138910. CICER ARIETINUM L. Fabaceae. Chickpea.

Nakhud is the vernacular name for the chickpea in Iran.

138903. No. 5283. From Saidabad, Kirman, January 1, 1940.

138904. No. 5397. From Dehishib, Kirman, January 18, 1940.

138905. No. 5432. From Bam, January 25, 1940.

138906. No. 5458. From Dehidisk, February 2, 1940.

138907. No. 5495. From Tomogaon, February 5, 1940.

138908. No. 5625. From Taft, February 23, 1940.

138909. No. 5471. From Tomogaon, February 3, 1940.

138910. No. 5675. From Eglit, Fars, March 8, 1940.

138911. Cucumis sp. Cucurbitaceae.

No. 5517. From Tomogaon, February 6, 1940.

138912. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

No. 5427. From Bam, January 25, 1940. A scented, leafed annual. For previous introduction see 138598.

138913 to 138919. LATHYRUS CICERA L. Fabaceae.

138913. No. 5181. Mashuk. From Isin, Laristan, December 17, 1939.

138914. No. 5281. Kholar. From Saidabad, Kirman, January 1, 1939.

138915. No. 5451. Karui kohi. From Dehidisk, February 1, 1940.

138916. No. 5496. Karu. From Tomogaon, February 5, 1940.

138917. No. 5497. Karu. From Tomogaon, February 5, 1940.

138918. No. 5520. From Tomogaon, February 7, 1940.

138919. No. 5525. Karu. From Tomogaon, February 7, 1940.

138920 to 138928. LENS CULINARIS Medik. Fabaceae.

Lentil.

Adas is the vernacular name for lentil in Iran.

138920. No. 5226. From Saadahabad, Kirman, December 22, 1939.

138921. No. 5301. From Saidabad, Kirman, January 1, 1940.

138922. No. 5420. From Bam, January 25, 1940.

138923. No. 5454. From Dehidisk, February 1, 1940.

138924. No. 5455. From Dehidisk, February 1, 1940.

138925. No. 5478. From Tomogaon, February 4, 1940.

138926. No. 5486. From Tomogaon, January 4, 1940.

138927. No. 5674. From Eglit, Fars, March 8, 1940.

138928. No. 5710. From Persepolis, Fars, March 12, 1940.

## 138864 to 138954—Continued

138929. LEPIDIUM SATIVUM L. Brassicaceae.

Garden cress.

No. 5747. Taratezak. From Jahrum, Fars, March 25, 1940. Potherb.

138930. Petroselinum crispum (Mill.) Nym. Apiaceae.

Parsley.

No. 5401. Karfs. From Kirman, Kirman, January 21, 1940. A common potherb.

138931 and 138932. Phaseolus aureus Roxb. Fabaceae. Mung bean.

138931. No. 5231. Mash. From Teserj, Kirman, December 24, 1939.

138932. No. 5267. Mash. From Saidabad, Kirman, December 31, 1939.

138933 to 138944. Phaseolus vulgaris L. Fabaceae. Common bean.

Lobia is the vernacular name for the common bean in Iran.

138933. No. 5274. From Saidabad, Kirman, January 1, 1940.

138934. No. 5275. From Saidabad, Kirman, January 1, 1940.

138935. No. 5327. From Kirman, Kirman, January 4, 1940.

138936. No. 5540. From Guragan, February 10, 1940.

138937. No. 5573. From Yezd, Kirman, February 20, 1940.

138938. No. 5584. From Yezd, February 20, 1940.

138939. No. 5601. From Dehibala, Chirkuh, February 22, 1940.

138940. No. 5602. From Dehibala, Shirkuh, February 22, 1940.

138941. No. 5632. From Yezd, February 24, 1940.

138942. No. 5633. From Yezd, February 24, 1940.

138943. No. 5637. From Isfahan, February 27, 1940.

138944. No. 5670. From Eglit, Fars, March 8, 1940.

138945. PISUM SATIVUM L. Fabaceae.

Pea.

No. 5502. Kudi. From Tomogaon, February 5, 1940.

For previous introduction see 137184.

138946. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

No. 5185. Torp. From Isin, December 17, 1939.

138947 to 138950. RICINUS COMMUNIS L. Euphorbiaceae. Castor-bean.

138947. No. 5314. Kanatu or karchak. From Saidabad, Kirman, January 1, 1940.

138948. No. 5382. Ketan. From Khabis, Kirman, January 11, 1940.

138949. No. 5384. Ketan. From Khabis, Kirman, January 11, 1940.

138950. No. 5423. Ketan. From Bam, January 25, 1940. A bushy plant, 4 to 6 feet in height, with small seeds.

For previous introduction see 134014.

138951 and 138952. SPINACIA OLERACEA L. Chenopodiaceae.

Common spinach.

138951. No. 5326. Isfanach. From Kirman, Kirman, January 3, 1940.

138952. No. 5770. Isfinaj. From Niriz, Fars, March 30, 1940.

138953 and 138954. TRIGONELLA FOENUM-GRAECUM L. Fabaceae.

Fenugreek.

138953. No. 5856. Shambli. From Bushire, Fars, April 14, 1940. Potherb.

138954. No. 5317. From Saidabad, Kirman, January 1, 1940. Potherb. For previous introduction see 138688.

# 138955. Gossypium. Malvaceae.

Cotton.

From Massachusetts. Seeds presented by the Gray Herbarium, Harvard University, Cambridge. Received August 19, 1940.

C. B. 1409. Seeds originally received from Argentina.

# 138956. CYRTOSPERMA MERKUSII Schott. Araceae.

From the Philippine Islands. Collected by Dr. David Fairchild, Coconut Grove, Florida. Received August 21, 1940.

No. 452.

#### 138957 to 138960.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received August 20, 1940.

138957 to 138959. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

138957. No. 6154. Gelas. From Tehran, June 14, 1940. Fruit % inch in diameter, red, good flavor.

138958. No. 6201. Gelas. From Tehran, June 21, 1940. A large, crimson variety.

138959. No. 6208. Gelas. From Tehran, June 22, 1940. A firm, "black" variety.

138960. PRUNUS sp.

No. 6155. From Burujird, Luristan, May 26, 1940.

#### 138961 to 138964.

From Haiti. Seeds collected by H. F. Loomis and T. A. Fennell, Service Technique, Fond-des-Nègres. Received August 15, 1940.

#### 138961. ACROCOMIA ACULEATA Lodd. Phoenicaceae.

Grugru palm.

A beautiful spiny-trunked palm, with slightly arching fronds bearing crowded, narrow, drooping pinnae held at various angles to the upper surface of the rachis. This is the first record of the species from the Southern Peninsula of Haiti; several of the palms being found at Habitation Deron, between Beaumont and Rivier Glace, where the native name is *Cocotier*.

For previous introduction see 93528.

#### 138962. Bornoa crassispatha (Mart.) Cook. Phoenicaceae.

Pali

A magnificent, pinnate-leaved palm, somewhat resembling the coconut, but attaining greater size and having a straight trunk; the leaves are arranged somewhat more on edge and are darker green. The very large, compact fruit-cluster from which the seeds were gathered weighed more than 40 pounds and was estimated to have had 1,500 to 2,000 fruits that were bright yellow when fully ripe.

#### 138963. BORNOA sp.

Palm.

Similar to *Bornoa crassispatha*, but the spathes are longer, more slender, and do not open as widely over the fruit cluster. The fruit clusters are smaller, with smaller fruits, fewer in number on the branches of the spadix; the terminal or male portion of the branches is longer. The palms here are known as *Cocoroz* or *Cocorosse*.

# 138964. GEONOMA OXYCARPA Mart. Phoenicaceae.

Palm.

A slender palm, with a slender, very stiff trunk, 7 to 8 feet high, growing in moist woods on the higher mountains. The leaves are unevenly pinnate, with the pinnae usually segregated in several individual groups on each side of the rachis. The small fruits are bluish black. The common name of this palm is Coco-macaque.

138965. SACCHARUM SPONTANEUM var. AEGYPTIACUM Hack. Poaceae.

From Africa. Seeds presented by the Director, Department of Agriculture, Entebbe, Uganda. Received August 22, 1940.

From the Ankole District, Uganda.

138966. Amygdalus persica L. Amygdalaceae. Peach.

From Argentina. Seeds collected by Paul E. Yatman, Swift & Co., Mendoza. Received August 21, 1940.

Seedlings of this peach are considered useful as rootstocks to be planted where more than normal soil moisture conditions are present.

138967 and 138968. PRUNUS AVIUM L. Amygdalaceae.

Sweet cherry.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received August 26, 1940.

138967. No. 6184. Gelas. From Tehran, June 18, 1940. Fruit yellow, washed with red, 1 inch in diameter; flesh not firm, somewhat acid.

138968. No. 6225. Gelas. From Tehran, June 25, 1940. Flesh crimson, sweet, firm.

138969. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From California. Tree grown at the United States Plant Introduction Garden, Chico. Numbered August 28, 1940.

A selection (tree 6, row 10, orchard 0) from P. I. 82648. Tree vigorous, healthy; fruit yellow; flesh yellow, thick, firm, of good quality, practically free of red color around pit.

138970. Rubus sp. Rosaceae.

From Haiti. Seeds collected by T. A. Fennell, Agricultural Advisor to the Government of Haiti, Port-au-Prince. Received August 24, 1940.

From the pine forest of Morne des Commissiares, near Savanne Zombi. A bush-type blackberry, with particularly large clusters of large, high quality fruit. The plants bear during more than 2 months.

138971. Triticum durum Desf. Poaceae. Durum wheat.

From Guatemala. Seeds presented by Dr. Mariano Pacheco, Director General de Agriculture, Guatemala City. Received August 28, 1940.

Var. Pellis. Originally from Algeria.

For previous introduction see 134944.

138972. SACCHARUM. Poaceae.

Sugarcane.

From Australia. Seeds received from Colonial Sugar Refining Co., Ltd., Sydney, New South Wales. Received August 29, 1940.

No. 37. N. G. 6.

138973 to 138991.

From Venezuela. Seeds collected by A. G. Sandoval, Soil Conservation Service, United States Department of Agriculture. Received August 3, 1940.

138973. Anthephora Hermaphrodita (L.) Kuntze. Poaceae. Grass.

No. 6.

For previous introduction see 74512.

138974. Axonopus affinis Chase. Poaceae.

Grass.

Grows on sandy soil on the savannas and near river banks; a good soil binder.

# 138973 to 138991—Continued

138975. Axonopus barbigerus (Kunth) Hitchc.

One of the best cultivated grasses for fattening cattle; similar to guinea grass.

138976. AXONOPUS PURPUSII Chase.

138977 and 138978. DIGITARIA HORIZONTALIS Willd. Poaceae. Grass.

138977. No. 5. Grows in protected places, moist ground near riverbank.

138978. Grows on relatively moist ground.

138979. ELEUSINE INDICA (L.) Gaertn. Poaceae.

Ragi.

138980. ERAGROSTIS sp. Poaceae.

Grass.

138981. LEPTOCHLOA DOMINGENSIS (Jacq.) Trin. Poaceae.

Grass.

No. 4.

138982. MELINIS MINUTIFLORA Beauv. Poaceae. For previous introduction see 132806.

Molasses grass.

138983. PANICUM LAXUM Swartz. Poaceae.

Grass.

For previous introduction see 51782.

138984. PANICUM MAXIMUM Jacq.

Guinea grass.

For previous introduction see 133432. 138985. PANICUM VERSICOLOR Doell.

No. 2.

138986. PASPALUM CONJUGATUM Berg. Poaceae. For previous introduction see 99337.

Grass.

Grass.

138987. PASPALUM MELANOSPERMUM Desv.

Grass.

138988. SETARIA sp. Poaceae.

Grass.

A valuable grass; grows in moist places.

138989. SORGHUM HALEPENSE (L.) Pers. Poaceae.

Johnson grass.

Grows on moist ground.

138990. Sporobolus indicus (L.) R. Br. Poaceae.

Grass.

Grown in moist places; valuable pasture grass.

138991. SPOROBOLUS POIRETI (Roem. and Schult.) Hitchc.

Grass.

138992 to 139069, ORYZA SATIVA L. Poaceae.

Rice.

From Brazil. Seeds presented by Dr. C. A. Krug, Instituto Agronómico de São Paulo, Campinas. Received August 30, 1940.

138992. Var. 161, I-2550.

139002. Var. 171, I-2560.

138993. Var. 162, I-2551. 138994. Var. 163, I-2552. 139003. Var. 172, I-2561.

Var. 164, I-2553. 138995.

139004. Var. 173, I-2562.

138996. Var. 165, I-2554.

Var. 174, I-2563. 139005.

Var. 166, I-2555. 138997.

Var. 175, I-2564. 139006. 139007. Var. 176, I-2565.

Var. 167, I-2556. 138998.

139008. Var. 177, I-2566.

Var. 168, I-2557. 138999. 139000. Var. 169, I-2558. 139009. Var. 178, I-2567.

139001. Var. 170, I-2559.

Var. 179, I-2568. 139010. 139011. Var. 180, I-2569.

# 138992 to 139069—Continued

to loove Continued		
139012. Var. 181, I-2570.	139041.	Var. 283, I-2871.
139013. Var. 182, I-2571.	139042.	Var. 284, I-2872.
139014. Var. 183, I-2572.	139043.	Var. 285, I-2873.
139015. Var. 184, I-2573.	139044.	Var. 286, I-2874.
139016. Var. 185, I-2574.	139045.	Var. 287, I-2875.
139017. Var. 186, I-2575.	139046.	Var. 289, I-2877.
139018. Var. 187, I-2576.	139047.	Var. 290, I-2878.
139019. Var. 188, I-2577.	139048.	Var. 291, I-2879.
139020. Var. 189, I-2578.	139049.	Var. 292, I-2880.
139021. Var. 190, I-2579.	139050.	Var. 293, I-2881.
139022. Var. 191, I-2580.	139051.	Var. 294, I-2882.
139023. Var. 192, I-2581.	139052.	Var. 295, I-2883.
139024. Var. 193, I-2582.	139053.	Var. 296, I-2884.
139025. Var. 194, I-2583.	139054.	Var. 297, I-2885.
139026. Var. 268, I-2856.	139055.	Var. 298, I-2886.
139027. Var. 269, I-2857.	139056.	Var. 299, I-2887.
139028. Var. 270, I-2858.	139057.	Var. 300, I-2888.
139029. Var. 271, I-2859.	139058.	Var. 301, I-2889.
139030. Var. 272, I-2860.	139059.	Var. 302, I-2890.
139031. Var. 273, I-2561.	139060.	Var. 303, I-2991.
139032. Var. 274, I–2862.	139061.	Var. 351, I-3634.
139033. Var. 275, I–2863.	139062.	Var. 352, I-3635.
139034. Var. 276, I-2864.	139063.	Var. 353, I-3636.
139035. Var. 277, I–2865.	139064.	Var. 354, I-3637.
139036. Var. 278, I–2866.	139065.	Var. 355, I-3638.
139037. Var. 279, I-2867.	139066.	Var. 356, I-3639.
139038. Var. 280, I–2868.	139067.	Var. 357, I-3640.
139039. Var. 281, I-2869.	139068.	Var. 358, I-3641.
139040. Var. 282, I-2870.	139069.	Var. 359, I-3642.
120070 to 120071		

# 139070 to 139071.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received August 26, 1940.

139070. PENNISETUM CILIARE (L.) Link. (P. cenchroides Rich.). Poaceae. Grass.

A perennial grass, with ascending stems up to 2 feet long. Native to South Africa.

For previous introduction see 133898.

139071. OLEA VERRUCOSA (Roem. and Schult.) Link. Oleaceae. Olive. For previous introduction see 137596.

# 139072 to 139131. ZEA MAYS L. Poaceae.

Corn.

From Brazil. Seeds presented by C. A. Krug, Instituto Agronómico, Campinas, São Paulo. Received August 30, 1940.

Nos. 139072 to 139105 were from the market at Cochabamba, Bolivia.

# 139072 to 139131—Continued

139072. Var. 454. Maiz pisanokalla.

139073. Var. 456. Maiz pisanokalla.

139074. Var. 460. Maiz chuspillo; sweet corn.

139075. Var. 469. Maiz chuspillo; sweet corn.

139076. Var. 476. Maiz chechiche.

139077. Var. 479. Maiz chechiche.

139078. Var. 499. Maiz colli.

139079. Var. 500. Maiz colli.

139080. Var. 501. Maiz colli.

139081. Var. 502. Maiz colli.

139082. Var. 503. Maiz colli.

139083. Var. 504. Maiz cruzado. 139084. Var. 505. Maiz cruzado.

139085. Var. 506. Maiz cruzado.

139086. Var. 507. Maiz crespo o

139087. Var. 509. Maiz blanco.

chieche.

139088. Var. 510. Maiz huillcaparu.

139089. Var. 511. Maiz huilleaparu.

139090. Var. 514. Maiz amarillo.

139091. Var. 515. Maiz amarillo.

139092. Var. 516. Maiz amarillo.

139093. Var. 523. Maiz uchuquilla.

139094. Var. 528. Maiz chuspillo morado.

139095. Var. 542. *Maiz culli* (negro).

139096. Var. 548. Maiz colli.

139097. Var. 549. Maiz cruzado.

139098. Var. 550. Maiz erespo o chieche.

139099. Var. 551. Maiz crespo o chieche.

139100. Var. 552. Maiz crespo o chieche.

139101. Var. 553. Maiz crespo o chieche.

139102. Var. 554. Maiz crespo o chieche.

139103. Var. 555. Maiz huilleaparu.

139104. Var. 556. Maiz gris.

139105. Var. 557. Maiz gris.

Nos. 139106 to 139108 were from the Criadero Enrique Klein, Pla.—C. G. B. A., Argentina.

139106. Var. 561. Maiz Colorado Cuarentón Klein.

139107. Var. 562. Amarillo Klein.

139108. Var. 563. Colorado Klein.

139109. Var. 564. Maiz dulce. From Carlos Bazzani & Cia, Montevideo, Uruguay.

Nos. 139110 to 139124 were from the Estación Experimental de la Molina, Lima, Peru.

139110. Var. 578. Maiz sacsa.

139111. Var. 580. Maiz blanco.

139112. Var. 585. Maiz chulpi.

139113. Var. 586. Maiz orque.

139114. Var. 588. Maiz urquillino.

139115. Var. 591. Maiz huaira.

139116. Var. 614. Maiz de Ayusbamba.

139117. Var. 616. Maiz de Cuzco.

139118. Var. 620. Maiz blanco.

139119. Var. 623. Maiz chullipi.

139120. Var. 628. Maiz cafe.

139121. Var. 636. Maiz de Echarte.

139122. Var. 637. Maiz cafe de Cuzco.

139123. Var. 644. Maiz laurel.

139124. Var. 645. Maiz suave (mole).

Nos. 139125 to 139129 were from Quito, Ecuador.

139125. Var. 666. Morocho.

139126: Var. 678. Maiz negro (semiduro).

139127. Var. 680. Maiz rojo del guinche.

139128. Var. 683. Maiz chu'pi.

#### 139072 to 139131—Continued

139129. Var. 685. Maiz morocho (indurata).

Nos. 139130 and 139131 were collected at Barranquilla, Colombia.

139130. Var. 689. 139131. Var. 690.

# 139132. BABIANA PLICATA (L.) Ker. Iridaceae.

From California. Bulbs presented by the H. A. Hyde Co., Watsonville. Received October 20, 1937. Numbered September, 1940.

A dwarf, sweet-scented, early-flowering babiana, with five to six lanceolate leaves 3 to 6 inches long, and four to six flowers in a simple or forked spike, usually shorter than the leaves. The ringent lilac or reddish perianth is about 1 inch long. Native to South Africa.

For previous introduction see 132676.

# 139133. STENOMESSON PEARCEI Baker. Amaryllidaceae.

From Peru. Bulbs presented by C. Vargas, University of Cuzco, Department of Botany, Cuzco. Received June 29, 1938. Numbered in September, 1940.

# 139134. PRUNUS AVIUM L. Amygdalaceae. Sweet cherry.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received September 5, 1940.

No. 6242. Gelas. From Tehran, July 5, 1940. Fruit dark maroon; moderately firm, ¾ inch in diameter; little sugar or flavor.

# 139135 and 139136.

From Mexico. Seeds presented by Dr. Narciso Souza-Novelo, Mérida, Yucatan. Received September 7, 1940.

139135. CORDIA DODECANDRA DC. Boraginaceae.

Ciricote.

139136. CORDIA SEBESTENA L.

Geiger-tree.

# 139137. HIBISCUS KITAIBELIFOLIUS St. Hil. Malvaceae.

From Brazil. Seeds presented by Eliezer Moreira, Chefe da Secção de Plantas Texteis, Ministerio da Agricultura, Rio de Janeiro. Received September 5, 1940.

# 139138 to 139146. SOLANUM spp. Solanaceae.

From India. Tubers presented by B. P. Pal, Imperial Economic Botanist, New Delhi. Received September 9, 1940.

139138. Solanum andigenum Juz. and Buk.

For previous introduction see 133617.

139139. SOLANUM ARRACC-PAPA Juzepczuk.

For previous introduction see 133629.

139140. SOLANDUM CANDELARIUM Busasov.

139141. SOLANUM CURTILOBUM Juz. and Buk.

For previous introduction see 103031.

139142. SOLANUM LEPTOSTIGMA Juzepczuk.

For previous introduction see 133726.

139143. SOLANUM MAGLIA Schlecht.

For previous introduction see 138863.

Nightshade.

# 139138 to 139146—Continued

139144. SOLANUM NEO-ANTIPOVICZII Bukasov.

139145. SOLANUM OTITES Dun.

139146. SOLANUM SUBTILIUS Bitter.

#### 139147 to 139154.

From New Zealand. Plants purchased from J. N. Anderson & Son, Napier. Received September 10, 1940.

139147 to 139149. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

139147. Anderson's Seedling.

139148. Black Boy.

139149. Mary's Choice.

139150. CITRUS. Rutaceae.

Grapefruit.

Poorman Orange.

139151. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

Royal Late.

139152. PRUNUS sp.

Plum.

George Wilson.

139153 and 139154. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

139153. Giant Non-seeding.

139154. Topp's Crimson Winter.

# 139155 to 139163.

From New Zealand. Plants purchased from W. H. Walker & Sons, Hastings, Hawke's Bay. Received September 10, 1940.

139155 to 139157. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

139155. A-1.

139156. American Pound.

139157. Osprey Improved.

139158. CITRUS PARADISI Macfad. Rutaceae.

Grapefruit.

Morrison's Seedless.

139159 and 139160. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

139159. Frimley.

139160. Oratia Beauty.

139161 and 139162. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

139161. Bay View.

139162. Harris.

139163. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

Horton's Champion.

#### 139164 to 139172.

From New Zealand. Plants purchased from Webbs' Nurseries, Hastings, Hawke's Bay. Received September 10, 1940.

139164 and 139165. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

139164. Mahuta.

139165. Utalis.

#### 139164 to 139172—Continued

139166 to 139168. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

139166. Bledisloe Cox.

139167. English Red Cox.

139168. Kapai Red Jonathan.

139169 to 139171. PRUNUS spp. Amygdalaceae.

Plum.

139169. Sharp's Early.

139170. Wilson.

139171. Wright's Early.

139172. RHEUM RHAPONTICUM L. Polygonaceae

Common rhubarb.

 $Weight man \'s\ Invincible.$ 

# 139173. ARUNDO DONAX L. Poaceae.

Giant reed.

From France. Plants presented by Harold Kooden, Los Angeles, California. Received May 1, 1940.

For previous introduction see 138787.

#### 139174 to 139178.

From Turkey. Bulbs purchased from Hanna Boutros, Mersine. Received September 12, 1940.

139174. Iris persica var. stenophylla (Baker) Dykes. Iridaceae.

139175. IRIS Sp.

Juno section.

139176. FRITILLARIA sp. Liliaceae.

A species with yellow flowers.

139177. GALANTHUS CILICICUS Baker. Amaryllidaceae.

139178. TULIPA SPRENGERI Baker. Liliaceae.

#### 139179 to 139185.

From Venezuela. Seeds presented by A. G. Sandoval, Soil Conservation Service, United States Department of Agriculture, San Torú. Received September 7, 1940.

139179. CAJANUS CAJAN (L.) Druce. Fabaceae.

Pigeon-pea

Quinchancho. Produces for two seasons; eaten green and dried.

139180. Cassia sp. Caesalpiniaceae.

139181. CROTALARIA sp. Fabaceae.

139182. LESPEDEZA sp. Fabaceae.

139183. GLYCINE MAX (L.) Merrill. Fabaceae.

Soybean.

139184. SORGHUM VULGARE VAR. SUDANENSE (Piper) Hitchc. Poaceae.

Sorghum.

Used as bird feed.

139185. VIGNA SINENSIS (Torner) Hassk. Fabaceae.

Cowpea.

Baunitas. Beans used green and dried.

# 139186. HIBISCUS. Malvaceae.

From Florida. Plants growing at the Plant Introduction Garden, Coconut Grove. Numbered September 20, 1940.

Var. Mrs. Earl Arthony. A handsome single yellow hibiscus, presumably of hybrid origin, originally introduced from Hawaii by Col. R. H. Montgom-

# 139186—Continued

ery. The flower, which measures 6 inches across, has full, well-rounded, overlapping petals of uniform picric yellow (Ridgway). The column, of the same color, is thick and stiffly erect. The stigmas are pinard yellow (Ridgway).

#### 139187 to 139193.

From New Zealand. Plants purchased from the J. H. Harrison Nurseries, Te Kuiti. Received September 24, 1940.

139187. AMYGDALUS PERSICA L. Amygdalaceae. Ideal.

Peach.

Iaeai.

139188. CITRUS PARADISI Macfad. Rutaceae.

Grapefruit.

Oani Kin Kan.

139189. CITRUS SINENSIS (L.) Osbeck.

Orange.

Poorman.

139190 and 139191. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

139190. Albany Beauty.

139191. Kidds Orange Red.

139192. PRUNUS sp. Amygdalaceae.

Duffy's Early Jewell.

139193. RHEUM RHAPONTICUM L. Polygonaceae. Giant Crimson Wonder.

Common rhubarb.

139194. GLADIOLUS sp. Iridaceae.

From Florida. Plant growing at the United States Plant Introduction Garden, Coconut Grove. Numbered September 24, 1940.

Large, round bulbs with purple flowers.

#### 139195 to 139203.

From Australia. Trees purchased from F. E. Benham, Benyenda Nurseries, Byrnestown, Queensland. Received September 24, 1940.

139195. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

Wiggins.

139196 and 139197. CITRUS spp. Rutaceae.

139196. Joppa.

139197. White Siletta.

139198 to 139200. CITRUS RETICULATA Blanco. Rutaceae. Mandarin orange.

139198. Scarlet Emperor.

139199. Solid Scarlet.

139200. Thorny.

139201. ERIOBOTRYA JAPONICA (Thunb.) Lindl. Malaceae.

Loquat.

Heards.

139202 and 139203. PRUNUS spp. Amygdalaceae.

139202. PRUNUS ARMENIACA L.

Apricot.

Travatt.

139203. PRUNUS sp.

Plum.

Rema.

#### 139204 to 139251.

From the United States. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received September 16, 1940.

Unless otherwise stated, collections were made in Georgia.

139204. AESCULUS PAVIA L. Aesculaceae.

No. 5390. From Athens, Clarke County, August 27, 1940.

139205. AMORPHA VIRGATA Small. Fabaceae.

No. 5309. From the swamps along the Altamaha River, near Lyons, Toombs County, August 23, 1940.

139206. AMORPHA FRUTICOSA L.

Indigobush.

No. 5310. From the Altamaha River, south of Lyons, Toombs County, August 25, 1940.

For previous introduction see 118796.

139207. Амогрна sp.

No. 5319. Southeast of Greensboro, Greene County, August 26, 1940.

139208. BAPTISIA sp. Fabaceae.

From the swamps of the Altamaha River, south of Lyons, Toombs County, August 25, 1940.

139209. CALYCANTHUS sp. Calycanthaceae.

From the Bent Creek Experimental Forest, Buncombe County, North Carolina. August 30, 1940.

139210 and 139211. CLIFTONIA MONOPHYLLA (Lam.) Sarg. Cyrillaceae.

139210. No. 5294. From northeast of Homerville, Clinch County, August 28, 1940.

139211. From Waycross, Ware County, August 24, 1940.

139212. CLINOPODIUM COCCINEUM (Nutt.) Kuntze. Verbenaceae.

No. 5312. From the sand hills of Ohoopee River, Oak Park, Emanuel County, August 25, 1940.

139213. COREOPSIS PUBESCENS Ell. Asteraceae.

From southwest of Franklin, Heard County, August 20, 1940.

139214. Coreopsis grandiflora Sweet.

From near Wedowee, Randolph County, Alabama. August 20, 1940.

139215. CRATAEGUS FLORIDANA Sarg. Malaceae.

No. 5275. From Live Oak, Suwannee County, Florida. August 24, 1940. 139216. ELAEAGNUS UMBELLATA Thunb. Elaeagnaceae. Autumn elaeagnus.

No. 5388. From Athens, Clarke County, August 27, 1940.

139217. ILEX CORIACEA (Pursh) Chapm. Aquifoliaceae.

No. 5293. From Homerville, Clinch County, August 24, 1940.

139218. LEUCOTHOE AXILLARIS (Lam.) D. Don. Ericaceae.

No. 5318. From Metter, Candler County, August 25, 1940.

139219 to 139238. MALUS spp. Malaceae.

139219. MALUS sp.

No. 5227. Collected 10 miles west of Junction City, Talbot County, August 22, 1940.

139220. MALUS Sp.

# 139204 to 139251—Continued

No. 5229. Collected 5 miles south of Reynolds, Macon County, August 22, 1940.

139221. MALUS sp.

No. 5253. Collected 8 miles south of Bainbridge, Decatur County, August 23, 1940.

139222. MALUS sp.

No. 5254. Collected 8.5 miles south of Bainbridge, August 23, 1940.

Nos. 139223 to 139227 were collected near Chattahoochee and Quincy, Gadsden County, Florida, August 23 and 24, 1940.

139223. MALUS sp.

No. 5255.

139224. MALUS sp.

No. 5257.

139225. MALUS sp.

No. 5270.

139226. MALUS sp.

No. 5271.

139227. MALUS sp.

No. 5274.

Nos. 139228 to 139233 were collected in Buncombe County, North Carolina.

139228. MALUS sp.

No. 5409. From 3 miles south of Asheville, August 29, 1940.

139229. MALUS Sp.

No. 5420. From Asheville, August 30, 1940.

139230. MALUS sp.

No. 5421. From Asheville, August 30, 1940.

139231. MALUS Sp.

No. 5422. From Asheville, August 30, 1940.

139232. MALUS sp.

No. 5425. From the Bent Creek Experimental Forest, August 30, 1940.

139233. MALUS Sp.

No. 5426. From the Bent Creek Experimental Forest, August 30, 1940. 139234. MALUS sp.

No. 5433. From Glen Alpine, Burke County, August 31, 1940.

139235. MALUS sp.

No. 5441. From Virginia. Collected in a meadow near Arlington, September 15, 1940.

Nos. 139236 to 139238 were collected in Pennsylvania.

139236. MALUS sp.

No. 5443. From Orchard Hill, Duncannon, Perry County, September 22, 1940.

139237. MALUS sp.

No. 5447. From 2 miles southwest of Dromgold, Perry County, September 22, 1940.

# 139204 to 139251—Continued

139238. MALUS sp.

No. 5448. From 2 miles southwest of Dromgold, Perry County, September 22, 1940.

139239. MANFREDA TIGRINA (Engelm.) Small. Amaryllidaceae.

No. 5320. From 9 miles southeast of Greensboro, Greene County, August 26, 1940.

139240. NOLINA GEORGIANA Michx. Liliaceae.

No. 5139. From 10 miles west of Augusta, Richmond County, August 19, 1940.

139241. NYSSA OGECHE Marsh. Cornaceae.

Tupelo.

No. 5285. From 10 miles northwest of Fargo, Clinch County, August 24, 1940.

139242. LYONIA LUCIDA (Lam.) K. Koch. Ericaceae.

No. 5280. From 6 miles north of Fargo, August 24, 1940.

139243. POLYGONELLA AMERICANA (Fisch. and Mey.) Small. Polygonaceae. No. 5138. From 5 miles west of Augusta, Richmond County, August 19,

139244 to 139247. PORTULACA spp. Portulacaceae.

139244. PORTULAÇA SP.

1940.

No. 5418. From Flat Rock, Henderson County, North Carolina, August 29. 1940.

139245. PORTULACA SMALLII P. Wilson.

From Greensboro, Greene County, August 26, 1940.

139246 and 139247. PORTULACA CORONATA Small.

139246. From Eatonton, Putnam County, August 19, 1940.

139247. From Appling, Columbia County, August 19, 1940.

139248. PRUNUS sp. Amygdalaceae.

No. 5228. From Junction City, Talbot County, August 22, 1940. A red-fruited plum.

139249. PRUNUS sp.

No. 5273. From near Wakulla Spring, Wakulla County, Florida. August 23, 1940. Fruits black.

139250. TALINUM MENGESII W. Wolf. Portulacaceae.

From Alabama. From 5 miles west of Wedomee, Randolph County, Alabama. August 20, 1940.

139251. Torreya taxifolia Arn. Taxaceae.

No. 5258. From Chattahoochee, Gadsden County, Florida. August 24, 1940.

139252. COELOCOCCUS AMICARUM (Wendl.) W. F. Wight (C. carolinensis Dingl.). Phoenicaceae. Ivory-nut palm.

From Florida. Plants growing at the Plant Introduction Garden, Coconut Grove. Numbered October 15, 1940.

The ivory-nut palm, 30 to 50 feet high, is native to the Pacific Islands. The beautiful, brownish, scaly fruits, 3 inches in diameter, are used in the manufacture of the very large buttons used on ladies' coats.

For previous introduction see 54515.

#### 139253 to 139255.

From Turkey. Bulbs presented by Hanna Boutros, Mersine. Received September 30, 1940.

139253. ALLIUM CILICIUM Boiss. Liliaceae.

139254. HYACINTHUS ORIENTALIS L. Amaryllidaceae.

For previous introduction see 124975.

139255. COLCHICUM AUTUMNALE L. Melanthiaceae.

For previous introduction see 90951.

#### 139256 to 139267.

From Australia. Seeds presented by the Waite Agricultural Research Institute, Glen Osmond, South Australia. Received September 21, 1940.

139256. MEDICAGO HISPIDA var. CONFINIS (Koch) Burnat. Fabaceae.

Medic

For previous introduction see 31022.

139257. MEDICAGO OBSCURA Retz. Fabaceae.

Medic.

139258. MEDICAGO TRUNCATULA var. TRIBULOIDES (Desr.) Burnat.

For previous introduction see 135858.

Clover.

139259. TRIFOLIUM CERNUUM Brot. Fabaceae. For previous introduction see 90727.

139260. TRIFOLIUM GLOMERATUM L.

Clover.

For previous introduction see 137703.

139261. TRIFOLIUM LAPPACEUM L.

Clover.

For previous introduction see 121233.

139262. Trifolium resupinatum L.

Strawberry clover.

For previous introduction see 121234.

139263 to 139266. Trifolium subterraneum L.

Subterranean clover.

139263. Bacchus Marsh.

139264. Mulwala.

139265, Seaton Park,

139266. A white-seeded form.

139267. TRIGONELLA SUAVISSIMA Lindl. Fabaceae.

For previous introduction see 135860.

139268. PINUS TROPICALIS Morelet. Pinaceae.

Pine.

From Cuba. Seed presented by Alberto Fors, Director of Forestry, Department of Agriculture, Havana. Received September 27, 1940.

#### 139269 to 139271.

From Surinam. Plants presented by the Department of Agriculture, Paramaribo. Received August 1, 1939.

139269. Undetermined bamboo.

139270 and 139271. DENEROCALAMUS ASPER (Schultes) Backer. Bamboo.

139272. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Yugoslavia. Scions presented by Ivo Volaric, Stenjevec, Croatia. Received December 30, 1938.

Numbered in September, 1940.

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# Plant Inventory No. 145

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C., October 1950



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, OCTOBER 1 TO DECEMBER 31, 1940 (Nos. 139273 to 139627)

CONTRACTOR OF THE STREET

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This inventory, No. 145, lists the plant material (Nos. 139273 to 139627) received by the Division of Plant Exploration and Introduction during the period from October 1 to December 31, 1940. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Rotanist.

Plant Industry Station, Beltsville, Md.

#### INVENTORY

139273 to 139275.

From Turkey. Bulbs presented by Hanna Boutros, Mersine. Received October 16, 1940.

139273. GLADIOLUS ATROVIOLACEUS Boiss. Amaryllidaceae.

139274. IRIS PERSICA L. Iridaceae.

For previous introduction see 106023.

139275. (Undetermined.)

139276. Chorisia speciosa St. Hil. Bombacaceae.

Floss-silk-tree.

From Brazil. Seeds presented by J. Borges, São Paulo. Received October 5, 1940.

<sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### 139276—Continued

Paina. A timber tree; the floss from the seed pods is used locally like kapok.

For previous introduction see 118374.

139277. Solanum sp. Solanaceae.

From Honduras. Seed collected by Raymond Stadelman, Montana Farm, east of Tela. Received October 9, 1940.

Tomatillo. Plant covered with sharp spines; resembles wild tomato.

139278. EUGENIA AUSTRALIS Wendl. Myrtaceae.

Australian brush-cherry.

From California. Seeds presented by Wm. Hertrich, Huntington Botanic Garden, San Marino. Received October 12, 1940.

For previous introduction see 98848.

139279. GARCINIA CAMBOGIA (Gaertn.) Desr. Clusiaceae.

From Guatemala. Seeds presented by Wilson Popenoe. Received October 16, 1940.

For previous introduction see 70759.

139280 and 139281. PANICUM MILIACEUM L. Poaceae. Proso.

From Canada. Seeds presented by T. M. Stevenson, Dominion Agrostologist, Central Experimental Farm, Ottawa. Received October 15, 1940.

139280. Crown millet.

139281. Empire millet.

For previous introduction see 138747.

139282. POA FLABELLATA (Lam.) Raspail. Poaceae.

Tussock grass.

From the Falkland Islands. Seeds presented by R. C. Pole Evans, Agricultural Department, Stanley. Received October 2, 1940.

For previous introduction see 67134.

139283. SACCHARUM. Poaceae.

Sugarcane.

From Barbados. Cuttings presented by the Department of Science and Agriculture. Received October 5, 1940.

139284. Annona diversifolia Safford. Annonaceae. Ilama.

From Guatemala. Seeds presented by Wilson Popenoe, Antigua. Received October 5, 1940.

For previous introduction see 105716.

139285 to 139335. Solanum Tuberosum L. Solanaceae. Potato.

From California. Seeds presented by C. Vargas, Peru, through Dr. T. H. Goodspeed, University of California, Berkeley. Received October 17, 1940.

139285. No. 384. Alcca chillea.

139290. No. 361. Ccoscco mactillo.

139286. No. 415. Alcca misquila.

139291. No. 140. Cchuaillos.

139287. No. 343. Alcca-palta.

139292. No. 1. Choaviscca.

139288. No. 388. Alccaihuarmi.

139293. No. 13. Choachineca.

139289. No. 161. Ccolosti.

139294. No. 199. Ckamarancho.

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139300.	No.	410.	Huaca ccallo.	139322.	No.	392.	Tana cusi.
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139308.			Puca lumucha.	139328.	No.	89.	Toccoro.
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139316.	No.	409.	Sahuasirai.	macc		0211	C . pv 0.300pw

#### 139336 to 139422.

From the Dutch East Indies and the Philippine Islands. Material collected by the Fairchild-Archbold Expedition. Numbered in November 1940.

Unless otherwise stated, material was received as seeds and was collected in the Dutch East Indies.

#### 139336. ACANTHUS sp. Acanthaceae.

No. 303. From low, sandy places on the island of Boeroe, Moluccas, May 2, 1940. A plant 2 to 3 feet high, with dark-green, almost spineless leaves, spikes of white flowers, and brownish-orange fruits.

139337. AEGICERAS CORNICULATUM (L.) Blanco. Myrsinaceae.

No. 310. From the island of Boeroe, May 3, 1940. A swamp shrub, with fragrant white flowers borne in clusters.

## 139338. ALBIZZIA sp. Mimosaceae.

No. 299. From Tomahoe Island, Moluccas, May 1, 1940.

139339 to 139341. ALPINIA spp. Zingiberaceae.

#### 139339. ALPINIA sp.

No. 306. From Mount Tomahoe, island of Boeroe, May 2, 1940. A species with lanceolate, dark-green leaves more than 1 foot long and scarlet fruits in bunches 1 foot long.

139340. ALPINIA sp.

No. 355. From Kasiroeta Island, Moluccas, May 20, 1940. A tall, leafy, grasslike plant, with red fruits nearly 1 inch long, in long pendent clusters.

139341. ALPINIA sp.

No. 373. From Halmahera, near Pajahi Bay, Moluccas, May 27, 1940.

139342 to 139344. Areca spp. Phoenicaceae. Palm.

139342. Areca sp..

No. 324. From Manipa Island, May 5, 1940. A pinnate-leaved stilt palm about 20 feet high, with very dark-green leaves 6 to 8 feet long. The leaflets are up to 1 foot wide. The ovoid fruits, 1¼ inches long, are lacquer red and are borne in branched clusters.

139343. ARECA sp.

No. 374. From Halmahera near Pajahi Bay, Moluccas, May 29, 1940. A stilt palm 20 feet high, with dark-green leaves 3 to 5 feet long. The long-pointed leaflets are 2 to 3 feet in length, and the obovoid yellow fruits, about 2 inches long, are crowded into a solid mass of about 200 fruits.

139344. ARECA sp.

No. 411. From Karekelang Island, Talaud Group, June 12, 1940. A stilt palm 25 feet tall, with stilt roots 4 to 12 feet long. The fruits are a brilliant lacquer red.

139345. BAUHINIA sp. Caesalpiniaceae.

No. 325. From Manipa Island, Moluccas, May, 1940. A vigorous shrub or small tree, with gray-green leaves 1 inch long.

139346. BIKKIA GAUDICHAUDIANA Brongn. Rubiaceae.

No. 404. From Dagasoeli Island, June 7, 1940. A showy shrub, with dark-green obovate leathery leaves and long, fragrant, trumpetlike flowers, white striped with purple, 4 inches long and 2 inches across.

139347. BOERLAGIODENDRON sp. Araliaceae.

No. 422. From Karekelang Island, Talaud Group, June 13, 1940.

139348. CALAMUS sp. Phoenicaceae.

Palm.

No. 31. Biri. Seeds collected in Mount Makiling National Park, Luzon, Philippine Islands, October 29, 1939.

139349. CALOPHYLLUM sp. Clusiaceae.

No. 313. From the island of Boeroe, Moluccas, May 3, 1940. A tree, with glossy green leaves 6 inches long and 4 inches wide and globose green fruits about 1 inch in diameter.

139350 and 139351. CALYPTROCALYX SPICATUS (Lam.) Blume. Phoenicaceae. Palm.

139350. No. 301. From the island of Boeroe, Moluccas, May 2, 1940. A pinnate-leaved palm about 30 feet tall, with bright-red fruits borne on a single stem 8 to 10 feet long.

139351. No. 407. (No data received.)

139352. CELTIS PHILIPPENSIS Blanco. Ulmaceae.

No. 439. From Mount Makiling National Park, Luzon, Philippine Islands, July 12, 1940. A handsome shade tree, with large leathery leaves; much more attractive than *Celtis australis*.

139353. Clerodendrum sp. Verbenaceae.

No. 317. From Manipa Island, May 6, 1940. A species, with gorgeous red flowers in spikes 15 inches long. The dark-green palmate-cordate leaves are about 15 inches long and wide.

139354. (Undetermined.)

No. 375. From the Bai River, Pajahi Bay, Halmahera Island, May 29, 1940. A large forest tree 50 feet high, with large, leathery, ovate leaves 6 inches long and large tangerine-red fruits that resemble those of *Terminalia catappa*.

139355. CORDIA sp. Boraginaceae.

No. 357. From Batjan Island, Moluccas, May 19, 1940. A strand tree, with broadly ovate, papery leaves up to 6 inches long, and tubular, salmon-colored flowers  $1\frac{1}{2}$  inches long and  $1\frac{1}{2}$  inches across the corolla.

139356. CORDIA sp.

No. 405. From the Loloda Islands, Halmahera, Moluccas, June 7, 1940.

139357. CYCAS sp. Cycadaceae.

No. 360. From Mandioli Island, Batjan, Moluccas, May 18, 1940. A cycad about 10 feet high, with a crown of glossy green leaves up to 9 feet long, the leaflets up to 1 foot long and ¾ inch wide. The fruits, ¼ inch in diameter, were distinctly flattened.

139358. DAEMONOROPS sp. Phoenicaceae.

Palm.

No. 436. Yas-yas. From Barrio Cabigaan, Aborlan, Palawan Island, Philippine Islands, May, 1940.

139359. DODONAEA sp. Sapindaceae.

No. 327. From Manipa Island, Moluccas, May 6, 1940. A strand tree common on the beach.

139360. DOLICHANDRONE SPATHACEA (L. f.) K. Schum. Bignoniaceae.

No. 368. From Mandioli Island, Moluccas, May 20, 1940. A mediumsized tree, with pale-green leaves and large yellow flowers.

139361. ERYTHRINA sp. Fabaceae.

No. 329. From Manipa Island, Moluccas, May 6, 1940. A large tree with dark-red flowers.

139362 to 139365. Ficus spp. Moraceae.

139362. FICUS sp.

No. 371. From Pajahi Bay, Halmahera, Moluccas, May 26, 1940. A tall, buttressed tree, 60 feet high, with large thin leaves, and round, pinkand-green fruits,  $1\frac{1}{2}$  inches in diameter, which apparently are not used by the natives.

139363. Ficus sp.

No. 384. From Kahatola Island, Loloda Group, Moluccas, June 1, 1940. A small, attractive tree, with numerous fruits, yellow becoming red, and about ½ inch in diameter. The oval acute leaves are about 6 inches long.

139364. FICUS sp.

No. 389. From Kahatola Island, Moluccas, June 3, 1940. A small tree, with oblong, acute pale-green leaves 5 inches long, and abundant small fruits, yellow becoming deep crimson.

139365. Ficus sp.

No. 418. From Karakelang Island, Talaud Group, Moluccas, June 13, 1940. A small tree, with rough, dark-green, ovate leaves 7 inches long, and orange-yellow fruits 1 inch long, turning red as they ripen; the edible fruits have a good flavor and texture.

139366. GARCINIA sp. Clusiaceae.

No. 339. From Mandioli Island, Moluccas, May 19, 1940. A small tree about 10 feet high, with brilliant orange-red fruits the size of plums. The fruit has a thin shell, with pulp of indifferent or even unpleasant flavor.

139367. HELICONIA sp. Musaceae.

No. 392. From Halmahera Island, Moluccas, June 2, 1940. Apparently a wild species.

139368. HERNANDIA PELTATA Meissn. (H. ovigera L.) Hernandiaceae.

No. 311. From the beach, Tengali Island, Moluccas, May 1, 1940. A large tree, with fragrant flowers and barrel-shaped fruits.

For previous introduction see 67185.

139369. HIBISCUS sp. Malvaceae.

No. 338. From Mandioli Island, Moluccas, May 19, 1940. A striking species, with pendent flowers in panicles 4 inches long. The petals, red with white bases, are entire and twisted.

139370. Hoya sp. Asclepiadaceae.

No. 296. From Tamahoe Island, Moluccas, May 1, 1940. A tall climbing plant, with handsome dark-green broadly ovate, pointed leaves with prominent midrib, up to 4 by  $2\frac{1}{2}$  inches, the upper surface with scattered hairs easily rubbed off. The dull, light-yellow flowers,  $1\frac{1}{2}$  inches across and on stems 1 inch long, are in clusters of three to five and are followed by three-sided grooved pods about  $5\frac{1}{2}$  by  $1\frac{3}{4}$  inches.

139371. HOYA sp.

No. 300. From Tamahoe Island, Moluccas, May 2, 1940. Similar to No. 296 (P. I. 139370), but with leaves more inclined to be bullate and with larger pods.

139372. Intsia bijuga (Colebr.) O. Kuntze. (Afzelia bijuga A. Gray) Caesalpiniaceae. Ipil.

No. 401. From Dagasoeli Island, Moluccas, September 1940. A tall handsome shade tree, with light-green compound leaves and with fragrant white and reddish flowers in large conspicuous clusters.

139373. Ixora sp. Rubiaceae.

For previous introduction see 106607.

No. 332. From Ambon, Amboina Island, May 9, 1940. A large, hand-some shrub, with light-red flowers nearly 2 inches long, in dense clusters, followed by small kidney-shaped fruits, brilliant red turning to black.

139374. LEEA sp. Vitaceae.

No. 403. From Toeakara Island, Loloda Group, June 7, 1940. A rapid-growing shrub that bears juicy black fruits, about ½ inch in diameter, in large corymbose clusters 8 inches across. The fruits are not eaten, but are used for medicinal purposes.

139375. LICUALA sp. Phoenicaceae.

Palm.

No. 351. From Mandiola Island, Batjan Group, Moluccas, May 19, 1940. A solitary fan palm, up to 10 feet high, with dark-green palmate leaves 2½ feet across, divided into about 20 narrow leaflets. The orange-red fruits, ½ inch in diameter, are borne on a branched stem about 3 feet long.

139376. ANTIDESMA sp. Euphorbiaceae.

No. 259. From the market at Bang Kalang, Madoera, March 16, 1940. A tropical evergreen tree, similar to *Antidesma bunius*, but with smaller berries in more compact clusters. The leaves are mixed with fcod to give it a sour taste.

139377. MUCUNA sp. Fabaceae.

No. 326. From Manipa Island, Moluccas, May 6, 1940.

139378. Musa sp. Musaceae.

No. 388. From Halmahera Island, South Loloda Group, Moluccas, June 2, 1940. A stoloniferous species 20 feet high, with leaves 12 feet long. The bronze-orange fruit, about 4 inches long, has a tough waxy skin and black seeds in creamy but scanty flesh.

139379. ONCOSPERMA HORRIDUM (Griff.) Scheff. Phoenicaceae. Palm.

No. 428. From the Mount Makiling National Park, Luzon, Philippine Islands, July 12, 1940. A handsome spiny pinnate-leaved palm, with salmon-red leaf sheaths. The large purple fruits, the size of Black Hamburg grapes, are in large compact clusters on lacquer-red stems.

For previous introduction see 136636.

139380. ORANIA PALINDAN (Blanco) Merr. Phoenicaceae. Palm.

No. 365. From swampy places near Sambaki, Batjan Island, Moluccas, May 23, 1940.

For previous introduction see 135444.

139381. PANDANUS sp. Pandanaceae.

No. 292. (No data received.)

139382. PANDANUS DUBIUS Spreng.

No. 363. From Noessa Raloid Island, Batjan Group, Moluccas, May 25, 1940. A large tree 60 feet high, with spiny, gray-green leaves 10 to 20 feet. The 10 to 20 large stilt roots are up to 20 feet long and 6 inches in diameter.

139383. PANDANUS POLYCEPHALUS Lam.

No. 307. From Tomahoe Island, Moluccas, May, 1940. A narrowleaved species, with glossy scarlet ellipsoid fruits 2 inches long, in large clusters 8 inches long.

139384. PIGAFETTIA ELATA (Mart.) Wendl. Phoenicaceae.

Paln

No. 369. From Pajahi Bay, Halmahera Island, Moluccas, May 27, 1940. For previous introduction see 138407.

139385 to 139388. PINANGA spp. Phoenicaceae.

Palm.

139385. PINANGA Sp.

No. 290. From Wowoni Island, southeast of Celebes, April 29, 1940. A slender-stemmed cluster paim 25 feet high, with irregularly spaced leaflets. The spineless leaf sheaths, 2 feet long, are covered with a white "bloom," and the ivory-white flowers in clusters 1 foot long are succeeded by purple-black fruits.

139386. PINANGA sp.

No. 323. From Manipa Island, Moluccas, May 6, 1940. A very slender feather palm up to 50 feet tall, with a trunk only 2 to 3 inches in diameter. The leaves are 6 feet long with slender irregularly placed pinnae. The small red fruits are ¼ inch in diameter.

139387. PINANGA sp.

No. 377. From South Loloda Bay, Halmahera Island, Moluccas, June 4, 1940. A tall cluster palm 30 feet high, with a trunk 3 inches in diameter. The dull magenta-red oblong fruits, ¾ inch long, are borne in a large branched cluster 2 feet across.

139388. PINANGA sp.

No. 386. From Kahatola Island, South Loloda Group, Moluccas, June 2, 1940. A palm, with light-red pointed fruits  $\frac{1}{2}$  inch in diameter.

139389. PREMNA sp. Verbenaceae.

No. 421. From Karakelang Island, Talaud Group, Moluccas, June 12, 1940. A bushy tree, with black fruit, related to *P. odorata*. The tree from which the seeds were collected was so heavily loaded with fruit that it may be a distinct strain or variety.

139390. PREMNA ODORATA Blanco. (P. pubescens Blume.)

No. 395. From Laba River, Halmahera Island, Moluccas, June 4, 1940. Possibly a more vigorous strain than usual, with larger clusters of black berries.

For previous introduction see 35453.

139391. RHOPALOBLASTE sp. Phoenicaceae.

Palm

No. 385. Goeroebe. From Kahatola Island, South Loloda Group, Moluccas, June 2, 1940. A tall solitary feather palm, up to 100 feet high, with leaves up to 15 feet long and leaflets up to 3 feet long. The oval red fruits, 7 inches long, are in a huge branched cluster 4 feet across.

139392. SANDORICUM KOETJAPE (Burm. f.) Merr. (S. indicum Cav.) Meliaceae. Santol.

No. 440. From Pasay Rizal, Manila, Philippine Islands, July 1940. The dull greenish-yellow fruits, at a distance resembling small oranges, contain a rather scanty white pulp of a pleasantly acid flavor, used in beverages and for preserves.

For previous introduction see 89418.

139393. Schefflera sp. Araliaceae.

No. 340. From Mandioli Island, Moluccas, May 19, 1940. A shrub, with large attractive palmately divided leaves and clusters of orange berries that turn claret red upon ripening. It grows on the calcareous strand a few feet from salt water.

139394. SOPHORA TOMENTOSA L. Fabaceae.

No. 337. From Mandioli Island, Moluccas, May 19, 1940. An excellent strand tree, growing down to the very edge of the water.

For previous introduction see 107002.

139395. STERCULIA sp. Sterculiaceae.

No. 382. From Kahatola Island, South Loloda Group, Moluccas, June 1, 1940. A medium-sized strand tree, with entire, thin, ovate leaves 5 inches long, showy red pods 2 inches long, and polished brown seeds.

139396. STERCULIA sp.

No. 410. From Karakelang Island, Talaud Group, Moluccas, June 12, 1940. The showy red pods of this species are narrower and more sharp-pointed than others collected in this region.

139397. TACCA sp. Taccaceae.

No. 399. From trail to Mount Loloda, Halmahera Island, Moluccas, June 3, 1940. A perennial, 2 to 3 feet high, with rhizomes and palmate leaves. The fleshy red six-lobed berries are ¾ inch across.

139398 to 139400. UVARIA spp. Annonaceae.

139398. UVARIA sp.

No. 322. From Manipa Island, Moluccas, May 6, 1940. A tall-growing woody climber, with oblong, glossy-black fruits 5 inches in diameter. The juicy red flesh is acid and of good flavor.

139399. UVARIA sp.

No. 342. From Kasiroeta Island, Moluccas, May 20, 1940. A small tree 8 feet high, with clusters of oval yellow fruits ½ inch by % inch; the scanty pulp is very bitter.

139400. UVARIA sp.

No. 396. From Gedi, Halmahera Island, Moluccas, June 4, 1940. A rank-growing vine, with large coarse glossy green leaves and rough, dull brownish-yellow fruits 11/4 inches long, of woody texture.

139401. VITEX sp. Verbenaceae.

No. 319. From Maripa Island, Moluccas, May 6, 1940. A tree about 30 feet high, with large spikes of lilac, nonfragrant flowers.

139402. XYLOCARPUS GRANATUM Koen. Meliaceae.

No. 372. From near Pajahi Bay, Halmahera Island, Moluccas, May 27, 1940.

For previous introduction see 67424.

139403. CALLICARPA PENTANDRA Roxb. Verbenaceae.

No. 414. From Karakalang Island, Talaud Group, Moluccas, June 12, 1940. A large tree, with ovate leaves 8 inches long, covered with stellate brown pubescence. The very small purplish flowers are in flat-topped cymes 4 to 6 inches across.

139404. (Undetermined.)

No. 354. From Kasiroeta Island, Batjan Group, Moluccas, May 21, 1940. A gingerlike plant, with immense broad leaves on leafy stems 10 feet long, giving the appearance of a giant reed. The globular fruits, 1 inch in diameter, are in large pendent clusters 20 inches long and 4 inches across.

139405. (Undetermined.)

No. 413. From Karakelang Island, Talaud Group, Moluccas, June 12, 1940. An attractive shrub.

139406. (Undetermined.)

No. 344. From Mandioli Island, Moluccas, May 18, 1940. A small tree, with compound leaves and small pendent clusters of yellow pods. The pods, ½ inch long and ¾ inch across, are open to expose two brown seeds covered with shiny red arils.

139407. (Undetermined.)

No. 350. From Kasiroeta Island, Batjan Group, Moluccas, May 1940. A medium-sized tree, with thin, opposite leaves 5 inches long, containing sweetish pulp and one or two brown seeds.

139408. (Undetermined.)

No. 398. From Halmahera Island, Moluccas, June 3, 1940. A slender-branched shrub 10 feet high, sparsely leaved, and covered with clusters of small red berries.

139409. (Undetermined.)

No. 346. From shady places on Kasiroeta Island, Batjan Group, Moluccas, May 20, 1940. A small tree, with whorls of glossy-green leaves. The small, brilliant-red fruits, ¾ inch in diameter, are borne in clusters on the trunk, on peduncles about 6 inches long.

139410. (Undetermined.)

No. 353. From Mandioli Island, Batjan Group, Moluccas, May 18, 1940. 139411. (Undetermined.)

No. 415. From Karakelang Island, Talaud Group, Moluccas, June 12, 1940. A climbing plant, with large, dark-green leaves 8 inches long and oval, blue-black fruits 1 inch long, in roundish clusters.

139412. PINANGA sp. Phoenicaceae.

Palm.

No. 402. From Halmahera Island, Moluccas, June 7, 1940. A solitary feather palm 30 feet high, with a very slender trunk and stilt roots 1 to 4 feet long. The leaves, 4 to 6 feet long, have very broad pinnae like those of *Caryota*. The small flowers are dark red, spirally arranged on the stem, and the coral-red fruits are ¾ inch long.

139413. (Undetermined.)

No. 408. From Morotai Island, Moluccas, June 8, 1940. A tall straight tree, up to 100 feet high, with the trunk unbranched 50 feet from the base. The oval, rough, gray-brown seeds are about 2 inches long.

139414. EUONYMUS sp. Celastraceae.

No. 416. From Morotai Island, Moluccas, June 10, 1940. A shrub, with delicate pinnately divided leaves about 1 foot long and white globular berries, ¼ inch in diameter, in clusters.

139415. (Undetermined.)

No. 348. From Kasiroeta Island, Moluccas, May 20, 1940. A tree 40 feet tall, with large opposite glossy-green leaves 10 inches long and deep-scarlet ovoid fruits, 1 inch long, in axillary clusters.

139416. (Undetermined.)

No. 291. From Wowoni Island, east of Celebes, April 29, 1940. A strand shrub, with obovate fleshy leaves 6 inches long, forming clumps 15 feet across. The irregular flowers, with hairy petals and brushlike stigmas, are freely visited by bees.

139417. (Undetermined.)

No. 321. From Maripa Island, Moluccas, May 6, 1940. A small gnarled tree, with narrow, obovate-lanceolate obtuse leaves about 1 inch long and small fragrant white flowers.

139418. (Undetermined.)

An undetermined palm collected in the Dutch East Indies by David Fairchild in 1940.

139419. (Undetermined.)

No. 294. From Wowoni Island, east of Celebes, April 29, 1940. A vigorous vine, with light-green leaves 4 inches long and 2 inches wide and clusters of orange-yellow fruits.

139420. (Undetermined.)

No. 328. From Manipa Island, Moluccas, May 6, 1940. A strand tree, with large, dark-green leaves and fruits of a peculiar shape.

139421. (Undetermined.)

No. 295. From Wowoni Island, east of Celebes, April 29, 1940. A tree 40 feet high, with long-stemmed, spirally arranged, light-green, acute leaves 3 inches across and fragrant, white, tubular flowers 2 inches long. The large, plum-colored, oval inedible fruits, in pairs, are 3½ inches long.

139422. (Undetermined.)

No. 312. From Tomahoe Island, Moluccas, May 2, 1940. An attractive strand tree, with trifoliolate, light-green leaves 6 inches long, that bears small, edible, ovoid berries ½ inch long, in clusters.

# 139423 to 139425. AMELANCHIER spp. Malaceae.

From Nevada. Seeds presented by Percy Train, Bureau of Plant Industry, United States Department of Agriculture. Received October 18, 1940.

139423. AMELANCHIER sp.

No. 4346. From Aurora.

139424. AMELANCHIER Sp.

No. 4600. From Ruby Mountains, Elko County, August 22, 1940.

139425. AMELANCHIER Sp.

No. 4644. From Soldier Creek, Elko County, August 29, 1940.

# 139426 to 139436. MALUS spp. Malaceae.

From the United States. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received October 18, 1940.

139426. MALUS sp.

No. 5457. From Virginia Beach, Virginia, September 27, 1940.

139427. MALUS Sp.

No. 5462. From Rosedale, Baltimore County, Maryland, September 29, 1940.

139428. MALUS sp.

No. 5473. From north of the Pennsylvania Turnpike at intersection of Somerset, Pennsylvania.

139429. MALUS sp.

No. 5481. From south of Ridgway, Elk County, Pennsylvania, October 2, 1940.

139430. MALUS sp.

No. 5482. From east of Smethport, McKean County, Pennsylvania, October 3, 1940.

139431. MALUS sp.

No. 5484. From east of Port Allegany, in Potter County, Pennsylvania, October 3, 1940.

139432. MALUS sp.

No. 5485. From east of Port Allegany, in Potter County, Pennsylvania, October 3, 1940.

139433. MALUS sp.

No. 5488. From southwest of Newfield, in Schuyler County, New York, October 3, 1940.

#### 139426 to 139436—Continued

139434. MALUS sp.

No. 5492. From Lick Brook, southwest of Ithaca, New York, October 4, 1940.

139435. MALUS sp.

No. 5494. From Lick Brook, southwest of Ithaca, New York, October 4, 1940.

139436. MALUS sp.

No. 5495. From near Bailey Hall, Cornell University, Ithaca, New York, October 4, 1940.

139437 to 139439. Hevea Brasiliensis (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Haiti. Cuttings presented by Service National de Produits Agricole, Port-au-Prince. Received October 21, 1940.

139437. No. 20.

139438. No. 76.

139439, No. 80.

139440. HEVEA BRASILIENSIS (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Costa Rica. Seeds collected in Guapiles by Robert D. Rands, Bureau of Plant Industry, United States Department of Agriculture. Received October 21, 1940.

139441. NEPHELIUM LAPPACEUM L. Sapindaceae. Rambutan.

From Guatemala. Seeds presented by Wilson Popenoe, Antigua. Received October 16, 1940.

An erect tropical tree up to 40 feet high, with compound leaves composed of 5 to 7 pairs of elliptic, obovate, or oblong leaflets about 4 inches long. The crimson or yellowish fruits, in clusters of 10 to 12, are oval, about 2 inches long, and covered with soft fleshy spines less than 1 inch long.

For previous introduction see 112396.

#### 139442 to 139447.

From New Zealand. Trees and plants puchased from Rasmussen, Ltd., Constantia Nursery, Wanganui. Received October 22, 1940.

139442 and 139443. Amygdalus persica L. Amygdalaceae.

Peach.

139442. Orange.

139443. Wiggins.

139444. Amygdalus persica var. nectarina Ait. Zealandia.

Nectarine.

139445. AMYGDALUS PERSICA L.

Peach.

Rubra.

139446 and 139447. RHEUM RHAPONTICUM L. Polygonaceae.

Common rhubarb.

139446. Giant Seedless.

139447. Topp's Winter.

139448. AGASTACHE BREVIFLORA (A. Gray) Epling. Menthaceae.

From New Mexico. Seeds collected by L. N. Gooding, Soil Conservation Service, United States Department of Agriculture, in the Animos Mountains. Numbered October 25, 1940.

A herbaceous perennial about 2½ feet high, with ovate, gray-green leaves of pleasant mintlike fragrance. The light purple-magenta flowers are in a dense compound terminal raceme. Native to New Mexico.

139449. AEGLE MARMELOS (L.) Correa (Belou marmelos (L.) Lyons). Rutaceae. Bel.

From India. Seeds collected by Miss Gertrude R. Anderson, American Baptist Mission, Bhamo, Burma. Received October 19, 1940.

For previous introduction see 114421.

139450. SACCHARUM. Poaceae.

Sugarcane.

From Argentina. Cuttings presented by Dr. W. E. Cross, Estación Experimental Agricola, Tucuman. Received October 29, 1940.

139451. HEVEA BRASILIENSIS (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Peru. Seeds collected by Dr. E. C. Stakman, Bureau of Plant Industry, United States Department of Agriculture. Received October 30, 1940. From a tree at the northern end of Requina, October 15, 1940.

139452 and 139453.

From Canada. Plants presented by F. L. Skinner, Dropmore, Manitoba. Received October 31, 1940.

139452. ROSA PERSICA Michx. (R. berberifolia Pallas.) Rosaceae.

Persian rose.

For previous introduction see 129580.

139453. POPULUS ANGUSTIFOLIA James. Salicaceae. Weeping Poplar.

139454. FICUS GNAPHALOCARPA (Mig.) A. Rich. Moraceae.

From Africa. Seeds presented by the Department of Agriculture, Luanda, Angola, Portuguese West Africa. Received November 4, 1940.

139455. PENSTEMON DISSECTUS Ell. Scrophulariaceae.

From Georgia. Seeds collected by D. Eyles, United States Public Health Service, Savannah. Received October 28, 1940.

139456 to 139475. SORGHUM VULGARE Pers. Poaceae. Sorghum.

From Africa. Seeds presented by J. B. H. Lejeune, Director, Experimental Station, Rubona, Territories of Ruanda-Urundi. Received October 30, 1940.

139456. Amamba.

139457. Amayenzi.

139458. Gihove.

139459. Kanyamungo.

139460. Karuguma Rouge.

139461. Karuauma.

139462. Kebo.

139463. Mugabo.

139464. Muhutuo.

139465. Nyagashara.

139466. Nyagiteye.

139467. Nyarwera.

139468. Nyiragikori.

139469. Nyirakayanze.

# 139456 to 139475—Continued

139470. Nyiramugufi.

139473. Ruyongo.

139471. Rugori.

139474. Urukamba.

139472, Rutare.

139475. Urukina.

139476. CHAENOMELES JAPONICA (Thunb.) Lindl. Malaceae.

From Ireland. Plants purchased from the Donard Nursery Co., Newcastle, County Down. Received November 7, 1940.

Rowallans Seedling.

For previous introduction see 137550.

139477. AMELANCHIER sp. Malaceae.

From Nevada. Seeds presented by Percy Train, Bureau of Plant Industry, United States Department of Agriculture. Received October 26, 1940.

No. 4377. From 1 mile northwest of Verdi, Washoe County, July 24, 1940. A tree 6 to 8 feet high, with ashen-gray bark. The fruit is unusually large, sweet, very palatable, and better than the average in Nevada.

139478. MALUS sp. Malaceae.

From Virginia. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received October 26, 1940.

No. 5497. From Ballston, Arlington County.

139479 and 139480.

From Nevada. Plants growing at the United States Plant Introduction Garden, Glenn Dale, Maryland. Numbered November 7, 1940.

139479. LYCIUM PALLIDUM Miers. Solanaceae.

Plants grown from seeds collected by Percy Train (No. 1911) at Overton, Nevada. June 2, 1938.

139480. PENSTEMON RUBICUNDUS Keck. Scrophulariaceae.

Plants grown from seeds collected by W. A. Archer (No. 6857) in the Wassuk Mountains. September 1, 1938.

139481 and 139482. KALOPANAX PICTUM (Thunb.) Nakai. Araliaceae.

From Massachusetts. Collected at the Arnold Arboretum, Jamaica Plain, by Paul Russell, Bureau of Plant Industry, United States Department of Agriculture. Received November 8, 1940.

AA 12456. A tree with a spread of about 25 feet; trunk 2 feet in diameter.

139481. Plants.

139482. Seeds.

139483. LYCIUM HALIMIFOLIUM Mill. Solanaceae.

From Nevada. Seeds collected by Percy Train, Agent, Bureau of Plant Industry, United States Department of Agriculture. Numbered in November 1940.

No. 1912. From Overton. June 2, 1938.

139484. PHILADELPHUS PURPUREO-MACULATUS Lemoine. Hydrangeaceae.

From Pennsylvania. Plants purchased from B. H. Farr, Wyomissing Nursery Co., Weiser Park. Received November 9, 1940.

For previous introduction see 137556.

139485. PASPALUM URVILLEI Steud. Poaceae. Vasey grass.

From Portugal. Seed presented by H. Chambers, Vila de Barreiros, Maia. Received October 22, 1940.

A frost-resistant grass 5 or 6 feet in height, much relished by stock. A good grass for moist land; gives a heavy yield. Native to Brazil.

For previous introduction see 62048.

139486. Eragrostis sp. Poaceae.

Grass.

From the Union of South Africa. Seed presented by the University of the Witwatersrand, Johannesburg. Received November 4, 1940.

139487 to 139508.

From the Philippine Islands and the Dutch East Indies. Material collected by the Fairchild-Archbold Expedition. Received in December, 1940.

Unless otherwise stated, material was received as seeds and was collected in the Philippine Islands.

139487. Alangium longiflorum Merr. Cornaceae.

No. 453. From the Makiling Arboretum, Luzon, July 23, 1940. A hand-some tree about 45 feet high, with large, white tubular flowers  $2\frac{1}{2}$  inches long and red, edible fruits  $1\frac{1}{2}$  inches in diameter.

139488. Albizzia Lebbeck (L.) Benth. Mimosaceae.

No. 445. From the Makiling Arboretum, Luzon, July 21, 1940. A tree with drooping habit.

139489. Alocasia portei (Schott) Engl. and Becc. Araceae.

No. 443. From the Makiling Arboretum, Luzon, July 20, 1940. A giant aroid about 12 feet high, with immense leaves, 6 to 8 feet long, deeply incised with lobes having wavy margins. The brilliant-red fruits, resembling kernels of corn in shape, are borne on rather short spadices.

139490. Arenga ambong Beccari. Phoenicaceae.

Paln

No. 435. Ambung. From the Barrio Cabigaan Mpal, Aborlan District, Palawan, May, 1940. This palm, like Arenga tremula, has a very short stem and grows in large clumps, but it is much larger and is characterized by its very much broader leaflets, which are prominently lobed, about 2½ feet long, and about 3 inches wide. It is a very beautiful species, though it is never cultivated as an ornamental in the Philippines. The pith was formerly used in the making of blowgun darts. The buds are edible.

139491. ARTOCARPUS CUMMINGIANA Trécul. Moraceae.

No. 442. From the Makiling Arboretum, Luzon, July, 1940. A large shade tree 50 feet tall, with glossy dark-green ovate leaves 1 foot long and rough, irregular, greenish-yellow fruits about  $2\frac{1}{2}$  inches long.

139492. BOERLAGIODENDRON PALMATUM (Boerl.) Harms. Araliaceae.

No. 424. From moist sandy places, Zamboanga, Mindanao, June 27, 1940. A fast-growing tree.

139493. Ceiba Pentandra (L.) Gaertn. Bombacaceae.

No. 288. From near Govontalo, Celebes, Dutch East Indies. A variety said to be earlier maturing and more productive than other varieties.

For previous introduction see 114897.

139494. Coix lacryma-jobi var. Ma-yuen. (Romanet) Stapf. Poaceae. Adlay.

No. 462. From Long Berana, Borneo, Dutch East Indies, August 16, 1940. A small-seeded brown variety, known as *Karoekeb* by the Dyaks of Borneo.

#### 139487 to 139508—Continued

139495. CYRTOSPERMA MERKUSII Schott. Araceae.

No. 452. Plant collected west of Port Royal, Luzon, July 22, 1940. A giant aroid, with spineless, dark-green heart-shaped leaves that rise from the ground to a height of 18 feet, with petioles 4 inches in diameter. The leaf blade is 6 feet long and 4 feet wide.

For previous introduction see 138956.

139496. DILLENIA PHILIPPINENSIS Rolfe. Dilleniaceae.

No. 447. From the Makiling Arboretum, Luzon, July 21, 1940. A tree with broad leaves, large white flowers with papery petals, and green fruits about 2 inches across. The juicy, sour inner segments of the fruit are used for preserves.

For previous introduction see 135428.

139497. DILLENIA REIFFERSCHEIDIA Villar.

No. 448. From the Makiling Arboretum, Luzon, July 21, 1940. A species with fruits larger than those of *Dillenia philippinensis*. The tree has a different aspect, with very large leaves.

139498. EUGENIA sp. Myrtaceae.

No. 446. From the Makiling Arboretum, Luzon, July 21, 1940. A forest tree that bears clusters of white fruits on the main trunk. The fruit,  $1\frac{1}{2}$  inches in diameter, has scanty, watery, sour flesh, and might do for preserves. Introduced as  $Eugenia\ curranii$ , but the seeds are not of that species.

139499. GARDENIA PHILASTREI Pitard. Rubiaceae.

No. 441. From Manila, July 18, 1940. An Indo-Chinese tree 15 to 20 feet high, with large, light-yellow, very fragrant flowers,  $2\frac{1}{2}$  inches across and 3 inches long.

139500. GARDENIA PSEUDOPSIDIUM (Blanco) Vill.

No. 451. From the Makiling Arboretum, Luzon, July 21, 1940. A tree 20 feet high, with attractive dark-green leaves 6 inches long and pure white tubular flowers with a wheel-shaped corolla.

139501. MEDINILLA sp. Melastomaceae.

No. 457. From Zamboanga, July 1940.

139502. PANDANUS sp. Pandanaceae.

No. 449. From the Makiling Arboretum, Luzon, July 20, 1940.

139503. PHYLLANTHUS sp. Euphorbiaceae.

No. 425. From the Toledo Road, Cebu, July 3, 1940. A large open shrub, with branches that are thickly covered with snow-white berries, 1/8 to 1/4 inch across, in small compact clusters.

139504. Plumeria rubra × alba. Apocynaceae.

No. 459. From the garden of Montague Lord, Manila, July 30, 1940. A red-flowered tree, the result of a cross between these red- and white-flowered species.

139505. PLUMERIA RUBRA L.

Nosegay frangipani.

No. 458. From Mrs. George H. Fairchild, Pasay Rizal, Manila, July 20, 1940. A variety with handsome wine-red flowers.

139506. SANDORICUM KOETJAPE (Burm. f.) Merr. (S. indicum Cov.) Meliaceae.

No. 454. Santol. From Paeta Laguna, Luzon, July 23, 1940. A variety noted for its sweetness.

# 139487 to 139508—Continued

139507. (Undetermined.)

No. 239. (No collection data.) Plants said to belong to the Rhamnaceae.

139508. (Undetermined.)

No. 426. From Toledo Road, Cebu, July 3, 1940. A small tree bearing large pods that turn bright red and open, exposing large purplish-black seeds.

#### 139509 to 139526.

From California. Tubers and bulbs purchased from the University of California, Berkeley. Received November 14, 1940.

Originally collected in South America by T. H. Goodspeed.

139509 and 139510. ALSTROEMERIA PELEGRINA L. Amaryllidaceae.

139509. 40-1048.

139510, 39-2517,

For previous introduction see 92945.

139511. ALSTROEMERIA VIOLACEA Philippi.

39-1615. A Chilean species, with a stem 1 to 2 feet high, scattered, spreading, ovate-oblong leaves 1 inch long, and compound umbels of bright-lilac flowers 1 to 2 inches long, streaked with purple.

For previous introduction see 92947.

139512. BOMAREA sp. Amaryllidaceae. 39-1342.

139513. Bomarea Nematocaulon Killip.

39-1949.

139514. CONANTHERA BIFOLIA Ruiz and Pav. Amaryllidaceae.

37-1010.

139515. EUCHARIS GRANDIFLORA Planch, and Linden. Amaryllidaceae.

39-1432. Bulbs of a Colombian eucharis, with 2 to 4 ovate-acuminate leaves about 4 inches long and 3 to 5 white flowers on a scape more than a foot high. It resembles *Eucharis candida*, but the flowers are about twice as large.

For previous introduction see 107817.

139516. Eustephia sp. Amaryllidaceae.

39-1028.

139517. HIPPEASTRUM sp. Amaryllidaceae.

38-1080

139518. HYMENOCALLIS AMANCAES (Ruiz and Pav.) Nichols. Amaryllidaceae.

39-1027. Flowers large, canary yellow with green ribs.

For previous introduction see 117580.

139519. HYMENOCALLIS sp.

139520 to 139523. Stenomesson spp. Amaryllidaceae.

139520. STENOMESSON sp.

39-1778.

#### 139509 to 139526—Continued

139521. STENOMESSON sp.

39-1042.

139522. STENOMESSON sp.

39-2503.

139523. STENOMESSON sp.

39-2529.

139524 to 139526. URCEOLINA PERUVIANA (Presl) Macbr. Amaryllidaceae.

Bulbs of a tender plant, with wide oblong leaves 1 foot long and a solitary scape with an umbel of 4 to 6 nodding yellow to orange-red flowers. Native to the Andes of Peru.

139524, 39-1041,

139525, 36-2046,

139526. 39-1041.

For previous introduction see 111966.

#### 139527 to 139552.

From Brazil. Seed presented by Dr. A. C. Brade, Botanic Garden, Rio de Janeiro. Received October 31, 1940.

139527. BARBOSA PSEUDOCOCOS Beccari. Phoenicacae.

Palm.

139528. Cassia alata L. Caesalpiniaceae.

Ringworm cassia.

A shrub up to 10 feet high, sometimes cultivated as an ornamental, with pinnate leaves 2 feet long and showy yellow flowers. Native to tropical America.

For previous introduction see 136884.

139529. CASSIA FERRUGINEA DC.

139530. CASSIA LEPTOPHYLLA Vog.

A Brazilian tree, with pinnate leaves composed of 9 to 12 lanceolateoblong leaflets and many small yellow flowers in terminal racemes about 5 inches long.

For previous introduction see 123792.

139531. CAESALPINIA FERREA Mart. Caesalpiniaceae.

139532. Cereus sp. Cactaceae.

139533. CLITORIA RACEMOSA G. Don. Fabaceae.

139534. DIOCLEA MACRANTHA Huber. Fabaceae.

A somewhat woody tropical climber, with trifoliolate leaves, the leaflets broadly ovate and about 2 inches long. The small lavender flowers are in axillary racemes. Native to northern South America.

For previous introduction see 107452.

139535. ECHINOCACTUS HASELBERGII F. Haage. Cactaceae.

139536. EPIPHYLLUM GAERTNERI (Regel) K. Schum. Cactaceae.

Received as *Epiphyllopsis mackoyanum*, now referred to the above species.

139537. TRICHOCEREUS MACROGONUS (Salm-Dyck) Riccobono. Cactaceae.

139538. EUTERPE BADIOCARPA Barb.-Rodr. Phoenicaceae.

Palm.

## 139527 to 139552—Continued

139539. EUTERPE EDULIS Mart.

Palm.

A palm, native to Brazil, which becomes 40 feet high, with a slender inclined trunk, pinnate leaves, and fruits the size of marbles. A nutritious beverage is made by the natives from the fibrous flesh surrounding the seeds.

For previous introduction see 104215.

139540. Euterpe oleracea Mart.

Palm.

A tall graceful solitary palm, with a trunk seldom more than 4 inches in diameter. The pinnate leaves, 4 to 6 feet long, droop gracefully, and the small white flowers are followed by purple, pealike fruits. The fruits yield oils reported to be suitable for making soaps. Native to Brazil.

For previous introduction see 101082.

139541. HERNANDIA GUIANENSIS Aublet. Hernandiaceae.

139542. LONCHOCARPUS DISCOLOR Huber. Fabaceae.

139543. Melocactus sp. Cactaceae.

Introduced under the name "bahiensis," for which a place of publication has not been found.

139544. CACTUS MELOCACTOIDES Hoffmgg. (Melocactus depressus Hook.) Cactaceae.

139545. CACTUS OREAS (Miquel) Britt. and Rose.

139546. MELOCACTUS sp. Cactaceae.

139547. RHEEDIA LONGIFOLIA Planch. and Triana. Clusiaceae.

139548. SCHEELEA AMYLACEA Barb.-Rodr. Phoenicaceae. Palm.

139549. Scheelea leeandroana Barb.-Rodr. Palm.

139550. SOCRATEA EXORRHIZA (Mart.) Wendl. Phoenicaceae. Palm:

A tall handsome spineless palm, native to tropical South America, bearing small yellow flowers and olive-green fruits. It has a swollen cylindrical trunk elevated on a pyramid of exposed roots, giving it a remarkable appearance. The trunk, 35 feet or more high, bears at its summit a crown of large irregularly pinnate leaves.

For previous introduction see 99636.

139551. TILMIA CARYOTAEFOLIA (H.B.K.) Cook. (Martinezia caryotaefolia H.B.K.) Phoenicaceae. Palm.

A slender, spiny-trunked, pinnate-leaved palm, with bright orange-red fruits borne in drooping racemes. Native to Colombia.

For previous introduction see 113756.

139552. SWARTZIA LANGSDORFFII Raddi (Tounatea langsdorffii (Raddi) Kuntze). Caesalpiniaceae.

A tall tropical tree, native to Brazil, with pinnate leaves and small yellow flowers in axillary racemes.

## 139553 and 139554.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received November 8, 1940.

139553. MALUS sp. Malaceae.

No. 6651. Sebi murabba. From Meshed, Khirassan, July 13, 1940. Fruits 1 inch in diameter, yellow, washed red; flavor like crabapple, but more acid.

139554. Prunus sp. Amygdalaceae.

A small sour cherry.

139555 and 139556.

From Brazil. Bulbs presented by the Botanic Garden, Rio de Janeiro. Received October 31, 1940.

139555. SINNINGIA sp. Gesneriaceae.

Received as "Gloquicinia sp.," presumably a misspelling of Gloxinia; bulbs are apparently Sinningia.

139556. HIPPEASTRUM RUTILUM (Edwards) Herbert. Amaryllidaceae. For previous introduction see 132709.

- 139557. Annona diversifolia Safford. Annonaceae. Ilama.
- From Guatemala. Seed presented by Dr. Mariano Pacheco, Director of Agriculture, Guatemala City. Received November 14, 1940.

For previous introduction see 139284.

- 139558. HEVEA BRASILIENSIS (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.
- From Honduras. Seeds presented by the United Fruit Co., Tela. Received November 19, 1940.

For previous introduction see 139451.

- 139559. VITIS PENTAGONA Diels and Gilg. Vitaceae.
- From Japan. Seed collected by P. H. Dorsett, Agricultural Explorer, Bureau of Plant Industry, United States Department of Agriculture. Numbered November 20, 1940.

No. 3167. From near Lake Shunzenji, April 1925.

For previous introduction see 103357.

- 139560. Castanospermum australe Cunn. and Fraser. Fabaceae. Moreton-Bay-chestnut.
- From Florida. Seed presented by David K. Stabler, Lake Wales, through J. B. Berry, Waverly. Received February 13, 1940.

For previous introduction see 137694.

- 139561 to 139563. HEVEA BRASILIENSIS (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.
- From the Canal Zone. Cuttings presented by Michael H. Langford, Experimental Gardens, Summit. Received December 6, 1940.

139561. G. 1.

139562. G. 3.

139563. G. 5.

- 139564. CYNODON PLECTOSTACHYS (Schum.) Pilg. Poaceae.

  Grass.
- From the Union of South Africa. Seed presented by the McGregor Museum, Kimberley. Received December 4, 1940.

For previous introduction see 136474.

139565 to 139572.

From New Zealand. Seed presented by Duncan & Davies, Ltd., New Plymouth. Received December 4, 1940.

#### 139565 to 139572—Continued

139565. CELMISIA MAJOR Cheeseman. Asteraceae.

Mountain Daisy.

For previous introduction see 129777.

139566. CHORDOSPARTIUM STEVENSONI Cheeseman. Fabaceae.

For previous introduction see 134023.

139567. COROKIA COTONEASTER Raoul. Cornaceae.

For previous introduction see 77602.

139568. Dodonaea viscosa (L.) Jacq. Sapindaceae.

Hopbush.

Received under the varietal name "purpurea," for which a place of publication has not been found.

139569. Entelea arborescens R. Br. Tiliaceae.

Corkwood.

For previous introduction see 113764.

139570. Notospartium carmichaeliae Hook f. Fabaceae.

For previous introduction see 125147.

139571. Pomaderris elliptica Labill. Rhamnaceae.

For previous introduction see 77201.

139572. TELOPEA OREADES F. Muell. Proteaceae.

139573 to 139598. LILIUM spp. Liliaceae.

Lily.

From Japan. Seeds obtained from the Hakoneya Nurseries, Numazu-shi. Received December 12, 1940.

139573 and 139574. LILIUM AMABILE Palibin.

139573. Typical form.

139574. Var. Luteum.

139575. LILIUM AMABILE X ELEGANS.

Purple Splendor.

139576. LILIUM BROWNII var. COLCHESTERI Wilson.

A trumpet-flowered lily, native throughout China from sea level to 5,000 feet altitude, often cultivated for the bulbs that are considered a table delicacy. The stems are 4 to 6 inches long, and the fragrant flowers, 4 to 6 inches long, are rose purple outside, creamy white inside, with the reflexed ends of the segments pure white.

For previous introduction see 124709.

139577. LILIUM CERNUUM X ELEGANS.

Var. Early Dazzler.

139578. LILIUM CONCOLOR var. BUSCHIANUM X ELEGANS.

Var. Crimson King.

139579 to 139581. LILIUM DAURICUM Ker.

Candlestick lily.

139579. Var. Pardinum.

139580. Var. Wadai.

139581. Var. Wallacei.

139582. LILIUM PHILIPPINENSE Baker.

Earliest flowering form.

For previous introduction see 135546.

Benguet lily.

#### 139573 to 139598—Continued

139583. LILIUM PHILIPPINENSE var. FORMOSANUM (Baker) Wilson.

Tall, late-flowering form.

For previous introduction see 91300.

139584. LILIUM HENRYI X AURATUM Var. PLATYPHYLLUM.

139585. LILIUM HENRYI X SPECIOSUM var. MAGNIFICUM.

139586. LILIUM JAPONICUM Thunb.

Received as variety "platyfolium," a name for which a place of publication has not been found.

139587. LILIUM LEICHTLINII var. MAXIMOWICZII (Regel) Baker.

For previous introduction see 135547.

139588. LILIUM REGALE X NOBILISSIMUM.

Received as  $Lilium\ regale imes longiflorum\ alexandrae$ , now referred to the above.

139589. LILIUM SPECIOSUM Thunb.

Var. Album-Novum.

139590. LILIUM SPECIOSUM var. MAGNIFICUM X AURATUM var. PLATYPHYLLUM.

139591. LILIUM SPECIOSUM Thunb.

Var. Punctatum.

139592. LILIUM SPECIOSUM var. PUNCTATUM X ROBUSTUM.

139593. LILIUM SPECIOSUM Thunb.

Var. Punctatum Rotundifolium.

139594 to 139597. LILIUM ELEGANS Thunb.

139594. Var. Maculatum.

139595. Var. Ovatum.

139596. Var. Crimson King.

139597. Var. Orange Queen.

139598. LILIUM TIGRINUM Ker.

Var. Fortunum × dauricum wilsonii.

# 139599. Triticum Aestivum L. Poaceae. Common wheat.

From Peru. Seed presented by Alberto Martin Lynch, Chief of the Lambayeque Experiment Station, Lambayeque. Received December 20, 1940.

No. 101.

139600 to 139603.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered December 16, 1940.

139600. ACROCOMIA VINIFERA Oerst. Phoenicaceae.

Palm.

Originally received from H. H. Bartlett and T. Lasser (No. 16877), Panama City, Canal Zone.

A palm 40 feet high, native to Central America, with a spiny-ringed trunk, large arching pinnate leaves with numerous linear pinnae, and a spathe about 3 feet high. It is closely related to Acrocomia lasiospatha.

139601 and 139602. BACTRIS spp. Phoenicaceae.

Palm.

Originally received from H. H. Bartlett and T. Lasser, Canal Zone.

## 139600 to 139603-Continued

139601. From Agua Clara Trail, Rio Aguardiente.

139602. From Mojinga Swamp.

139603. PYRENOGLYPHIS sp. Phoenicaceae.

Palm.

Originally received from H. H. Bartlett and T. Lasser (16951), Canal Zone.

139604 to 139606. CINCHONA spp. Rubiaceae.

From the Philippine Islands. Seeds presented by Col. Arthur F. Fischer, Manila. Received December 18, 1940.

139604. CINCHONA.

Introduced as Cinchona hybrida.

139605. CINCHONA OFFICINALIS L.

Introduced as Cinchona ledgeriana.

For previous introduction see 137132.

139606. CINCHONA PUBESCENS Vahl.

Introduced as Cinchona succirubra.

For previous introduction see 137138.

# 139607 to 139622. Ananas spp. Bromeliaceae.

From Brazil. Suckers presented by Dr. F. C. Camargo, São Paulo Institute of Agronomy, Campinas. Received December 20, 1940.

139607 and 139608. ANANAS COMOSUS (L.) Merr.

Pineapple.

139607. Branco. No. 315-A.

139608. Rudis. No. 315.

139609. Ananas erectifolius L. B. Smith.

No. 1182.

139610. ANANAS Sp.

Albus. No. 3177. Received as Ananas fritzmulleri var. albus, an apparently unpublished name.

139611. Ananas ananassoides var. nanus. L. B. Smith.

No. 2575.

139612. Ananas ananassoides (Baker) L. B. Smith.

No. 284. Received as *Ananas microstachys* f. typica, now referred to the above species.

139613 to 139617. Ananas comosus (L.) Merr.

Pineapple.

139613. Boituva. No. 304.

139614. Cochinchinensis. No. 270.

139615. Maranhão. No. 2003.

139616. Paulista Inerma. No. 307.

139617. Viridis. No. 299.

139618. ANANAS sp.

Rondoni. No. 273.

139619 and 139620. ANANAS.

139619. Rondoni  $\times$  Boituva (F 1). No. 2001.

139620. Rondoni  $\times$  Ananas ananassoides (F 1). No. 2017.

#### 139607 to 139622—Continued

139621. ANANAS sp.

No. 1.202.

139622. Ananas bracteatus (Lindl.) Schultes.

No. 2563. Received as *Pseudananas sagenarius* f. macrodontes, an apparently unpublished form; the species is now referred to the above.

## 139623. CITRUS. Rutaceae.

From Brazil. Budsticks presented by the Institute of Agronomy, São Paulo, Campinas. Received December 20, 1940.

Collected from trees No. 2, 3, 4, 60 of the orchard of Vital Pacifico, at Araras, State of São Paulo; this tree is one of the selections of the *Baianinha* araras type.

# 139624. ZEPHYRANTHES ROSEA Lindl. Amaryllidaceae.

Pink zephyrlily.

From Haiti. Bulbs presented by Frederic Kebreau, Chef de la Section de Phytopathologie, Service National de la Production Agricole. Received December 21, 1940.

For previous introduction see 114190.

## 139625 and 139626.

From New York. Seed presented by Dr. B. A. Krukoff, New York Botanical Garden, New York. Received December 23, 1940.

139625. MUNDULEA SERICEA (Willd.) A. Chev. Fabaceae.

Originally from Pretoria, South Africa.

139626. Tephrosia vogelii Hook f. (Cracca vogelii (Hook. f.) Kuntze.) Fabaceae.

Originally from Kenya, East Africa.

For previous introduction see 129367.

139627. STYLOSANTHES SUNDAICA Taub. Fabaceae.

From Australia. Seeds presented by J. A. Hamilton, Morganbury, Queensland. Received December 17, 1940.

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piectostacnys. Tussock. See Poa flabellata. Vasey. See Paspalum urvillei.

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philippinense, 139582. philippinense var. formosanum, 139583.

 $regale \times nobilissimum, 139588.$ speciosum, 139589, 139591,139593.

speciosum var. magnificum × auratum var. platyphyllum, 139590.

speciosum var. punctatum × robustum, 139592. tigrinum, 139598.

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Pigafettia elata, 139384. Pinanga spp., 139385-139388, 139412. Pineapple. See Ananas comosus.

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Xylocarpus granatum, 139402.

Zephyranthes rosea, 139624. Zephyrilily, pink. See Zephyranthes rosea.

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# Plant Inventory No. 146

# UNITED STATES DEPARTMENT OF AGRICULTURE Washington, D. C., December 1950



# PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUS-TRY, JANUARY 1 TO MARCH 31, 1941 (Nos. 139628 to 141198)

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This inventory, No. 146, lists the plant material (Nos. 139628 to 141198) received by the Division of Plant Exploration and Introduction during the period from January 1 to March 31, 1941. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Botanist.

Plant Industry Station, Beltsville, Md.

#### INVENTORY

139628. Momordica grosvenori Swingle. Cucurbitaceae.

From China. Tubers presented by Prof. G. W. Groff, Lingman University, Canton. Received January 6, 1941.

Lo han kuo. The dried fruits of this Chinese plant are imported in quantity into the United States, where Chinese residents use them for medicinal purposes.

## 139629 to 139631.

From Costa Rica. Seeds presented by Henry R. Jahn & Son, New York, N. Y. Received January 8, 1941.

139629. HYPARRHENIA RUFA (Nees) Stapf. Poaceae.

Jaragua.

For previous introduction see 133430.

139630. PANICUM MAXIMUM Jacq. Poaceae.

Guinea grass.

For previous introduction see 138984.

139631. PASPALUM NOTATUM Fluegge. Poaceae.

Bahia grass.

Gengibrillo. A tropical American perennial grass, used for forage and for erosion control.

For previous introduction see 137492.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### 139632 to 139646.

From Venezuela. Seeds collected by A. G. Sandoval, Soil Conservation Service, United States Department of Agriculture. Received January 13, 1941.

139632 and 139633. CAJANUS CAJAN (L.) Druce. Fabaceae. Pigeon-pea.

139632. Quinchoncho. From San Tome, State of Angoategui. A black, edible, hardy variety.

139633. Quinchoncho. From El Tigre, State of Angoategui. A white, edible, hardy variety; good chicken feed.

139634. Canavalia ensiformis (L.) DC. Fabaceae.

Jackbean.

From San Tome.

For previous introduction see 125096.

139635. CROTALARIA sp. Fabaceae.

From Ciudad Bolivar; an ornamental wild plant.

139636. Desmodium sp. Fabaceae.

Imperata. From San Tome, Estado Angoategui.

139637. Desmodium sp.

Imperata. From Cumanacoa.

139638 and 139639. GLYCINE MAX (L.) Merrill. Fabaceae.

Soybean.

From San Tome, Estada Angoategui.

139638. No. 1.

139639. No. 2.

139640. SORGHUM HALEPENSE (L.) Pers. Poaceae.

Johnson grass.

From Cumanacoa.

For previous introduction see 138989.

139641. SORGHUM VULGARE Pers.

Sorghum.

From eastern Venezuela; a semiwild type.

139642. STIZOLOBIUM DEERINGIANUM Bort. Fabaceae. Deering velvetbean.

TD 1 11

"Baby" velvetbean. From San Tome.

For previous introduction see 115031.

139643. STIZOLOBIUM PRURITUM (Wight) Piper and Tracy.

Velvetbean.

From San Tome.

For previous introduction see 110195.

139644. STIZOLOBIUM VELUTINUM (Hassk.) Piper and Tracy.

Velvetbean.

Giant velvetbean. From San Tome.

For previous introduction see 75382.

139645. TEPHROSIA sp. Fabaceae.

From El Tigre. A bushy, cloverlike species.

139646. VIGNA SINENSIS (Torner) Savi. Fabaceae.

Cowpea.

From San Tome. Fast growing, eaten both green and ripe.

#### 139647 to 139649.

From the Union of Soviet Socialist Republics. Seeds presented by the All Union Institute of Dry Subtropics, Stalinabad, through the Institute of Plant Industry, Leningrad. Received January 18, 1941.

139647. ALLIUM PSKEMENSE B. Fedtsch. Liliaceae.

## 139647 to 139649—Continued

139648. FRITILLARIA EDUARDII Regel. Liliaceae.

139649. Fritillaria RADDEANA Regel.

139650. ANACARDIUM EXCELSUM (H. B. K.) Skeels. (A. rhinocarpus DC.)
Anacardiaceae.

From Florida. Seeds presented by R. J. Berry, Miami. Received January 2, 1941.

A majestic tree, related to the cashew nut, found in Central America and northern South America at altitudes ranging from sea level to 2,700 feet. The wood, being hard and heavy, is worked with difficulty, but it is used in making boats and canoes.

For previous introduction see 47929.

#### 139651 to 139663.

From Australia. Seeds collected by M. Morris, The Zinc Corporation, Ltd., Broken Hill, New South Wales. Received January 2, 1941.

139651 to 139662. Acacia spp. Mimosaceae.

139651. ACACIA ANEURA F. Muell.

Mulga. A tall, yellow-flowered shrub that, in time of drought, is considered a good forage for livestock. The wood is very hard and is valued as timber.

For previous introduction see 126468.

139652. ACACIA CALAMIFOLIA Sweet.

A tall shrub or small tree, with slender erect branches and filiform drooping phyllodes 1 to 2 inches long. The large, yellow flower heads are in short erect racemes. It is said to be an excellent tanbark species, containing 20 percent of tannin.

For previous introduction see 106675.

139653. ACACIA CAMBAGEI R. T. Baker.

A tree 15 to 25 feet high, with pendulous branchlets, glaucous, falcate or lanceolate, obtuse or slightly acuminate, thin or membranous phyllodes up to 5 inches long, and axillary clusters of about 6 globular heads each bearing about 12 flowers. The straight flat pods are about 3 inches long and  $\frac{1}{3}$  inch wide.

139654. ACACIA GLADIIFORMIS A. Cunn.

A tall glabrous shrub with thick curved linear-lanceolate phyllodes 3 to 6 inches long and racemes of small dense flower heads.

For previous introduction see 106679.

139655. ACACIA LIGULATA A. Cunn.

A shrub 4 to 15 feet high, with spreading branches, linear or linear-oblong, rather thick, obtuse phyllodes  $1\frac{1}{2}$  to  $3\frac{1}{2}$  inches long, about 20 bright-yellow flowers in solitary heads or 2 to 5 in racemes much shorter than the phyllodes. The hard pods, 2 to 4 inches long, are more or less constricted.

139656. ACACIA NOTABILIS F. Muell.

A tall handsome shrub native to the mountain slopes of southeastern Australia. The sword-shaped, almost linear phyllodes are 4 to 6 inches long, and the dense globular heads of about 50 flowers each are borne in short racemes.

For previous introduction see 106683.

139657. ACACIA OSWALDII F. Muell.

139658. ACACIA PYCNANTHA Benth.

Golden wattle.

A small, rapid-growing tree up to 30 feet high, with coriaceous leaves and masses of fragrant bright-yellow flowers. The plant is useful as sand binder.

For previous introduction see 106686.

#### 139651 to 139663—Continued

139659. ACACIA RIGENS A. Cunn.

An Australian shrub 4 to 6 feet high, with threadlike compressed phyllodes 3 to 4 inches long and solitary yellow flower heads.

For previous introduction see 106687.

139660. ACACIA SALICINA Lindl.

A tall shrub or small tree, native to Australia, with pendulous branches and willowlike phyllodes up to 5 inches long. The yellow flowers are in short racemes of two or three globular heads.

For previous introduction see 106688.

139661. ACACIA VICTORIAE Benth.

A shrub up to 9 feet high, with glaucous, lanceolate-oblong or broad-linear phyllodes 1 to 2 inches long, pale-yellow heads about 30-flowered, on twin peduncles, usually in false racemes through the abortion of the phyllodes. Native to Australia.

139662. ACACIA WATTSIANA F. Muell.

A dense bushy shrub 4 to 5 feet high, with angular branches and leathery obovateoblong, obtuse phyllodes up to 1 inch long.

For previous introduction see 106693.

139663. Cassia artemisioides Gaud. Caesalpiniaceae.

Wormwood senna.

An erect bushy shrub covered with silky white tomentum. The leaves are made up of three to six pairs of linear-terete leaflets 1 inch long, and the yellow flowers are in short dense racemes.

For previous introduction see 100620.

#### 139664 to 139670.

From Canada. Scions presented by W. L. Kerr, Department of Agriculture, Experimental Station, Morden, Manitoba. Received January 14, 1941.

139664 to 139668. MALUS spp. Malaceae.

Apple.

139664. MALUS SYLVESTRIS Mill.

Anaros (Rosthern No. 2).

139665. X MALUS ROBUSTA Rehder.

Beauty.

139666. MALUS SYLVESTRIS Mill.

Florence (crab apple).

139667. X MALUS ADSTRINGENS Zabel.

Mecca.

139668. MALUS SD.

Bedford Crab.

139669. Prunus sp. Amygdalaceae.

Plum.

Greenville.

139670. PRUNUS.

A cross between the sand cherry (Prunus pumila) and the Siberian apricot (P. sibirica).

139671 to 139678. SACCHARUM. Poaceae.

Sugarcane.

From Colombia. Cuttings presented by the Estación Agrícola Experimental, Palmira. Received January 15, 1941.

139671. 177-37.

139673. 133-37.

139672, 54-37.

139674. 113-37.

#### 139671 to 139678—Continued

139675. 45-37.

139677. Grupo 3

139676. Grubo 1.

139678. 38-1.

139679 to 139692. LILIUM spp. Liliaceae.

From Japan. Seeds obtained from K. Wada, Hakoneya Nurseries, Numazu-shi. Received January 16, 1941.

139679. LILIUM LONGIFLORUM VAI. ALEXANDRAE X AURATUM.

Very early flowering variety.

139680. LILIUM ELEGANS Thunb.

Crimson Queen. Received as L. longiflorum × auratum giganteum, now referred to the above.

139681. LILIUM AURATUM VAI. PLATYPHYLLUM X LONGIFLORUM VAI. ALEXANDRAE.

139682. LILIUM AURATUM var. PLATYPHYLLUM Baker.

Bicolor.

139683. LILIUM.

L. auratum var. platyphyllum var. Bicolor  $\times$  L. auratum var. giganteum var. Crimson Queen.

139684. LILIUM AURATUM var. VIRGINALE Duchartre.

139685. LILIUM sp.

Received as L. dauricum wilsonii, for which a place of publication has not been found.

139686. LILIUM JAPONICUM Thunb.

Japanese lily.

A species rather delicate under cultivation, with a globular, white or pale-yellow bulb 2 inches in diameter, purple-dotted smooth stems 2 to 4 feet high, 15 to 20 horizontal, lanceolate leaves about 8 inches long, and 1 to 7 deliciously fragrant rose-pink tubular flowers 5 to 7 inches long and wide. Native to Japan.

For previous introduction see 139586.

139687. LILIUM MEDEOLOIDES A. Gray.

139688. LILIUM SPECIOSUM var. GLORIOSOIDES Baker.

Delicatum.

139689. LILIUM SPECIOSUM var. GLORIOSOIDES Baker.

Superhum

139690. LILIUM SPECIOSUM f. PUNCTATUM X AURATUM VAI. PLATYPHYLLUM.

139691. LILIUM SPECIOSUM Thunb.

139692. LILIUM TSINGTAUENSE Gilg.

Lily.

A lily of the Pseudolirion group, up to 3 feet high, with scattered and whorled oblong-oblanceolate leaves, and one to six erect, inodorous orange flowers, the segments about 2 inches long. Native to Shantung, China, and Korea.

For previous introduction see 124713.

#### 139693 to 139696.

From Uruguay. Seeds presented by R. Salgueiro Silveira, Sección Información y Enseñanza, Montevideo. Received January 13, 1941.

139693. SORGHUM VULGARE Pers. Poaceae.

Grohoma. (1940 crop.)

139694 and 139695. Sorghum vulgare var. sudanense (Piper) Hitchc.

139694. La Estanzuela.

#### 139693 to 139696—Continued

139695. Maiz de Guinelo.

139696. SORGHUM VULGARE Pers.

Sorgo de Grohoma Milo.

Sorghum.

## 139697. Cucumis melo L. Cucurbitaceae.

Muskmelon.

From China. Seed presented by Hon. Nelson T. Johnson, Ambassador to the Chinese Government, Chungking. Received January 22, 1941.

"A very superior melon from the hot, dry sections of extreme northwest China."

#### 139698 to 139836. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seed presented by the Canal Zone Experimental Gardens, Pedro Miguel (Summit). Received January 22, 1941.

139698. Red Top, Plt. 10.

139699. Rayada, Plt. 10.

139700. 28 NG 52-Imp. 641, Plt. 10.

139701. 1C.Z.

139702. 2C.Z.

139703. 3C.Z.

139704. 4C.Z.

190101. 70.2

139705. 5C.Z.

139706. 6C.Z.

139707. 7C.Z.

139708. 8C.Z.

139709. 9C.Z.

139710. 10C.Z.

139711. 11C.Z.

139712. 12C.Z.

139713. 13C.Z.

139714. 14C.Z.

139715. 15C.Z.

139716. 16C.Z.

139717. 17C.Z.

139718. 18C.Z.

139719. 19C.Z.

139720. 20C.Z.

139721. 21C.Z.

139722. 22C.Z.

139723, 23C.Z.

139724. 24C.Z.

139725. 25C.Z.

139726. 26C.Z.

139727. 27C.Z.

139728. 7 Lahi, Imp. 733.

139729. No. 15 Laukona, Imp. 735.

139730. No. 18 Hinahina, Imp. 730.

139731. No. 29 Iliopua, Imp. 829.

139732. No. 31 Kea, Imp. 830.

139733. No. 50 Uahi-a-pele, Imp. 795.

139734. No. 51 Pohina, Imp. 749.

139735. No. 73 Maikoiko, Imp. 822.

139736. No. 74 Maikoiko str., Imp. 738

139737. No. 75 Lehu, Imp. 736.

139738. Iliopua, Imp. 879.

139739. Striped Tip, Imp. 611.

139740. NC 5, Imp. 879.

139741. NC 15, Imp. 881.

139742. NC 18, Imp. 883.

139743. NC 19, Imp. 884.

139744. NC 20, Imp. 885.

139745. NC 29, Imp. 889.

139746. NC 30, Imp. 890.

139747. NC 32, Imp. 892.

139748. NC 33, Imp. 893. 139749. NC 39, Imp. 896.

139750. NC 40, Imp. 897.

139751. NC 42, Imp. 898.

139752. NC 49, Imp. 900.

139753. NC 51, Imp. 894.

139754. NC 76, Imp. 904.

139755. NC 80, Imp. 906.

139756. NC 81, Imp. 908.

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139757. NC 83, Imp. 910.

139758. NC 90, Imp. 911.

139759. NC 91, Imp. 912.

139760. NC 93, Imp. 914.

139761. NC 99, Imp. 917.

139762. NC 104, Imp. 919.

139763. Badilla.

#### 139698 to 139836---Continued

139764. Bamboo blanca. 139765. Bamboo Mor.

139766. Barb. W. S.

139767. Batjan.

139768. Batjan G. S., Imp. 770.

139769. Black Fiji, Imp. 697.

139770. Brava de Perico, Imp. 766.

139771. Cana Criolla.

139772. Chuck Che, Imp. 183.

139773. Green D. N. G., Imp. 210.

139774. Loethers.

139775. N. H. 2, Imp. 922.

139776. Raratonga 1, Imp. 854.

139777. San Manuel.

139778. Simpson.

139779. Spansch.

139780. Tongatabu 3, Imp. 924.

139781. Tongatabu 6.

139782. Yellow Bamboo, Imp. 769.

139783. Hind's Special.

139784. 28 NG 2, Imp. 627

139785. 28 NG 3, Imp. 520.

139786. 28 NG 4, Imp. 628.

139787. 28 NG 6.

139788. 28 NG 11.

139789. 28 NG 14, Imp. 524.

139790. 28 NG 15, Imp. 353.

139791. 28 NG 22.

139792. 28 NG 39.

139793. 28 NG 42.

139794. 28 NG 45.

139795. 28 NG 47, Imp. 538.

139796. 28 NG 50, Imp. 640.

139797. 28 NG 54, Imp. 642.

139798. 28 NG 65, Imp. 512.

139799. 28 NG 68, Imp. 517.

139800. 28 NG 72, Imp. 514.

139837. MILLETTIA PACHYCARPA Benth. Fabaceae.

From China. Cuttings presented by B. S. Leung, Lingman University, Canton. Received January 23, 1941.

139838. Pyrus sp. Malaceae.

From Iran. Seeds presented by Walter Koelz, Tehran; agent, Bureau of Plant Industry, United States Department of Agriculture. Received January 23, 1941.

No. 7423. From Namin, Azerbaijan, November 6, 1940. A wild pear tree, with hard subglobose fruits about 2 inches in diameter, gathered for food

139801. 28 NG 93, Imp. 650.

139802. 28 NG 97, Imp. 418.

139803. 28 NG 98, Imp. 504.

139804. 28 NG 210, Imp. 658.

139805. 28 NG 212, Imp. 541.

139806. 28 NG 215, Imp. 542.

139807. 28 NG 219, Imp. 975.

139808. 28 NG 219, Imp. 976.

139809. 28 NG 220, Imp. 495.

139810. 28 NG 221, Imp. 706.

139811. 28 NG 221, Red Sport.

139812. 28 NG 257, Imp. 666.

139813. 28 NG 259, Imp. 545.

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139814. 28 NG 260, Imp. 494.

139815. 28 NG 264, Imp. 667.

139816. 28 NG 265, Imp. 546.

139817. 28 NG 267, Imp. 548.

139818. 28 NG 268, Imp. 668.

139819. 28 NG 269. 139820. 28 NG 287, Imp. 676.

139821. 96 NG 14.

139822. 96 NG 16.

139823. 96 NG 24.

139824, 14 NG 124.

139825. 14 NG 190.

139826. 14 NG 241.

139827. 21 NG 1.

139828. 21 NG 2.

195020. 21 110 2.

139829. 21 NG 5.

139830. 21 NG 9.

139831. 21 NG 12.

139832. 21 NG 13, Imp. 320.

139833. 21 NG 17.

139834. 21 NG 22.

139835, 21 NG 29, Imp. 332.

139836. 21 NG 44.

139839. CARICA PAPAYA L. Papayaceae.

Papaya.

From Argentina. Seeds presented by G. P. Araujo. Received January 17, 1941.

**139840 to 139845.** SACCHARUM. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira (Valle). Received January 15, 1941.

139840. Commun  $\times$  EPC 2057.

139843. EPC 4315 × POJ 2878.

139841. Green Ribbon × EPC 4300.

139844. EPC 4135  $\times$  MC 129.

139842. EPC  $1644 \times SC 1 2/4$ .

139845. EPC 2812  $\times$  POJ 2878.

139846. Musa velutina Wendl. & Drude. Musaceae.

From the British West Indies. Seeds presented to David Fairchild, Coconut Grove, Florida, by E. E. Cheesman.

An ornamental stoloniferous banana relative, with a stem about  $1\frac{1}{2}$  inches thick and about  $3\frac{1}{2}$  feet high to the spadix. The leaf blade is almost 3 feet long by 1 foot wide, and the petiole without the sheath is more than  $1\frac{1}{2}$  feet long. The thick, hairy, deep purplish-red spadix arises from the much paler sheath. This species is closely related to M. sanguinea.

#### 139847 to 139868.

From China. Plants presented by Prof. G. W. Groff, Lingnan University, Canton. Received January 27, 1941.

139847 and 139848. ATALANTIA spp. Rutaceae.

139847. No. 13573.

139848. No. 14088.

139849 to 139864. LITCHI CHINENSIS Sonner. (Nephelium litchi Cambess.) Sapindaceae. Lychee.

139849. No. B-1418. Lokong Kwa Luk Lychee.

139850. No. B-1448. Lokong Kwa Luk Lychee.

139851. No. B-2836. Lokong No Mai Lychee.

139852. No. B-2489. Lokong No Mai Lychee.

139853. No. B-2612. Punyu Lokong Kwei Mei Lychee.

139854. No. B-2614. Punyu Lokong Kwei Mei Lychee.

139855. No. B-2711. Lokong No Mai Lychee.

139856. No. B-2712. Lokong No Mai Lychee.

139857. No. B-2800. Tsangsheng Kwei Mei Lychee.

139858. No. B-2803. Tsangsheng Kwei Mei Lychee.

139859. No. B-2848. Lokong No Mai Lychee.

139860. No. B-2858. Lokong No Mai Lychee.

139861. No. B-2861. Lingnan Heung Lai Lychee.

139862. No. B-2868. Lingnan Heung Lai Lychee.

139863. No. B-3030. Punyu Tuwah Shui Tung Haak Ip Lychee.

139864. No. B-3039. Punyu Tuwah Shui Tung Haak Ip Lychee. (Black Leaf.)

139865 to 139868. Rosa spp. Rosaceae.

139865. Lingnan Sz Kwei Chun Rose. No. 16039.

139866. Lingnan in Chi T'ip Rose. No. B-3054.

139867. Lingnan Wong Lai Chun Rose. No. 4800.

139868. Lingnan Uet Kwei Rose. No. 4785.

139869. CITRUS sp. Rutaceae.

From Australia. Trees presented by the New South Wales Department of Agriculture, Sydney. Received January 28, 1941.

No. 519. Valencia Late, Black's.

139870 to 139913.

From China. Plants presented by F. A. McClure, Lingman University, Canton. Received January 30, 1941.

139870 to 139887. Arundinaria spp. Poaceae.

Bamboo.

139870. ARUNDINARIA sp.

No. 1.

139871. ARUNDINARIA Sp. *No.* 2.

139872. ARUNDINARIA Sp. No. 2A.

139873. ARUNDINARIA Sp. No. 14.

139874. ARUNDINARIA Sp. LU BG No. 1167.

139875. ARUNDINARIA Sp.

LU BG No. 1852.

139876. ARUNDINARIA Sp. LU BG No. 1884.

139877. ARUNDINARIA sp.

LU BG No. 1994.

139878. ARUNDINARIA Sp. LU BG No. 2010.

139879. ARUNDINARIA sp.

LU BG No. 2176.

139880. ARUNDINARIA Sp.

LU BG No. 2330.

139881. ARUNDINARIA Sp.

LU BG No. 2336.

139882. ARUNDINARIA Sp.

LU BG No. 2340.

139883. Arundinaria funghomii McClure.

LU BG No. 2343.

139884. ARUNDINARIA BASIGIBBOSA McClure.

LU BG No. 2393.

139885. ARUNDINARIA Sp.

LU BG No. 2644.

139886. Arundinaria sp.

LU BG No. 2670.

139887. Arundinaria sp.

LU BG No. 2436.

139888 to 139893. Bambusa spp. Poaceae.

Bamboo.

139888. Bambusa Eutuldoides McClure.

No. 10. A large sympodial bamboo cultivated for its thick-walled upright culms, which are used locally for heavy construction and miscellaneous farm needs.

For previous introduction see 128696.

139889. Bambusa textilis var. fusca McClure.

No. 11. The variety differs from the species in the very much darker, denser, more persistent, appressed pubescence on the culm sheaths. This bamboo is used for the same purpose as the typical form.

For previous introduction see 128746.

139890. Bambusa dissimulator McClure.

No. 12. A medium-large, somewhat thorny, sympodial species, cultivated for its strong, thick-walled culms, which are used in heavy construction.

For previous introduction see 128750.

139891. BAMBUSA Sp.

No. 15. A large, stiffly upright, much-branched sympodial bamboo, cultivated for its thick-walled straight culms, which are used in heavy construction and for punting poles. The wood is very durable.

### 139870 to 139913—Continued

139892. BAMBUSA DISSIMULATOR McClure.

LU BG No. 2653.

139893. BAMBUSA PERVARIABILIS McClure.

No. 9.

139894 to 139897. Indocalamus spp. Poaceae.

Bamboo.

139894. Indocalamus sinicus (Hance) Nakai.

No. 4.

139895. INDOCALAMUS HERKLOTSH McClure.

No. 5. A small monopodial wild bamboo, promising as an ornamental and as a source of garden stakes.

For previous introduction see 128683.

139896. Indocalamus nanunicus McClure.

LU BG No. 1193.

139897. INDOCALAMUS Sp.

LU BG No. 2331.

139898. LINGNANIA CHUNGII McClure. Poaceae.

Bamboo.

No. 7.

139899. OXYTENANTHERA ALIENA McClure. Poaceae.

Bamboo.

No. 6.

139900 to 139902. PHYLLOSTACHYS spp. Poaceae.

Bamboo.

139900. PHYLLOSTACHYS sp.

LIJ BG No. 2109.

139901. PHYLLOSTACHYS sp.

LU BG No. 2114.

139902. PHYLLOSTACHYS sp.

LU BG No. 2132.

139903. Schizostachyum dumetorum (Hance) Munro. Poaceae.

Bamboo.

No. 3

For previous introduction see 128728.

139904. SASA Sp. Poaceae.

Bamboo.

LU BG No. 2162.

139905. SEMIARUNDINARIA VENUSTA McClure. Poaceae

Bamboo.

LU BG No. 2396.

139906. SEMIARUNDINARIA SD.

LU BG No. 2408.

139907 to 139913. SINOBAMBUSA spp. Poaceae.

Bamboo.

139907. SINOBAMBUSA HUMILIS McClure.

LU BG No. 1948 A.

139908. SINOBAMBUSA INTERMEDIA McClure.

LU BG No. 1301.

A rapid-spreading, wild bamboo, probably attaining heights of 12 to 15 feet. The leaves are oblong-lanceolate, 5½ to 8 inches long, about the same color on both sides, and entirely glabrous except in being slightly pilose near the base, beneath. Culm sheaths are purplish near the apex, as is also the tip portion of the sheath blade. The shoots appear very early in spring and probably are edible, though small. The culms are used in China for clothes-drying poles.

# 139870 to 139913—Continued

139909. SINOBAMBUSA LAETA McClure.

LU BG No. 1203.

139910. SINOBAMBUSA TOOTSIK (Makino) Makino.

No. 8.

For previous introduction see 128682.

139911. SINOBAMBUSA RUBROLIGULA McClure.

LU BG No. 2354.

139912. SINOBAMBUSA Sp.

LU BG No. 2402.

139913. SINOBAMBUSA Sp.

No. 13.

#### 139914 to 139929.

From Africa. Seeds presented by the Director General, National Institute for the Study of Agronomy, Yangambi, Belgian Congo. Received February 1, 1941.

139914 to 139922. ARACHIS HYPOGAEA L. Fabaceae.

Peanut.

139914. Gemena.

139919. Mputu-C.

139915. Kiehusa.

139920. Mputu-D.

139916. Mfoko-A.

139921. Senegal.

139917. Mputu-A.

139922. Standard Yangambi.

139918. Mputu-B.

139923 to 139929. ORYZA SATIVA L. Poaceae.

Rice.

139923. 0110.

139927. No. 070.

139924. No. 031.

139928. *Y-3*.

139925. No. 035.

139929. Y 6-A.

139926. No. 065.

139930 to 139937. Gossypium. Malvaceae.

Cotton.

From China. Seeds presented by Chi Pao Yu, Division of Cotton, National Agricultural Research Bureau, Chungking. Received January 10, 1941.

139930. Curly leaf 272.

139934. Heterozygous yellow 273-4.

139931. Heterozygous yellow 267-1.

139935. Heterozygous yellow 273-5.

139932. Heterozygous yellow 267-2.

139936. Heterozygous yellow 273-6.

139933. Heterozygous yellow 273-1.

139937. Virescent 240-5.

139938. Daemonorops ochrolepis Becc. Phoenicaceae.

Palm.

From the Philippine Islands. Seeds collected by the Fairchild-Archbold Expedition, February 17, 1941.

Somulid. From the Mount Makiling National Arboretum, Laguna, Luzon. A tall climbing tropical palm with stems 1 inch thick.

139939 to 139943. Gossypium. Malvaceae.

Cotton.

From Puerto Rico. Seeds received from San Juan, February 4, 1941.

139939. C. B. 1419.

139942. C. B. 1422.

139940. C. B. 1420.

139943, C. B. 1423.

139941. C. B. 1421.

# 139944 to 139954. ORYZA SATIVA L. Poaceae.

Rice.

From Japan. Seeds presented by the Ohara Institute of Agricultural Research, Kurashiki. Received February 10, 1941.

139944. Ezoshima-Mochi (glutinous).

•

139950. Sensyo (nonglutinous).

139945. Gaisen (nonglutinous).

139951. Shindai-okoshi (nonglutinous).

139946. Gaisen-mochi (glutinous).

139952. Tayu (nonglutinous).

139947. Kirishima (nonglutinous).

139953. Tozo-Mochi (glutinous).

139948. Miyanishiki (nonglutinous). 139949. Owari-mochi (glutinous).

139954. Ura No. 31 (nonglutinous).

139955 to 139959. SACCHARUM. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira (Valle). Received February 12, 1941.

139955. E. P. C. 46-37 × P.O.J. 28-78.

139958. P. O. J.  $28-83 \times E$ . P. C. 59-90.

139956. E. P. C.  $46-37 \times M.C.$  129.

139959. E. P. C. 47-22  $\times$  P.R. 543.

139957. E. P. C. 47-54 × Mayaguez 28.

139960. Melocactus guitarti León. Cactaceae.

From Cuba. Seeds presented by F. G. Walsingham, Assistant Superintendent, Atkins Institution of the Arnold Arboretum, Cienfuegos. Received February 14, 1941.

For previous introduction see 133390.

139961. Castanopsis sp. Fagaceae.

From Indo-China. Seeds presented by M. Poilane. Received February 21, 1941.

A tall tree, 70 to 80 feet in height, found at an altitude of 10,000 feet. The thick, leathery leaves are silvery beneath, and the small, edible nuts are sweet.

139962 to 139965. Pennisetum ciliare (L.) Link (P. cenchroides Rich.). Poaceae.

From Tanganyika Territory. Seeds presented by the Director of Veterinary Services, Mpwapwa. Received February 20, 1941.

139962. Type "A," T. P. 22.

139964. Type "C," T. P. 52.

139963. Type "B," T. P. 114.

139965. Type "D," T. P. 100.

For previous introduction see 139070.

139966 to 139972. ALYSICARPUS spp. Fabaceae.

From Australia. Seeds presented by A. McTaggart, Council for Scientific & Industrial Research, Division of Plant Industry, Canberra City. Received February 26, 1941.

139966. Alysicarpus bupleurifolius (L.) DC.

C.P.I. 2675.

For previous introduction see 33599.

139967 to 139970. ALYSICARPUS RUGOSUS (Willd.) DC.

An erect annual legume, native to southern Asia and Africa. The tough stems are 3 to 4 feet high, and the roots bear nitrogen nodules.

139967. C.P.I. 3767.

139969. C.P.I. 3769.

139968. C.P.I. 2785.

139970. C.P.I. 7752.

For previous introduction see 97817.

139971. ALYSICARPUS RUGOSUS var. HEYNEANUS (Wight and Arn.) Baker. C.P.I. 5542.

#### 139966 to 139972—Continued

139972. ALYSICARPUS VAGINALIS (L.) DC.

C.P.I. 2676. An annual legume from 3 to 6 feet high. Under favorable conditions it may be cut 2 or 3 times a season.

For previous introduction see 101185.

## 139973 to 139979.

From Washington. Seeds presented by Mrs. H. B. Looff, Oak Harbor.

Collected in the Olga Bay region of Kodiak Island, Alaska. Received February 28, 1941.

139973. AGROSTIS EXARATA Trin. Poaceae.

Grass.

139974. AGROSTIS sp.

For previous introduction see 106418.

139975. Bromus ciliatus L. Poaceae.

Grass.

For previous introduction see 16085.

139976. CALAMAGROSTIS CANADENSIS (Michx.) Beauv. Poaceae.

Grass.

For previous introduction see 135567.

139977. Deschampsia caespitosa (L.) Beauv. Poaceae.

Tufted hairgrass.

For previous introduction see 136319.

139978. Festuca Rubra L. Poaceae. For previous introduction see 127682.

Red fescue.

20070 Day ----- I Day

139979. POA PRATENSIS L. Poaceae.

Kentucky bluegrass.

For previous introduction see 133165.

139980. Solanum tuberosum L. Solanaceae.

Potato.

From Australia. Tubers presented by Thos. W. Pockett, Healesville, Victoria. Received March 5, 1941.

Rival No. 1 (Carmen × Up-to-date.)

139981. CARICA PAPAYA L. Papayaceae.

Papaya.

From Honduras. Seeds presented by T. J. Grant, Rubber Investigations, Bureau of Plant Industry, United States Department of Agriculture. Received March 4, 1941.

# 139982 and 139983.

From Puerto Rico. Seeds presented by John McGill, Puerto Rico Reconstruction Administration, San Juan. Received March 6, 1941.

139982. Gossypium. Malvaceae.

Cotton.

Common type.

139983. Gossypium.

Special type.

#### 139984 and 139985.

From Australia. Seeds presented by the Waite Agricultural Institute, Glen Osmond, South Australia. Received March 4, 1941.

139984. PHALARIS TUBEROSA L. Poaceae.

Grass.

Acc. No. 3407, Gb 379.

139985. PHALARIS TUBEROSA L.

Acc. No. 3554, Gb 378X.

For previous introduction see 132167.

# 139986 to 140010. Solanum. Solanaceae.

From Java. Tubers presented by P. Van der Goot, Chief, Experiment Station, Buitenzorg. Received March 11, 1941.

Nos. 139986 to 139991 are "Thung hybrids."

139986. Solanum andigenum X Green Mountain.

139987. SOLANUM ANDIGENUM X Paul Kruger.

139988. Solanum andigenum × Populair.

139989. Solanum andigenum × Sutton's Flourball.

139990. Solanum andigenum × Thorbecke.

139991. Solanum antipoviczii × Populair.

Nos. 139992 to 139999 are "Cramer hybrids."

139992. Solanum (demissum  $\times$  Ailbeca)  $\times$  Ailbeca.

139993. SOLANUM DEMISSUM X Ailbeca.

No. 172-121.

139994. SOLANUM (DEMISSUM × Ailbeca) × Thaneaudepi 149. No. 174–29.

139995. Solanum (Demissum × Ailbeca) × Thaneaudepi 149.

139996 to 139999. Solanum (Demissum X Ailbeca) X Tobelle.

139996. No. 175-29.

139998. No. 175-47.

139997. No. 175-37.

139999. No. 175-55.

140000. Solanum demissum X Deodora.

140001. SOLANUM DEMISSUM X Fruhmolle.

140002. Solanum demissum X Iduna.

140003. Solanum demissum X Jubilee.

140004. Solanum demissum × Katahdin.

140005. Solanum demissum × Populair.

140006. Solanum demissum × Robijn.

140007. Solanum demissum × Roland L.

140008 to 140010. SOLANUM.

140008. Cramer Hyb., 175-25-68.

140009. Cramer Hyb., 210-2586.

140010. Cramer Hyb., 1109-8596.

#### 140011 to 140023.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received March 11, 1941.

140011. ACTINOTUS HELIANTHI Labill. Apiaceae.

Flannel flower.

For previous introduction see 125011.

140012. CALLITRIS ROBUSTA (A. Cunn.) R. Br. (Frenela robusta A. Cunn.). Pinaceae. Great Murray pine.

For previous introduction see 73033.

140013 to 140021. EUCALYPTUS spp. Myrtaceae.

## 140011 to 140023—Continued

140013. EUCALYPTUS CAESIA Benth.

A pink-flowered variety.

140014. EUCALYPTUS CRUCIS Maiden.

A variety with glaucous, ovate, small silver leaves.

For previous introduction see 123770.

140015. EUCALYPTUS EREMOPHILA (Diels) Maiden (E. occidentalis eremophila Diels).

A form with bright-yellow flowers.

For previous introduction see 123772.

140016. EUCALYPTUS ERYTHROCORYS F. Muell.

A variety with bright-scarlet flowers.

For previous introduction see 135476.

140017. EUCALYPTUS PREISSIANA Schauer.

Flowers large, deep lemon yellow.

For previous introduction see 111874.

140018. EUCALYPTUS PYRIFORMIS TUTCZ.

For previous introduction see 135479.

140019. EUCALYPTUS TETRAGONA (R. Br.) F. Muell.

Leaves silvery, flowers white.

For previous introduction see 135480.

140020. EUCALYPTUS TETRAPTERA TUTCZ.

A variety with large red flowers.

For previous introduction see 135481.

140021. EUCALYPTUS TOROUATA Luehm.

A red-flowered variety.

For previous introduction see 106711.

140022. Telopea speciosissima (J. E. Smith) R. Br. Proteaceae.

Waratah. A very striking, evergreen Australian shrub, about 8 feet high, with irregular-toothed, dark-green leaves 6 inches long and deep-crimson, tubular flowers about 1 inch long, borne in a dense globular head surrounded by blood-red bracts 2 or 3 inches in length. The shrub is the State flower of New South Wales.

For previous introduction see 125014.

140023. Tristania conferta R. Br. Myrtaceae.

Brisbane-box.

Brush Box.

For previous introduction see 76947.

# **140024 to 140032**. Saccharum. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Granja Agricola de Palmira, Palmira (Valle). Received March 12, 1941.

140024. E.P.C.  $47-22 \times P.O.J. 28-78$ .

140029. E.P.C.  $47-54 \times M.C.$  129.

**140025.** E.P.C.  $62-19 \times P.O.J. 28-78$ .

140030. E.P.C.  $47-54 \times M.C.$  129.

140026. E.P.C.  $46-37 \times P.O.J. 27-27$ .

140031. P.O.J.  $27-25 \times E.P.C. 68-99$ .

**140027.** E.P.C. 25-00  $\times$  P.O.J. 28-78.

140032. P.O.J. 27-25 × E.P.C. 66-88.

140028. E.P.C.  $47-54 \times P.R. 543$ .

140033. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From Ohio. Trees purchased from the Storrs & Harrison Co., Painesville. Received March 20, 1940; numbered March 13, 1941.

Hungaria's Best.

140034. Dendrocalamus giganteus Munro. Poaceae.

Bamboo.

From Puerto Rico. Plants received from the Agricultural Experiment Station, Mayaguez. Received March 17, 1941.

Originally received in 1929 from J. E. Higgins, Summit, Canal Zone.

A tropical bamboo 80 feet or more high.

#### 140035 to 140068.

From Brazil. Seeds and bulbs presented by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received March 15, 1941.

Unless otherwise noted the material was received as seeds, and was obtained in Belém.

140035 to 140039. ALLIUM CEPA L. Liliaceae.

Unior

140035. No. 44. Rio Grande Onion.

140038. No. 23. Alho. Bulbs. 140039. No. 3. Alho. Bulbs.

140036. Cebola cebolinho. 140037. Cebola marron.

140040. ARACHIS HYPOGAEA L. Fabaceae.

Peanut.

140041. Basella Rubra L. Basellaceae.

No. 39. Bretalha Branca.

For previous introduction see 114864.

140042. Brassica oleracea var. botrytis L. Brassicaceae.

Cauliflower.

Anão de Erfurt.

140043. Canavalia ensiformis (L.) DC. Fabaceae.

Jackbean.

No. 15. Feijão de Porco.

140044 to 140046. Capsicum frutescens L. Solanaceae.

Redpepper.

140044.

140045. No. 4. Pimenta Cheiro. From Bahia.

140046. D'Hespanha.

140047. CORIANDRUM SATIVUM L. Apiaceae.

Coriander.

No. 38. From native peddlers.

140048. Cucumis melo L. Cucurbitaceae.

Muskmelon.

0040 CHOUDDITA A

140049. Cucurbita Moschata Duchesne. Cucurbitaceae.

Cushaw.

No. 35. Abobara Caravella.

140050 to 140055. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

140050. [No special notes.] 140051. A German variety.

140074 77 . 7

140052. Rei Humberto.

140054. Tomate Pera.

140052. Kei Humberto.

140055. Grande Rei Humberto.

140053. A large-fruited Italian variety.

140056. Phaseolus lunatus L. Fabaceae.

Lima bean.

No. 10. From Pernambuco.

140057 to 140060. Phaseolus vulgaris L. Fabaceae.

Common bean.

140057. No. 7. Common type, Pernambuco.

140058. No. 14. Black, Pernambuco.

140035 to 140068—Continued

140059. No. 1. Yellow bean, Bahia.

140060. No. 11. From Bahia.

140061. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

No. 40. Nabica da Terra 106.

140062. RAPHANUS SATIVUS L.

No. 37. Gilo de Fructo Amargo 94.

140063. Solanum melongena L. Solanaceae.

Eggplant.

140064. SOLANUM Sp.

Originally from Peru.

140065. STIZOLOBIUM sp. Fabaceae.

No. 12. Feijão Mucana.

140066 to 140068. Vigna sinensis (Torner) Savi. Fabaceae.

Cowpea.

140066.

140067.

140068.

140069 to 140075. ORYZA SATIVA L. Poaceae.

Rice.

From Africa. Seeds presented by the Station des Recherches Agronomiques, Yangambi, P. S., Belgian Congo. Received March 18, 1941.

140069. Var. No. 031.

140073. Var. Y 6 A.

140070. Var. No. 035.

140074. Var. Y 3. 140075. Var. 0110.

140071. Var. No. 065. 140072. Var. No. 070.

140076. TELFAIRIA PEDATA (J. E. Smith) Hook. Cucurbitaceae.

From Africa. Seeds presented by the American Consulate, Nairobi, Kenya, British East Africa. Received March 13, 1941.

A lofty, perennial vine with pale-purple flowers followed by oblong fruits 2 to 3 feet long; these contain an abundance of large seeds, sometimes called "oyster nuts," which yield an oil said to be equal in quality to olive oil. In Kenya Colony, Africa, where this plant is native, the seeds are boiled and used as food by the natives.

For previous introduction see 133322.

### 140077 to 140082.

From California. Seeds presented by Ira W. Clokey, South Pasadena. Received March 14, 1941.

140077. Angelica scabrida Clokey and Mathias. Apiaceae.

140078. Arctomecon californica Torr. and Frem.

140079. ARCTOMECON MERRIAMII Coville.

For previous introduction see 118929.

140080 to 140082. Penstemon spp. Scrophulariaceae.

140080. Penstemon bicolor (T. S. Brandeg.) Clokey and Keck.

140081. Penstemon bicolor ssp. roseus Clokey and Keck.

140082. PENSTEMON PALMERI A. Gray.

Palmer penstemon.

The spikes stand 4 to 6 feet high, and the plant is reduced to little more than a rosette of basal leaves at the close of the long, dry, late summer and autumn. Its abundant glaucous green foliage, long spike (2 to 3 feet) of large light-pink flowers opening progressively from below, together with its very robust habit, make it a desirable acquisition to our long list of penstemons. It has good seed habits and if

#### 140077 to 140082—Continued

started early in flats and transplanted into the open in early spring, it will blossom sparingly the same year.

For previous introduction see 46595.

# 140083. CARAPA GUIANENSIS Aubl. Meliaceae. Crabwood tree.

From Trinidad. Seeds presented by the Department of Agriculture, Port-of-Spain. Received March 14, 1941.

Crapoo. A fast-growing tree that becomes 60 feet high, with compound leaves 18 inches long, small axillary flowers, and thick-shelled russet-brown fruits about 3 inches in diameter containing two to six chestnutlike seeds. The bitter oil expressed from the seeds is used by the natives, who rub it into their skin to protect themselves from noxious insects; it is also made into a varnish or lacquer for iron objects, protecting them from rust. Native to northern South America.

For previous introduction see 106506.

# 140084 to 140124.

From Iran. Bulbs presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received March 20, 1941.

#### 140084. Allium sp. Liliaceae.

Onion.

No. 5976. From Tale, Bakhtiari, May 2, 1940. A 1-leaved onion with the leaf about 4 inches long and 2 inches wide. The green flowers, with broad lavender margins, are in heads about 3 inches across.

# 140085. АLLІИМ sp.

No. 5979. From Damavar, Bakhtiari, May 4, 1940.

#### 140086. ALLIUM Sp.

No. 5957. From Sandarht, Bakhtiari, April 26, 1940. An onion up to 4 feet high, with large pink flowers in heads 4 inches across.

#### 140087. NARCISSUS sp. Amaryllidaceae.

No. 5983. From Damavar, Bakhtiari, May 4, 1940.

#### 140088. Allium sp. Liliaceae.

Onion.

No. 5987. From Tale, Bakhtiari, May 7, 1940. An attractive species about 18 inches long, with narrow leaves and heads of rose-purple flowers.

#### 140089. ALLIUM Sp.

No. 5989. From Tale, Bakhtiari, May 7, 1940. A plant with two broad leaves and a 3-inch head of green flowers, edged in lavender.

## 140090. ALLIUM sp.

No. 5998. From Siachal, Bakhtiari, May 11, 1940. A plant about 18 inches high, with heads about  $2\frac{1}{2}$  inches across. The flowers are green and broadly edged in white; the anthers are rose purple.

#### 140091. ALLIUM Sp.

No. 6001. From Cheshmashirin, Bakhtiari, May 12, 1940. A plant about 18 inches in height, with loose and open heads about 3 inches across. The flowers are of a rose-purple cast.

# 140092. ALLIUM sp.

No. 6038. From Labisufed, Bakhtiari, May 15, 1940. A low steppe species growing on barren slopes, about 8 inches high, with loose heads about 2 inches across of white flowers.

#### 140093. ALLIUM sp.

No. 6039. From Labisufed, Bakhtiari, May 15, 1940. An attractive steppe species, growing about 3 feet high, with deep-maroon flowers in dense heads about 2½ inches across.

# 140084 to 140124—Continued

140094. АLLІИМ sp.

No. 6124. From Durud, Luristan, May 20, 1940. Dry bulbs found in a meadow. 140095. ALLIUM SD.

No. 6129. From Durud, Luristan, May 22, 1940. A tall, broadleaved plant about 4 feet high, with 5-inch heads of rose-purple flowers.

140096. ALLIUM sp.

No. 6131. From Durud, Luristan, May 22, 1940. A low species about 6 to 8 inches high, with two broad leaves and large heads of rose-purple flowers.

140097. ALLIUM sp.

No. 6135. From Kalvar, Luristan, May 30, 1940. Two feet high with 2-inch heads of white, green-ribbed flowers.

140098. ALLIUM sp.

No. 6136. From Kalvar, Luristan, May 30, 1940. A medium-sized species with tubular leaves.

140099. ALLIUM sp.

No. 6140. From Ti, Luristan, June 5, 1940. An onion 12 to 18 inches high, with 1-inch heads of yellow-white, green-ribbed flowers.

140100. ALLIUM sp.

No. 6141. From Chamchid, Luristan, June 6, 1940. A plant 20 inches high, with 2-inch heads of yellow-white flowers.

140101. ALLIUM Sp.

No. 6142. From Chamchid, Luristan, June 6, 1940. The 2-inch heads of green-white, green-ribbed flowers are on peduncles maroon-colored for 2 inches next to the head.

140102. ALLIUM sp.

No. 6143. From Chamchid, Luristan, June 6, 1940. An onion growing in clumps up to about 15 inches high, with heads, 2 inches across, of clear-yellow flowers.

140103. ALLIUM sp.

No. 6144. From Chamchid, Luristan, June 6, 1940. A tubular-leaved species, with a much-bent stem, 3 feet high.

140104. ALLIUM sp.

No. 6145. From Durud, Luristan, June 6, 1940. The heads are 2½ inches across, with deep-purple flowers and bluish stamens.

140105. ALLIUM sp.

No. 6146. From Durud, Luristan, June 7, 1940. A wild garlic growing in spots about a spring.

140106. ALLIUM sp.

No. 6328. From Shahkuh, Mazenderan, July 19, 1940. A field weed 2 feet high, with heads about 2 inches across of green-white flowers.

140107. АLLІИМ sp.

No. 6413. From Gumbat Gabus, July 31, 1940. An onion growing along the border of a marsh, 18 inches high, with a head 1 inch across of whitish flowers.

140108. ALLIUM sp.

No. 6417. From Marave, Khorassan, July 31, 1940. A steppe plant about 12 inches high, with a flower head 1½ inches across.

140109. ALLIUM Sp.

No. 6445. From Bujmund, Khorassan, August 2, 1940. A tall, flat-leaved onion growing in a grainfield, with a head about 1% inches across of white flowers.

# 140084 to 140124—Continued

140110. ALLIUM SD.

No. 6469. From Kotaliyetchinar, Khorassan, August 4, 1940. A steppe plant about 2 feet high, with a head 1 foot across. Rather rare.

#### 140111. ALLIUM Sp.

No. 6471. From Kotaliyetchinar, Khorassan, August 4, 1940. A plant 2 feet high, with yellowish flowers veined and washed brown, in heads 3 inches across.

## 140112. ALLIUM sp.

No. 6688. From Bardu Forest, Khorassan, August 20, 1940. A hardy plant, with a spindle-shaped swelling 1½ inches through in the middle of the stem, and heads 2½ inches across.

## 140113. Аглим sp.

No. 6689. From Bardu Forest, Khorassan, August 20, 1940. A hardy plant 2 feet high, with heads 2 inches across.

## 140114. ALLIUM Sp.

No. 6695. From Bardu Forest, Khorassan, August 20, 1940. An onion growing on a dry slope, about 2½ feet high, with heads 2½ inches across of rose-purple flowers.

## 140115. ALLIUM sp.

No. 6696. From Bardu Forest, Khorassan, August 20, 1940. A hardy plant about 2 feet high, growing on a dry slope.

## 140116. ALLIUM sp.

No. 6858. From Robat Khan, Khorassan, September 2, 1940. A desert plant about 15 inches high, with heads 2 inches across.

#### 140117. ALLIUM sp.

No. 6919. From Tabas, Khorassan, September 8, 1940. A wild onion with heads 2 inches across.

#### 140118. ALLIUM sp.

No. 6999. From Turbat Haidari, Khorassan, September 12, 1940. From a plowed field.

#### 140119. ALLIUM SD.

No. 7230. From Shahmid, Khorassan, September 26, 1940. A hardy wild onion 3 feet high, with a head  $1\frac{1}{4}$  inches across.

#### 140120. ALLIUM sp.

From Shahkuh, Khorassan, July 20, 1940. From a dry plateau.

#### 140121 to 140124. ALLIUM SATIVUM L. Liliaceae.

Garlic.

140121. No. 5939. From Ahwaz, Khuzistan, April 21, 1940.

140122. No. 6210. From Tehran, June 24, 1940.

140123. No. 7098. From Meshed, Khorassan, September 16, 1940.

140124. No. 7174. From Sabzawar, Khorassan, September 23, 1940.

#### 140125. Furcraea selloa K. Koch. Amaryllidaceae.

From Cuba. Bulbils presented by F. G. Walsingham, Assistant Superintendent, Atkins Institution of the Arnold Arboretum, Soledad, Cienfuegos. Received March 21, 1941.

A furcraea, with a short, stout stem, 3 to 5 feet high, clothed with old, brown leaves and numerous, spreading, straight, bright-green, narrow lanceolate-ensiform leaves about 3 feet long, gradually narrowed into a long, pungent, deciduous, chestnut-brown spine, the leaf margin armed with remote, incurved, horny, chestnut spines ¼ inch long. The slender, green scape, 15 to 20 feet high, bears a spreading, lax-branched panicle 4 to 6 feet long of rather crowded, drooping flowers, the greenish perianth segments with white

# 140125—Continued

margins. Native to Central America from Guatemala to Colombia at altitudes of 3,000 to 9,000 feet.

140126. Rosa. Rosaceae.

Rose.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered March 21, 1941.

A pillar rose grown from a cross made by Martin Bilon, assistant to the late Dr. Walter Van Fleet. In 1927 an unnamed Wichuraiana hybrid produced by Doctor Van Fleet was crossed with the hybrid tea rose, *Independence Day*. Seedling of this cross was in turn crossed with Talisman in 1932. The resulting seedling resembles Talisman in the shape and color of the flowers. The color is possibly a little more intense, and the red and yellow seem to be blended a little more into orange. The plant is spring-flowering, approximately mid-season or a trifle later.

# 140127 to 140136. SACCHARUM. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Experiment Station, Palmira (Valle). Received March 22, 1941.

140127. EPC  $1644 \times PR$  543.140132. EPC  $6561 \times POJ$  2878.140128. EPC  $2072 \times PR$  543.140133. EPC  $6219 \times MC$  129.140129. EPC  $6561 \times POJ$  2878.140134. EPC  $4722 \times 129$ .140130. EPC  $4754 \times POJ$  2878.140135. EPC  $6259 \times POJ$  2878.140131. EPC  $6219 \times POJ$  2727.140136. POJ  $2883 \times EPC$  6688.

140137. SYNSEPALUM DULCIFICUM (Schum.) Daniell (Sideroxylon dulcificum A. DC.). Sapotaceae.

From Florida. Seeds presented by W. Paul Phillips, Orlando. Originally from Canal Zone. Received March 18, 1941.

An ornamental tropical African shrub about 6 feet high, with dark-red fruits, which, when eaten, make sour things taste sweet.

For previous introduction see 75283.

#### 140138 to 140177.

From Afghanistan. Seeds presented by Wilbur Harlan, Kabul. Received March 25, 1941.

Obtained from the Kabul bazar.

140138. ALLIUM CEPA L. Liliaceae.

Onion.

Praz.

140139. ALLIUM CEPA L.

Gandana.

140140 to 140142. Brassica RAPA L. Brassicaceae.

Turnip.

140140. Turbalz.

140141. Sharsham.

140142, Shalzham.

140143. Capsicum frutescens L. Solanaceae.

Redpepper.

Murch.

140144 to 140146. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

140144. Nimla.

140145.

.140146. Tarbooz.

# 140138 to 140177—Continued

140147. CORIANDRUM SATIVUM L. Apiaceae.

Coriander.

Gashnige.

140148 to 140154. Cucumis melo L. Cucurbitaceae.

Muskmelon.

140148. Karbooza.

140152. Karbooza Gird.

140149. Baudrang.

140153.

140150. Karbooza Bergonai.

140154. Khanabad.

140151. Karbooza Daraz.

140155. CUCURBITA PEPO L. Cucurbitaceae.

Pumpkin.

140156. CYDONIA OBLONGA Mill. (Pyrus cydonia L.). Malaceae. For previous introduction see 133997.

Quince.

140157. DAUCUS CAROTA L. Apiaceae.

Carrot.

Zardaz.

140158. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd. Kadu Chopi.

140159. LENS CULINARIS Medik. Fabaceae.

Lentil.

Doll.

140160. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Banjan Roomii.

Temato.

140161 to 140163. Phaseolus vulgaris L. Fabaceae.

Common bean.

140161. Fasila Safait.

140162. Baculii Inglesi.

140163.

140164. Phaseolus sp. Fabaceae.

Fasila Surh.

140165. PISUM SATIVUM L. Fabaceae.

Pea.

Mushong.

140166. PISUM SATIVUM L.

Sarichashma.

140167. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

Muli Safait.

140168. Solanum melongena L. Solanaceae.

Eggplant.

\* Baunjan.

140169. SPINACIA OLERACEA L. Chenopodiaceae.

Common spinach.

140170 to 140177. VITIS VINIFERA L. Vitaceae.

European grape.

140170. White grape.140171. Long white grape.

140174. Large white grape.

140172. Brownish-white grape.

140175. Round white grape. 140176. Small, round, white grape.

140172. Brownish-white gra

140177. White grape.

140173. White grape.

### 140178 to 140221.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received March 25, 1941.

140178. Gossypium. Malvaceae.

Cotton.

No. 6922. From Turbat, Haidari, Khorassan. September 10, 1940.

# 140178 to 140221—Continued

140179. GOSSYPIUM.

No. 6925. From Turbat, Haidari, Khorassan. September 10, 1940. Short staple; yellow-center flowers; said to be good for coarse cloth.

140180 to 140199. Triticum aestivum L. Poaceae.

Common wheat.

140180. No. 5865. From Bushire, Fars, April 14, 1940.

140181. No. 5894. From Bushire, Fars, April 15, 1940.

140182. No. 5934. From Ahwaz, Khuzistan, April 21, 1940.

140183. No. 6047. From Dizful, Khuzistan, May 18, 1940.

140184. No. 6048. From Dizful, Khuzistan, May 18, 1940.

140185. No. 6049. From Dizful, Khuzistan, May 18, 1940.

140186. No. 6050. From Dizful, Khuzistan, May 18, 1940.

140187. No. 6066. From Durud, Luristan, May 20, 1940.

140188. No. 6112. From Durud, Luristan, June 6, 1940.

140189. No. 6113. From Durud, Luristan, June 6, 1940.

140190. No. 6115. From Durud, Luristan, June 7, 1940.

140191. No. 6332. From Shahkuh, Mazenderan, July 19, 1940.

140192. No. 6335. From Shahkuh, Mazenderan, July 19, 1940.

140193. No. 6336. From Shahkuh, Mazenderan, July 19, 1940.

140194. No. 6343. From Karimserai, Mazenderan, July 21, 1940.

140195. No. 6365. From Gurgan, Mazenderan, July 27, 1940.

140196. No. 6401. From Gurgan, Mazenderan, July 30, 1940.

140197. No. 6407. From Gumbatigabus, July 30, 1940.

140198. No. 6421. From Garamab, Khorassan, August 1, 1940.

140199. No. 6429. From Bymurd, Khorassan, August 2, 1940.

140200. AGROPYRON Sp. Poaceae.

Grass.

No. 6479. From Kataligekchinar, Khorassan, August 5, 1940.

140201 to 140219. TRITICUM AESTIVUM L. Poaceae.

Common wheat.

140201. No. 6501. From Bymurd, Khorassan, August 8, 1940.

140202. No. 6665. From Abdullabad, Khorassan, August 14, 1940.

140203. No. 6670. From Abdullabad, Khorassan, August 14, 1940.

140204. No. 6809. From Bijistan, Khorassan, August 26, 1940.

140205. No. 6827. From Fidus, Khorassan, August 28, 1940.

140206. No. 2828. From Fidus, Khorassan, August 28, 1940.

140207. No. 6862. From Khaur, Khorassan, September 5, 1940.

140208. No. 7007. From Turbat Haidari, Khorassan, September 12, 1940.

140209. No. 7008. From Turbat Haidari, September 12, 1940.

140210. No. 7009. From Turbat Haidari, September 12, 1940.

140211. No. 7069. From Turbat Haidari, September 13, 1940.

140212. No. 7072. From Turbat Haidari, September 13, 1940.

140213. No. 7074. From Turbat Haidari, September 13, 1940.

140214. No. 7142. From Nishabur, Khorassan, September 21, 1940.

140215. No. 7192. From Sabzawar, Khorassan, September 24, 1940.

140216. No. 7194. From Sabzawar, Khorassan, September 24, 1940.

# 140178 to 140221—Continued

140217. No. 7198. From Sabzawar, Khorassan, September 24, 1940.

140218. No. 7199. From Sabzawar, Khorassan, September 24, 1940.

140219. No. 7257. From Shahud, Khorassan, September 27, 1940.

140220 and 140221. ZEA MAYS L. Poaceae.

Corn.

140220. No. 6527. From Bymurd, Khorassan, August 8, 1940.

140221. No. 7037. From Turbat Haidari, Khorassan, September 13, 1940.

#### **140222** to 140271. SACCHARUM. Poaceae.

Sugarcane.

From Java. Cuttings presented by Dr. G. Booberg, Director of the Experimental Station, Java Sugar Industry, Pasoeroean. Received March 26, 1941.

140222. Ahoe.

140223. Arjoeno groen.

140224. Bandjarmasin hitam.

140225. Banteng Java.

140226. Boengaja, Bali.

140227. Boetota, Bilatoe.

140228. Booengo aloeta, Bilatoe.

140229. Bourbonriet, Surinam.

140230. Branche Blanche, Reunion.

140231. Cebu purple.

140232. Fotiogo, Mauritius.

140233. Gael Muntok.

140234. Groen, Soembawa.

140235. Hitan Browewang.

140236. Hitan Rokan.

140237. Ireng, Malang.

140238. Iscambine rouge.

140239. Keong, Java.

140240. Kerah, Sumatra.

140241. Khelia, Coimbatore.

140242. Lichtrode knopvariant id.

140243. Malagche Phil.

140244. Mekigeli.

140245. Menado groen.

140246. Menado rood.

140248. Muntok Java.

140249. Oedang, Amboina.

140250. Padangsche Bovenlanden

donkerrood.

140251. Poetih, Borneo.

140252. Ra-cha, Formosa.

140253. Roodbladriet Donomollio.

140254. Rood, Ceram.

140255. Rood, Djapara.

140256. Samuri, Malakka.

140257. Soerat, Borneo groen.

140258. Tadjem mata, Sumatra.

140259. Tamarin, Reunion.

140260. Teboe Poh, Longhiram.

140261. Tijang, Bali.

140262. Timorriet.

140263. Tjemeng Payaman.

140264. Tomohon wit.

140265. Tomohon zwart.

140266. Vico Malakka.

140267. Wit Borneo.

140268. Wit Manilla.

140269. Woeloeng.

140270. Zwart Borneo.

140271. Zwart Manilla.

140247. Monjet Gayam.

# 140272. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From New Jersey. Budsticks presented by Prof. M. A. Blake, Agricultural Experiment Station, New Brunswick. Received March 26, 1941. Chili.

140273. GLYCERIA MAXIMA (Hartm.) Holmberg. Poaceae.

From the Netherlands. Seeds presented by J. Th. Barenbrug, Barenbrug's Zaadhandel, Arnhem. Received March 19, 1941.

Water meadow grass.

#### 140274 to 140290.

From Afghanistan. Seeds presented by Wilbur Harlan. Received March 26, 1941.

140274. Bromus Japonicus Thunb. Poaceae.

Grass.

From Sind Valley, August 13, 1940.

For previous introduction see 110360.

140275. Bromus racemosus L.

From north of Maimana, September 5, 1940.

For previous introduction see 133154.

140276. Cupressus sp. Pinaceae.

Cedar.

From Shah Jehan's Garden, Nimla, August 4, 1940.

140277. HORDEUM sp. Poaceae.

Barley.

From Sind Valley, August 31, 1940.

140278. Hordeum sp.

From Bamian, August 31, 1940.

140279. LATHYRUS SATIVUS L. Fabaceae.

Bittervetch.

Kalol. From the Kabul bazar.

140280. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

Gishka. From the Kabul bazar.

140281. NICOTIANA TABACUM L. Solanaceae.

Common tobacco.

From the Kabul bazar.

140282. Panicum miliaceum L. Poaceae.

Broomcorn millet.

Azan. From the Kabul bazar.

140283. Rosa sp. Rosaceae.

A wild rose from Sonmarg.

140284. Rosa sp.

A wild rose from the Sind Valley.

140285. THUJA ORIENTALIS L. Pinaceae.

Oriental arborvitae.

From Kabul, November 13, 1940.

140286. TRIFOLIUM RESUPINATUM L. Fabaceae.

Persian clover.

Shaftal, najot. From the Kabul bazar.

140287. TRIFOLIUM RESUPINATUM L.

Siah dana. From the Kabul bazar.

140288. VICIA FABA L. Fabaceae.

Broadbean.

Baculi Bodrang. From the Kabul bazar.

140289. VICIA FABA L.

Bauculi Surh. From the Kabul bazar.

140290. ZEA MAYS L. Poaceae.

Corn.

Jowarie. From the Kabul bazar, May 5, 1940.

#### 140291 to 140314.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States
Department of Agriculture. Received March 27, 1941.

140291 to 140294. CICER ARIETINUM L. Fabaceae.

Chickpea.

140291. No. 5826. From Shiraz, Fars, April 5, 1940.

140292. No. 6521. From Brujmerd, Khorassan, August 8, 1940. Pounded, and the kernels used as food. Excellent cooked with bacon.

## 140291 to 140314—Continued

140293. No. 6644. From Meshed, Khorassan, August 13, 1940.

140294. No. 7129. From Nishabur, Khorassan, September 20, 1940.

140295 to 140298. PISUM SATIVUM L. Fabaceae.

Pea.

140295. No. 6459. From Bujmerd, Khorassan, August 7, 1940.

140296. No. 6182. From Tehran, June 18, 1940.

140297. No. 6192. From Tehran, June 18, 1940.

140298. No. 6618. From Meshed, Khorassan, August 12, 1940.

140299. PISUM sp. Fabaceae.

No. 5968. From Talimansur, Bakhtiari, April 27, 1940. An annual 18 inches high, from the oakwoods.

# 140300 to 140314. Phaseolus spp. Fabaceae.

140300. Phaseolus coccineus L.

Scarlet runner bean.

No. 5827. From Shiraz, Fars, April 5, 1940.

140301 to 140314. Phaseolus vulgaris L.

Common bean.

140301. No. 5936. From Ahwaz, Khuzistan, April 21, 1940.

140302. No. 6169. From Tehran, June 16, 1940.

140303. No. 6188. From Tehran, June 18, 1940.

140304. No. 6025. From Tehran, June 22, 1940.

140305. No. 6206. From Tehran, June 22, 1940.

140306. No. 6400. From Gurgan, July 29, 1940.

Eaten ripe and as string beans.

140307. No. 6631. From Meshed, Khorassan, August 12, 1940.

140308. No. 6634. From Meshed, Khorassan, August 13, 1940.

140309. No. 6643. From Meshed, Khorassan, August 13, 1940.

140310. No. 6645. From Meshed, August 13, 1940.

140311. No. 6646. From Meshed, August 13, 1940.

Plant much branched, twining, very floriferous.

140312. No. 6903. From Tabas, Khorassan, September 8, 1940.

140313. No. 7056. From Turbat, Haidari, September 13, 1940.

140314. No. 7067. From Turbat Haidari, Khorassan, September 13, 1940.

## 140315. BOUGAINVILLEA GLABRA Choisy. Nyctaginaceae.

From Puerto Rico. Plants received from Claud Horn, Agricultural Experimental Station, Mayaguez. Received March 27, 1941.

A white variety.

#### 140316 to 140468.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received March 27, 1941.

140316 to 140319. Abelmoschus esculentus (L.) Moench. Malvaceae. Okra.

140316. No. 5878. From Bushire, Fars, April 14, 1940.

140317. No. 5921. From Ahwaz, Khuzistan, April 20, 1940.

140318. No. 6171. From Tehran, June 17, 1940.

140319. No. 6628. From Meshed, Khorassan, August 12, 1940. Fruit eaten when 2 to 3 inches long.

140320 to 140335. ALLIUM CEPA L. Liliaceae.

- Onion.
- 140320. No. 5925. From Ahwaz, Khuzistan, April 21, 1940. Globose, red and white.
- 140321. No. 6059. From Dizful, Khuzistan, May 21, 1940. Globose to flattened, red and white.
- 140322. No. 6185. From Tehran, June 18, 1940. Used as green onions.
- 140323. No. 6186. From Tehran, June 18, 1940. Semiglobose, red and white; good quality.
- 140324. No. 6389. From Gurgan, July 29, 1940. Globose, large, white and very strong.
- 140325. No. 6425. From Bujmerd, Khorassan, August 1, 1940. Small table onions.
- 140326. No. 6432. From Bujmerd, Khorassan, August 2, 1940. Globose, red and vellow.
- 140327. No. 6445. From Bujmerd, Khorassan, August 2, 1940. Tall, flat-leaved onion, with white flowers in head about 13/4 inches across.
- 140328. No. 6617. From Meshed, Khorassan, August 12, 1940. Flat, red purple.
- 140329. No. 6786. From Turbat, Shaikh Jan, Khorassan, August 23, 1940. Flat, red to red purple, small, hot.
- 140330. No. 6813. From Firdus, Khorassan, August 27, 1940. Flat, white and red.
- 140331. No. 6900. From Tabas, Khorassan, September 8, 1940. Flat, red purple, tender, and not too strong.
- 140332. No. 7040. From Turbat Haidari, Khorassan, September 13, 1940. Large, flat, white, tender.
- 140333. No. 7118. From Nishabur, Khorassan, September 20, 1940. Flat, red and white.
- 140334. No. 7177. From Sabzawar, Khorassan, September 23, 1940. Very flat, large, white, rather mild.
- 140335. No. 7250. From Shahrud, Khorassan, September 27, 1940. Flat, red and white, 3 inches in diameter.
- 140336 to 140348. ALLIUM PORRUM L. Liliaceae.

- Leek.
- 140336. No. 5920. From Ahwaz, Khuzistan, April 20, 1940.
- 140337. No. 6189. From Tehran, June 18, 1940. Potherb.
- 140338. No. 6379. From Gurgan, July 28, 1940. Leaves eaten green.
- 140339. No. 6435. From Bujmerd, Khorassan, August 2, 1940. Eaten fresh with bread.
- 140340. No. 6620. From Meshed, August 12, 1940.
- 140341. No. 6637. From Meshed, Khorassan, August 13, 1940. Leaves eaten fresh with bread.
- 140342. No. 6774. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Leaves eaten fresh.
- 140343. No. 6814. From Firdus, Khorassan, August 27, 1940. Eaten fresh like onions.
- 140344. No. 6913. From Tabas, Khorassan, September 8, 1940.
- 140345. No. 7043. From Turbat Haidari, Khorassan, September 13, 1940. Leaves eaten raw with bread.
- 140346. No. 7130. From Nishabur, Khorassan, September 20, 1940. Leaves eaten fresh.

- 140347. No. 7176. From Sabzawar, Khorassan, September 23, 1940. Leaves eaten fresh.
- 140348. No. 7254. From Shahrud, Khorassan, September 27, 1940. Leaves eaten fresh.
- 140349 to 140362. Beta vulgaris L. Chenopodiaceae.

Common beet.

- 140349. No. 5891. From Bushire, Fars, April 15, 1940.
- 140350. No. 5926. From Ahwaz, Khuzistan, April 21, 1940.
- 140351. No. 6052. From Dizful, Khuzistan, May 18, 1940.
- 140352. No. 6177. From Tehran, June 17, 1940. Long, tapered, blood red, sweet but very stringy.
- 140353. No. 6369. From Gurgan, Mazenderan, July 28, 1940. Globose, red outside and yellow inside, sweet.
- 140354. No. 6526. From Bujmerd, Khorassan, August 8, 1940.
- 140355. No. 6624. From Meshed, Khorassan, August 12, 1940. Long, pale red outside and yellow inside.
- 140356. No. 6627. From Meshed, Khorassan, August 12, 1940. Said to be the local sugar beet.
- 140357. No. 6820. From Firdus, Khorassan, August 27, 1940.
- 140358. No. 6899. From Tabas, Khorassan, September 8, 1940. Semiglobose; red purplish outside, yellow inside.
- 140359. No. 7036. From Turbat Haidari, Khorassan, September 13, 1940. Sub-globose, yellow to red purple outside, yellow-fleshed; not fibrous.
- 140360. No. 7121. From Nishabur, Khorassan, September 20, 1940. Semiglobose; reddish outside.
- 140361. No. 7178. From Sabzawar, Khorassan, September 23, 1940.
- 140362. No. 7249. From Shahrud, Khorassan, September 27, 1940. Elongate, red purple outside, yellow inside.
- 140363 to 140375. Capsicum frutescens L. Solanaceae.

Redpepper.

- 140363. No. 5918. From Ahwaz, Khuzistan, April 20, 1940.
- 140364. No. 6064. From Dizful, Khuzistan, May 18, 1940. Bullnosed, red, mild, 2 inches long.
- 140365. No. 6198. From Tehran, June 19, 1940. Bullnosed, about 3 inches long; scarlet, sweet.
- 140366. No. 6386. From Gurgan, July 28, 1940. Fruit about 3 inches long; rare.
- 140367. No. 6454. From Bujmerd, Khorassan, August 2, 1940. Pointed, up to about 3 inches long, mildly hot.
- 140368. No. 6606. From Meshed, Khorassan, August 12, 1940. Fruits crimson, semibullnosed, hot to mildly hot.
- 140369. No. 6770. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Fruit 2½ inches long, handsome red; flesh tough, rather sweet.
- 140370. No. 6901. From Tabas, Khorassan, September 8, 1940. Fruit pointed, crimson, flesh mild, seeds hot.
- 140371. No. 6991. From Turbat Haidari, Khorassan, September 12, 1940. Fruit pointed, about 3 inches long, crimson, hot.
- 140372. No. 7047. From Turbat Haidari, Khorassan, September 13, 1940.
- 140373. No. 7080. From Meshed, Khorassan, September 15, 1940. Fruits bullnosed, crossed with the pointed sort, about 3 inches long, scarlet; flesh sweet, hot-seeded.

## 140316 to 140468---Continued

140374. No. 7144. From Nishabur, Khorassan, September 21, 1940. Fruits pointed, about 2½ inches long, hot.

140375. No. 7241. From Shahrud, Khorassan, September 27, 1940. Fruits pointed, scarlet, and hot.

140376 to 140391. DAUCUS CAROTA L. Apiaceae.

Carrot.

140376. No. 5892. From Bushire, Fars, April 15, 1940.

140377. No. 5897. From Bushire, Fars, April 16, 1940.

140378. No. 5914. From Ahwaz, Khuzistan, April 20, 1940.

140379. No. 6054. From Dizful, Khuzistan, May 18, 1940.

140380. No. 6181. From Tehran, June 17, 1940. Stubby, orange, and of fair quality.

140381. No. 6293. From Gurgan, July 11, 1940.

140382. No. 6384. From Gurgan, July 28, 1940.

140383. No. 6506. From Bujmerd, Khorassan, August 8, 1940. Yellow, with less dissected and much more tomentose leaves than others seen.

140384. No. 6632. From Meshed, Khorassan, August 12, 1940. Said to be of foreign origin.

140385. No. 6635. From Meshed, Khorassan, August 13, 1940. Yellow, long.

140386. No. 6785. From Turbati Shaikh Jam, Khorassan, August 23, 1940.

140387. No. 6815. From Firdus, Khorassan, August 27, 1940.

140388. No. 6905. From Tabas, Khorassan, September 8, 1940. Yellow, with coarse leaves.

140389. No. 7038. From Turbat Haidari, Khorassan, September 13, 1940. Roots purple outside, pale yellow inside; no fiber, low in sugar; leaves coarsely cut.

140390. No. 7145. From Nishabur, Khorassan, September 21, 1940. Leaves coarsely cut.

140391. No. 7175. From Sabzawar, Khorassan, September 23, 1940.

140392 to 140402. LACTUCA SATIVA L. Cichoriaceae.

Garden lettuce.

140392. No. 5924. From Ahwaz, Khuzistan, April 21, 1940. Loose green heads about 10 inches long; bitter.

140393. No. 6387. From Gurgan, July 29, 1940.

140394. No. 6524. From Bujmerd, Khorassan, August 8, 1940.

140395. No. 6616. From Meshed, Khorassan, August 12, 1940.

140396. No. 6629. From Meshed, Khorassan, August 12, 1940. Large, foreign sort.

140397. No. 6783. From Turbati Shaikh Jam, Khorassan, August 23, 1940.

140398. No. 6822. From Firdus, Khorassan, August 27, 1940. Seeds used for medicine.

140399. No. 6898. From Tabas, Khorassan, September 8, 1940.

140400. No. 7049. From Turbat Haidari, Khorassan, September 13, 1940.

140401. No. 7131. From Nishabur, Khorassan, September 20, 1940.

140402. No. 7188. From Sabzawar, Khorassan, September 24, 1940.

140403 to 140423. Lycopersicon esculentum Mill. Solanaceae. Tomato.

140403. No. 5930. From Ahwaz, Khuzistan, April 21, 1940.

140404. No. 6060. From Dizful, Khuzistan, May 18, 1940.

140405. No. 6197. From Tehran, June 19, 1940. Red, pear-type, local variety.

- 140406. No. 6378. From Gurgan, July 28, 1940. Grows wild along streets and in fields; red and round.
- 140407. No. 6397. From Gurgan, July 29, 1940. Fruit flat up to about 3 inches across, yellow with few seeds.
- 140408. No. 6412. From Gumbat-Gabus, July 31, 1940.
- 140409. No. 6415. From Marave, Khorassan, July 31, 1940. Fruit flat, up to about 3 inches across, red and smooth.
- 140410. No. 6450. From Bujmerd, Khorassan, August 2, 1940.
- 140411. No. 6605. From Meshed, Khorassan, August 11, 1940. Fruit flattened, up to about 4 inches across; red, smooth.
- 140412. No. 6609. From Meshed, Khorassan, August 12, 1940. Fruit irregular pear-shaped, 3½ inches long, red; with less water, firmer flesh and smaller seeds than other varieties.
- 140413. No. 6639. From Meshed, Khorassan, August 12, 1940.
- 140414. No. 6768. From Turbati Shaikh Jam, August 23, 1940. Fruits sub-globose, 1 inch in diameter, red.
- 140415. No. 6788. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A naturalized red variety.
- 140416. No. 6831. From Firdus, Khorassan, August 28, 1940. Fruits globose; red.
- 140417. No. 6843. From Meshed, Khorassan, September 18, 1940. Smooth, 4 inches in diameter, red.
- 140418. No. 6857. From Tabas, Khorassan, August 31, 1940. Fruits flat, up to 2½ inches, red, very acid.
- 140419. No. 6990. From Turbat Haidari, Khorassan, September 12, 1940. Fruit flat, yellow.
- 140420. No. 7055. From Turbat Haidari, Khorassan, September 13, 1940. Small, globose, well-flavored.
- 140421. No. 7126. From Nishabur, Khorassan, September 20, 1940.
- 140422. No. 7247. From Shahrud, Khorassan, September 27, 1940. Red, flat, up to about 3 inches in diameter.
- 140423. No.7182. From Sabzawar, Khorassan, September 23, 1940. Red, either globose or flat.
- 140424 to 140444. RAPHANUS SATIVUS L. Brassicaceae.

Radish.

- 140424. No. 6211. From Tehran, June 24, 1940. Black winter variety.
- 140425. No. 6217. From Tehran, June 24, 1940. White winter variety.
- 140426. No. 6428. From Bujmerd, Khorassan, August 2, 1940. Round, red spring radish.
- 140427. No. 6641. From Meshed, Khorassan, August 13, 1940. Mixture of winter sorts.
- 140428. No. 6775. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Mixture of winter sorts.
- 140429. No. 6777. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Red, small, spring radish.
- 140430. No. 6818. From Firdus, Khorassan, August 27, 1940. Mixture of winter sorts.
- 140431. No. 6908. From Tabas, Khorassan, September 8, 1940. Mixture of winter radishes.
- 140432. No. 6914. From Tabas, Khorassan, September 8, 1940. A spring radish.

- 140433. No. 7062. From Turbat Haidari, Khorassan, September 13, 1940. Small, spring radish.
- 140434. No. 7063. From Turbat Haidari, Khorassan, September 13, 1940. Mixture of winter sorts.
- 140435. No. 7119. From Nishabur, Khorassan, September 20, 1940. Small, red-purple and white radishes.
- 140436. No. 7120. From Nishabur, Khorassan, September 20, 1940. Mixture of winter varieties.
- 140437. No. 7183. From Sabzawar, Khorassan, September 23, 1940. Mixture of winter sorts.
- 140438. No. 7184. From Sabzawar, Khorassan, September 23, 1940. Semiglobose, red purple, tender, mild.
- 140439. No. 7251. From Shahrud, Khorassan, September 27, 1940. Mixture of winter sorts.
- 140440. No. 7252. From Shahrud, Khorassan, September 27, 1940. Red, sub-globose, small, spring radish.
- 140441. No. 5915. From Ahwaz, Khuzistan, April 20, 1940. Winter radish.
- 140442. No. 6168. From Tehran, June 16, 1940. Small, red spring radish.
- 140443. No. 6377. From Gurgan, July 28, 1940. Small, spring radish.
- 140444. No. 6451. From Bujmerd, Khorassan, August 2, 1940. Winter radish of mixed sorts.
- 140445 to 140460. Solanum melongena L. Solanaceae. Eggplant.
  - 140445. No. 5896. From Bushire, Fars, April 15, 1940. Long, purple variety.
  - 140446. No. 5917. From Ahwaz, Khuzistan, April 20, 1940.
  - 140447. No. 6058. From Dizful, Khuzistan, May 18, 1940. Elongate, 6 to 8 inches long, purple.
  - 140448. No. 6187. From Tehran, June 18, 1940. Long, dark purple.
  - 140449. No. 6376. From Gurgan, July 28, 1940. Purple, 6 to 8 inches long.
  - 140450. No. 6434. From Bujmerd, Khorassan, August 2, 1940. Long, purple variety.
  - 140451. No. 6647. From Meshed, Khorassan, August 13, 1940. Long, purple.
  - 140452. No. 6780. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Elongate, up to 7 inches long, deep purple.
  - 140453. No. 6912. From Tabas, Khorassan, September 8, 1940. Fruit purple black, elongate, 7 inches long, few seeds.
  - 140454. No. 6973. From Turbat Haidari, Khorassan, September 11, 1940. Pale green, 9 by 2¾ inches.
  - 140455. No. 6962. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 4 by 12 inches, purple black.
  - 140456. No. 7015. From Turbat Haidari, Khorassan, September 12, 1940. Grass green, turning yellow.
  - 140457. No. 7044. From Turbat Haidari, Khorassan, September 13, 1940. Green and black-purple fruit; few seeds.
  - 140458. No. 7134. From Nishabur, Khorassan, September 20, 1940. Elongate, purple-black fruit.
  - 140459. No. 7180. From Sabzawar, Khorassan, September 23, 1940. Elongate, pale-purple fruit.
  - 140460. No. 7233. From Shahrud, Khorassan, September 27, 1940. Pale purple, 7 by 2 inches, few seeds.

140461 to 140468. Spinacia oleracea L. Chenopodiaceae. Common spinach.

140461. No. 5923. From Ahwaz, Khuzistan, April 20, 1940.

140462. No. 6179. From Tehran, June 17, 1940.

140463. No. 6388. From Gurgan, July 29, 1940.

140464. No. 6626. From Meshed, Khorassan, August 12, 1940.

140465. No. 7045. From Turbat Haidari, Khorassan, September 13, 1940.

140466. No. 7117. From Nishabur, Khorassan, September 20, 1940.

140467. No. 6426. From Bujmerd, Khorassan, August 2, 1940.

140468. No. 7237. From Shahrud, Khorassan, September 27, 1940.

#### 140469 and 140470.

From Guatemala. Tubers presented by F. W. McBryde, New Orleans. Received March 31, 1941.

140469. SOLANUM. Solanaceae.

Potato.

Chiantla.

140470. SOLANUM.

Todas Dantos.

### 140471. CUCUMIS MELO L. Cucurbitaceae.

Muskmelon.

From Texas. Seeds presented by G. H. Godfrey, Agricultural Experimental Station, Weslaco. Received March 21, 1941.

Smell melon. Fruit small, orange yellow, somewhat striped while still green.

# 140472 to 140627. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

# Watermelon.

From Iran. Seeds collected by Walter Koelz, Bureau of Plant Industry, United States
Department of Agriculture. Received March 27, 1941.

140472. No. 5837. From Kazerun, Fars, April 11, 1940.

140473. No. 5954. From Bushire, Fars, April 14, 1940.

140474. No. 5901. From Bushire, Fars, April 16, 1940. Globose, 1 foot long, grass green; flesh pale pink, of good feature but without sugar; rind is from ½ to 1 inch wide.

140475. No. 5928. From Ahwaz, Khuzistan, April 21, 1940.

140476. No. 6056. From Dizful, Khuzistan, May 18, 1940.

140477. No. 6159. From Tehran, June 15, 1940. Globose, black green, no sugar.

140478. No. 6178. From Tehran, June 17, 1940.

140479. No. 6215. From Tehran, June 24, 1940. A mixture of round sorts.

140480. No. 6221. From Tehran, June 24, 1940. An early variety, dark green with narrow darker rib stripe; tender; rind ½ inch.

140481. No. 6227. From Tehran, June 26, 1940.

140482. No. 6228. From Tehran, June 26, 1940. Fruit 8 by 5 inches, pale green; flesh red, good quality.

140483. No. 6231. From Tehran, June 27, 1940. An early and smaller variety.

140484. No. 6232. From Tehran, June 27, 1940. Fruit 9 by 6 inches, elongate; rind 34 inch thick; fair quality, seedy.

140485. No. 6248. From Tehran, July 7, 1940. Fruit subglobose, 10 inches long.

140486. No. 6261. From Khatisabad, Gurgan, July 10, 1940. Fruit gray green, with narrow irregular blotch lines, 10 by 6 inches; flesh old rose, seedy.

- 140487. No. 6264. From Kratisabad, Gurgan, July 10, 1940.
- 140488. No. 6372. From Gurgan, Mazendaran, July 28, 1940. Fruit globose, 8 inches long, pea green; flesh rose, streaked with yellow, poor quality.
- 140489. No. 6393. From Gurgan, July 29, 1940. Fruit globose, 10 inches, sea green, with irregular ribs and splashes of black green; fair quality.
- 140490. No. 6440. From Bujmerd, Khorassan, August 2, 1940. Globose, grass green with lighter stripes; rind ½ inch thick; flesh pink, good and very heavy.
- 140491. No. 6441. From Bujmerd, Khorassan, August 2, 1940. Globose, 10 inches in diameter, grass green with broad, irregular lighter stripes; flesh bright rose, good.
- 140492. No. 6457. From Bujmerd, Khorassan, August 3, 1940. Fruit globose, 7 inches in diameter; rind ½ inch thick; flesh rose, solid.
- 140493. No. 6508. From Bujmerd, Khorassan, August 8, 1940. A good small melon.
- 140494. No. 6509. From Bujmerd, Khorassan, August 8, 1940. A market mixture of seeds collected for roasting.
- 140495. No. 6511. From Bujmerd, Khorassan, August 8, 1940. Fruit globose, pale green with darker stripes; flesh yellow.
- 140496. No. 6512. From Bujmerd, Khorassan, August 8, 1940. Fruit 12 by 7 inches, grass green with faint stripes of a paler color; flesh rose, good.
- 140497. No. 6533. From Meshed, Khorassan, August 10, 1940. Fruit 10 by 6½ inches, sea green with darker streaks; rind ½ inch thick; flesh rose.
- 140498. No. 6537. From Meshed, Khorassan, August 10, 1940. Fruit 10 by 6 inches, equal-width stripes of sea green and grass green; rind \( \frac{5}{8} \) inch thick; flesh good, rose.
- 140499. No. 6542. From Meshed, Khorassan, August 10, 1940. Fruit subglobose, 9 inches in diameter, grass green with darker stripes; flesh rose, good texture, fair taste.
- 140500. No. 6543. From Meshed, Khorassan, August 10, 1940. Fruit globose, 10 inches in diameter, pea green with darker green lines and scattered black spots; flesh deep pink, good.
- 140501. No. 6544. From Meshed, Khorassan, August 10, 1940. Fruit globose, 8 inches in diameter, grass green; rind ½ inch thick; flesh rose, good quality.
- 140502. No. 6545. From Meshed, Khorassan, August 10, 1940. Fruit globose, 8 inches in diameter, pale green; flesh white, tinged pink, good.
- 140503. No. 6553. From Meshed, Khorassan, August 10, 1940. Fruit 12 by 8 inches, grass green with rib lines a little darker; rind 5/8 inch thick; flesh deep pink, good.
- 140504. No. 6554. From Meshed, Khorassan, August 10, 1940. Fruit globose, 8 inches in diameter; rind ½ inch thick; flesh whitish, stained rose, good.
- 140505. No. 6555. From Meshed, Khorassan, August 10, 1940. Fruit globose, 8½ inches in diameter, sea green with splashes of black to brown broken narrow rib lines; rind ½ inch thick; flesh white, stained rose.
- 140506. No. 6556. From Meshed, Khorassan, August 10, 1940. Fruit small, 8 by 6 inches, curiously spotted whitish and grass green; flesh deep rose, fine.
- 140507. No 6587. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 6½ inches in diameter, stripe mottling of grass and pea green; flesh rose, good.
- 140508. No. 6588. From Meshed, Khorassan, August 11, 1940. Fruit 10 by 5 inches, grass green; rind \( \frac{3}{6} \) inch thick; flesh rose, good.
- 140509. No. 6604. From Meshed, Khorassan, August 11, 1940. Fruit globose, 8 inches in diameter, grass green with black spots and stripes; flesh rose, good.
- 140510. No. 6611. From Meshed, Khorassan, August 12, 1940. Fruit 14 by 61/2 inches, grass green with paler stripes; flesh apricot, good texture, low in sugar.

- 140511. No. 6612. From Meshed, Khorassan, August 12, 1940. Fruit subglobose, 9½ inches in diameter, pea green with fretted rib lines of black; rind ¾ inch thick; flesh deep pink, good.
- 140512. No. 6613. From Meshed, Khorassan, August 12, 1940. Fruit globose, 10 inches in diameter, alternate stripes of pea green and pale green; rind ¾ inch thick; flesh apricot, good.
- 140513. No. 6633. From Meshed, Khorassan, August 12, 1940. Seed-roaster's sample.
- 140514. No. 6653. From Meshed, Khorassan, August 13, 1940. Fruit subglobose, 6 inches in diameter, grass green with paler spots. A good, small melon.
- 140515. No. 6662. From Abdullabad, Khorassan.
- 140516. No. 6663. From Abdullabad, Khorassan, August 14, 1940. Fruit said to be dry brown, subglobose, 6 inches in diameter, sea green with darker stripes; flesh pink, good; rind ½ inch thick.
- 140517. No. 6664. From Abdullabad, Khorassan, August 14, 1940. Fruit globose, 5 inches in diameter, pea green with darker stripes; flesh pink, good.
- 140518. No. 6671. From Abdullabad, Khorassan, August 15, 1940. Fruit globose, 5 inches in diameter, black green; flesh pink, good; rind 1/4 inch thick.
- 140519. No. 6701. From Karizinu, Khorassan, August 21, 1940. Fruit 10 by 7 inches, pale green with broken reticulations darker; rind \% inch thick; flesh bright yellow, good.
- 140520. No. 6707. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 10 inches in diameter, dark green; flesh pink, streaked with white.
- 140521. No. 6708. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 14 by 7 inches, grass green and reticulated darker; rind ½ inch thick; flesh bright pink, good.
- 140522. No. 6709. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 12½ by 8½ inches, pea green with broken, irregular stripes of a darker green; rind ½ inch thick; flesh cream, fair.
- 140523. No. 6710. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 9 inches in diameter, grass green with chain blotches of darker green; flesh pink, streaked with white, fair.
- 140524. No. 6711. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 8 inches in diameter, sea green with faint broad, broken stripes of dark green; rind ½ inch thick; flesh pink, fair.
- 140525. No. 6712. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, green with deep green, narrow stripes; rind ½ inch thick; flesh pink, good.
- 140526. No. 6713. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, pale green; rind ½ inch thick; flesh white, tinged pink, fair.
- 140527. No. 6714. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 9 inches in diameter, sea green with black-green stripes; rind ½ inch thick; flesh pink, good.
- 140528. No. 6715. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 13 by 6 inches, sea green with broad, broken, darker stripes; hard rind ½ inch thick; flesh firm, apricot pink, fair.
- 140529. No. 6716. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 11½ by 5½ inches, pea green with irregular broad paler stripes; flesh pink, fair.
- 140530. No. 6717. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, pea green with black stripes; rind ½ inch thick; flesh pink, good.
- 140531. No. 6718. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 8 inches in diameter, pea green with broken, darker reticulations; rind ½ inch thick; flesh pink, fair.

- 140532. No. 6720. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, black green; rind hard, ½ inch thick; flesh pink, good.
- 140533. No. 6721. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 8 inches in diameter, grass green with thin dark-green stripes; flesh cream in heart, pink around seeds.
- 140534. No. 6722. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7½ inches in diameter, green white with narrow, grass-green stripes; rind very hard, ½ inch thick; flesh apricot, good keeper.
- 140535. No. 6723. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 9 inches in diameter, sea green with heavy, broken grass-green reticulations; rind ½ inch thick; flesh apricot pink, good.
- 140536. No. 6724. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 6 inches in diameter, green white with faint reticulations; rind ½ inch thick, very hard; flesh pink. Good keeper.
- 140537. No. 6725. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 8½ inches in diameter; pea green with thin chain ribs; rind ½ inch thick, hard; flesh pink, fair.
- 140538. No. 6726. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 10 inches in diameter, deep grass green with thin ribs of black; rind hard, ½ inch thick; flesh firm, white around heart, pink around seeds. Good keeper.
- 140539. No. 6727. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, grass green with thin, irregular black stripes; rind \% inch thick; flesh pale pink, fair.
- 140540. No. 6754. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 12 by 5 inches, sea green; rind hard, ½ inch thick; flesh white, tinged pink around the seeds. Winter sort.
- 140541. No. 6758. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7½ inches in diameter, grass green with thin, irregular darker stripes; rind ½ inch thick; flesh pink, good.
- 140542. No. 6759. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 12 by 8 inches, pea green with broken vermiculations; rind ½ inch thick; flesh pink.
- 140543. No. 6799. From Meshed, Khorassan, August 24, 1940. Fruit globose, 10 inches in diameter, sea green with faint darker ribs; rind % inch thick; flesh pink.
- 140544. No. 6801. From Maina, Khorassan, August 26, 1940.
- 140545. No. 6819. From Firdus, Khorassan, August 27, 1940. Globose, small, about 7 to 8 inches in diameter.
- 140546. No. 6837. From Firdus, Khorassan, August 30, 1940. Fruit 12 by 10 inches, sea green; rind ½ inch thick; flesh yellow, heavily stained pink around seeds.
- 140547. No. 6838. From Firdus, Khorassan, August 30, 1940. Fruit globose, 5 inches in diameter, black green; rind % inch thick; flesh pink, good. Irrigated.
- 140548. No. 6839. From Firdus, Khorassan, August 30, 1940. Fruit subglobose, 10 inches in diameter, grass green with broken ribs of black green; rind ½ inch thick; flesh apricot, stained rose around seeds, good.
- 140549. No. 6840. From Firdus, Khorassan, August 30, 1940. Fruit globose, 5 inches in diameter, sea green vermiculated darker; rind ¼ inch thick; flesh rose, good.
- 140550. No. 6844. From Tabas, Khorassan, August 31, 1940. Fruit globose, 9 inches in diameter, pea green vermiculated darker; rind ½ inch thick; flesh pink, good.
- 140551. No. 6845. From Tabas, Khorassan, August 31, 1940. Fruit globose, 9 inches in diameter, grass green with darker stripes; rind ½ inch thick; flesh pink.
- 140552. No. 6846. From Tabas, Khorassan, August 31, 1940. Fruit subglobose, 6 inches in diameter, pea green, vermiculated darker; rind 3/8 inch thick; flesh rose, insipid.

- 140553. No. 6847. From Tabas, Khorassan, August 31, 1940. Fruit globose, 10 inches in diameter, dark grass green with faint, darker stripes; rind 3/4 inch thick; flesh pink, good.
- 140554. No. 6848. From Tabas, Khorassan, August 31, 1940. Fruit 10 by 6 inches, sea green; rind ¼ inch thick; flesh pink, good.
- 140555. No. 6849. From Tabas, Khorassan, August 31, 1940. Fruit subglobose, 10 inches in diameter, pea green with narrow black stripes; rind 3/8 inch thick; flesh rich apricot, insipid.
- 140556. No. 6850. From Tabas, Khorassan, August 31, 1940. Fruit globose, 9 inches in diameter, cloudy grass green with darker stripes; flesh bright yellow, insipid; rind % inch thick.
- 140557. No. 6853. From Tabas, Khorassan, August 31, 1940. Fruit globose, 9 inches in diameter, dark green with marbled black; rind ½ inch thick; flesh deep apricot red, good.
- 140558. No. 6854. From Tabas, Khorassan, August 31, 1940. Fruit globose, 9 inches in diameter, pea green with narrow black-green stripes; rind ¾ inch thick; flesh pink, good.
- 140559. No. 6856. From Tabas, Khorassan, September 1, 1940. Fruit 12 by 5 inches, sea green; rind \(^3\)% inch thick; flesh bright pink, insipid.
- 140560. No. 6859. From Tabas, Khorassan, September 3, 1940. Fruit subglobose, 11 inches in diameter, sea green; flesh bright yellow, insipid; rind ½ inch thick.
- 140561. No. 6896. From Tabas, Khorassan, September 8, 1940.
- 140562. No. 6952. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 10 by 7½ inches, pea green, vermiculated darker; rind ½ inch thick; flesh rose, good.
- 140563. No. 6953. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 9 by 7 inches, pea green with darker broken vermiculations; rind 3% inch thick; flesh rose, good.
- 140564. No. 6954. From Turbat Haidari, Khorassan, September 11, 1940. Fruit subglobose, 9 inches in diameter, green white mottled darker with broad, black-green stripes; rind ½ inch thick; flesh bright pink, fine.
- 140565. No. 6955. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 14 by 6 inches, pea green with vermiculations darker; flesh rose, good; rind ½ inch thick.
- 140566. No. 6956. From Turbat Haidari, Khorassan, September 11, 1940. Fruit globose, 7 inches in diameter, green white with narrow irregular darker stripes; rind % inch thick; flesh rose, fair.
- 140567. No. 6957. From Turbat Haidari, Khorassan, September 11, 1940. Fruit globose, 10 inches in diameter, black green with deeply indented ribs; rind \% inch thick; flesh white, tinged rose around seeds, good.
- 140568. No. 6976. From Turbat Haidari, Khorassan, September 12, 1940. Fruit globose, 12 inches in diameter, black green, faintly clouded paler shade; rind ½ inch thick; flesh pink, flecked yellow, good.
- 140569. No. 6977. From Turbat Haidari, Khorassan, September 12, 1940. Fruit 12 by 6 inches, tapering to stem, sea green, marbled and striped paler; rind ½ inch thick; flesh pink, streaked apricot; good.
- 140570. No. 6978. From Turbat Haidari, Khorassan, September 12, 1940. Fruit globose, 9 inches in diameter, sea green with handsome dark-green stripes; rind % inch thick; flesh pink; good.
- 140571. No. 6979. From Turbat Haidari, Khorassan, September 12, 1940. Fruit subglobose, 6 inches in diameter, grass green; rind \(^3\)k inch thick; flesh pink; fine.
- 140572. No. 6980. From Turbat Haidari, Khorassan, September 12, 1940. Fruit globose, 10 inches in diameter, pea green flecked and obscurely striped paler; rind % inch thick; flesh pink, streaked apricot, good.

- 140573. No. 6981. From Turbat Haidari, Khorassan, September 12, 1940. Fruit 12 by 7 inches, black green; rind \(^3\)/8 inch thick; flesh pink, good.
- 140574. No. 7002. From Turbat Haidari, Khorassan, September 12, 1940. Fruit globose, 7 inches in diameter, sea green with irregular deep ribs; rind \(^3\)% inch thick; flesh pink, good.
- 140575. No. 7003. From Turbat Haidari, Khorassan, September 12, 1940. Fruit globose, 7 inches in diameter, sea green, reticulated darker; rind \% inch thick; flesh pink, good.
- 140576. No. 7042. From Turbat Haidari, Khorassan, September 13, 1940. Bazar seed-roaster's mixture; melons of good quality.
- 140577. No. 7100. From Nishabur, Khorassan, September 19, 1940. Fruit 10 by 8 inches, grass green with darker stripes; rind 1/3 inch thick; flesh deep pink, good.
- 140578. No. 7101. From Nishabur, Khorassan, September 19, 1940. Fruit globose, 8 inches in diameter, pea green, reticulated darker; rind \(^3\)\% inch thick; flesh rose, good.
- 140579. No. 7102. From Nishabur, Khorassan, September 19, 1940. Fruit 10 by 6 inches, grass green with paler green spots; rind ½ inch thick; flesh pink, good.
- 140580. No. 7103. From Nishabur, Khorassan, September 19, 1940. Fruit 10 by 6 inches, pea green with broken darker reticulations; rind ¼ inch thick; flesh pink, good.
- 140581. No. 7104. From Nishabur, Khorassan, September 19, 1940. Fruit subglobose, 8 inches in diameter, grass green with cloudy darker ribs, heavily indented ribs; rind ½ inch thick; flesh deep pink, good.
- 140582. No. 7105. From Nishabur, Khorassan, September 19, 1940. Fruit  $12\frac{1}{2}$  by  $7\frac{1}{2}$  inches, green white, clouded darker; rind  $\frac{3}{8}$  inch thick; flesh deep pink, good.
- 140583. No. 7106. From Nishabur, Khorassan, September 19, 1940. Fruit subglobose, 8 inches in diameter, sea green with darker green dots; rind ¼ inch thick; flesh pink, good.
- 140584. No. 7107. From Nishabur, Khorassan, September 19, 1940. Fruit 11 by 7½ inches, grass green, lined and vermiculated darker; rind ¼ inch thick; flesh pink, good.
- 140585. No. 7108. From Nishabur, Khorassan, September 19, 1940. Fruit 12 by 5 inches, sea green; rind ½ inch thick; flesh pale rose, good.
- 140586. No. 7109. From Nishabur, Khorassan, September 19, 1940. A small, round or elongate melon, 8 inches in diameter, grass green with lighter spots; rind 3/8 inch thick; flesh deep pink, good.
- 140587. No. 7111. From Nishabur, Khorassan, September 19, 1940. Fruit subglobose, 11 inches in diameter, sea green with coarse reticulations arranged principally to form loose stripes; rind ½ inch thick; flesh pink, good.
- 140588. No. 7115. From Nishabur, Khorassan, September 20, 1940. Fruit globose, 7 inches in diameter, sea green with dotted and clouded darker markings; rind % inch thick; flesh pink, good.
- 140589. No. 7116. From Nishabur, Khorassan, September 20, 1940. Fruit globose, 7 inches in diameter, sea green, vermiculated darker; rind ½ inch thick; flesh pink, good.
- 140590. No. 7125. From Nishabur, Khorassan, September 20, 1940. Dry and irrigated cultivations of watermelons; melons of best quality here.
- 140591. No. 7143. From Nishabur, Khorassan, September 21, 1940. Fruit globose, 9 inches in diameter, handsomely and curiously marked in jagged stripes about 1 inch wide of alternate sea green and grass green, the grass green with rows of lighter spots of green; rind % inch thick; flesh rose, good.
- 140592. No. 7149. From Sultanabad, Khorassan, September 22, 1940. Fruit 17 by 9 inches, sea green; rind ½ inch thick; flesh pink, good. Said to be unirrigated.

- 140593. No. 7151. From Sultanabad, Khorassan, September 22, 1940. Bought from a restaurant; said to be unirrigated.
- 140594. No. 7153. From Sabzawar, Khorassan, September 22, 1940. Fruit subglobose, 10 inches in diameter, black green, clouded paler; rind 1/4 inch thick; flesh rose, good.
- 140595. No. 7154. From Sabzawar, Khorassan, September 22, 1940. Fruit globose, 10 inches in diameter, sea green vermiculated darker; rind ½ inch thick; flesh pink, good.
- 140596. No. 7155. From Sabzawar, Khorassan, September 22, 1940. Fruit subglobose, 10 inches in diameter, pea green with traces of narrow, darker ribs; rind ½ inch thick; flesh rose.
- 140597. No. 7159. From Sabzawar, Khorassan, September 22, 1940. Fruit globose, 9 inches in diameter, pea green with narrow, black-green stripes; rind 1/8 inch thick; flesh pink, fair. Said to be unirrigated.
- 140598. No. 7160. From Sabzawar, Khorassan, September 22, 1940. Fruit globose, 9 inches in diameter, irregular alternate, 1½ inch stripes of white green and cloudy pea green; rind ½ inch thick; flesh pink, fair. Said to be unirrigated.
- 140599. No. 7162. From Sabzawar, Khorassan, September 22, 1940. Fruit globose, 9 inches in diameter, sea green; rind ½ inch thick; flesh pink, fair. Said to be unirrigated.
- 140600. No. 7163. From Sabzawar, Khorassan, September 23, 1940. Unirrigated fruit, globose with deep irregular-spaced ribs, sea green with a cloudy darker green, 9 inches in diameter; rind 1/8 inch thick; flesh deep pink, good.
- 140601. No. 7164. From Sabzawar, Khorassan, September 23, 1940. Fruit sub-globose, 9 inches in diameter, sea green vermiculated darker; rind 1/4 inch thick; flesh pink, insipid. Said to be unirrigated.
- 140602. No. 7165. From Sabzawar, Khorassan, September 23, 1940. Fruit 10 by 8 inches, with broad alternating ribs of grass green and black; rind ½ inch thick; flesh rose, fair.
- 140603. No. 7166. From Sabzawar, Khorassan, September 23, 1940. Fruit subglobose, 9 inches in diameter, sea green with slightly darker ribs; rind ½ inch thick; flesh pink, good. Said to be unirrigated.
- 140604. No. 7167. From Sabzawar, Khorassan, September 23, 1940. Fruit 11½ by 7½ inches, sea green with broad mottled ribs of pea green; rind % inch thick; flesh rose; picked green.
- 140605. No. 7172. From Sabzawar, Khorassan, September 23, 1940. Fruit 8 by 14 inches, alternate stripes of grass green and pea green; rind \( \frac{1}{3} \) inch thick; flesh rose, fair. Said to be unirrigated.
- 140606. No. 7181. From Sabzawar, Khorassan, September 23, 1940. Farmer's mixture variety.
- 140607. No. 7186. From Sabzawar, Khorassan, September 24, 1940. Fruit 12 by 10 inches, alternate stripes of pale and pea green; rind ½ inch thick; flesh pink, good.
- 140608. No. 7202. From Shahrud, Khorassan, September 25, 1940. Fruit 17 by 9 inches, grass green; rind ½ inch thick; flesh yellow changing to pink towards center, good.
- 140609. No. 7203. From Shahrud, Khorassan, September 25, 1940. Fruit subglobose, 12 inches in diameter, grass green; rind ½ inch thick; flesh yellow, good.
- 140610. No. 7204. From Shahrud, Khorassan, September 25, 1940. Fruit 17 by 8 inches, sea green, vermiculated of a darker shade; rind ½ inch thick; flesh pink, fair.
- 140611. No. 7213. From Shahrud, Khorassan, September 26, 1940. Fruit 16 by 7 inches, sea green, rind \(^3\)\(^8\) inch thick; flesh pink, good.
- 140612. No. 7214. From Shahrud, Khorassan, September 26, 1940. Fruit globose, 6 inches in diameter, pea green with narrow black-green stripes; rind ½ inch thick; flesh pink, good.

- 140613. No. 7215. From Shahrud, Khorassan, September 26, 1940. Fruit 12 by 6 inches, grass green with broad irregular black-green stripes; rind ½ inch thick; flesh pink, good.
- 140614. No. 7216. From Shahrud, Khorassan, September 27, 1940. Fruit 12 by 7 inches, grass green; rind \( \frac{5}{6} \) inch thick; flesh pink, good.
- 140615. No. 7217. From Shahrud, Khorassan, September 27, 1940. Fruit 18 by 11 inches, grass green, clouded paler; rind ½ inch thick; flesh pink, good; heart hollow as in American watermelons.
- 140616. No. 7218. From Shahrud, Khorassan, September 27, 1940. Fruit 15 by 8 inches, alternate broad stripes of sea green and grass green; flesh pink, good.
- 140617. No. 7227. From Gurgan, September 29, 1940. Fruit globose, 8 inches in diameter, pea green with narrow stripes of darker green; rind ½ inch thick; flesh bright pink, firm, good. Good keeper.
- 140618. No. 7228. From Gurgan, October 1, 1940. Fruit globose, 7 inches in diameter, sea green vermiculated darker; rind ¼ inch thick; flesh pink, good.
- 140619. No. 7246. From Shahrud, Khorassan, September 27, 1940. The largest watermelons in Iran grow here.
- 140620. No. 7267. From Bandar Shahi, Astrabad, October 1, 1940. Fruit 12 by 15 inches, pea green with black stripes; rind hard, 1 inch thick; flesh pink, dry. Good keeper.
- 140621. No. 7268. From Bandar Shahi, Astrabad, October 1, 1940. A local mixture.
- 140622. No. 7269. From Bandar Shahi, Astrabad, October 1, 1940. Fruit globose, 7 inches in diameter, cloudy stripes of grass green and pea green; rind \(^3\)% inch thick; flesh pale rose, good. Good keeper.
- 140623. No. 7270. From Sari, Mazendaran, October 2, 1940. Fruit 10 by 6 inches, alternately striped with two tones of cloudy green; rind 1/4 inch thick; flesh red pink, good. Good keeper.
- 140624. No. 7273. From Tehran, October 3, 1940. Fruit 12 by 6 inches, sea green vermiculated darker; rind 1/4 inch thick; flesh deep pink, fair.
- 140625. No. 7274. From Tehran, October 3, 1940. Fruit globose, 12 inches in diameter, pea green; rind hard, 1 inch thick; flesh pink. Good keeper.
- 140626. No. 7276. From Tehran, October 5, 1940. Fruit 11 by 7½ inches, pale sea green; rind hard, 1 inch thick: flesh pink, firm, fair. Good keeper.
- 140627. No. 7285. From Sabzawar, Khorassan, September 22, 1940. A farmer's mixture.

#### 140628. Duboisia hopwoodii F. Muell. Solanaceae.

From Australia. Seed presented by the Department of Agriculture, Sydney, New South Wales. Received March 31, 1941.

A shrub or small tree native to Australia. The thick linear leaves are 2 to 4 inches long, and the small inconspicuous flowers, borne in leafy pyramidal panicles, are followed by small, black berries. The leaves are said to contain an alkaloid similar to nicotine.

For previous introduction see 102070.

#### 140629 to 140901.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received March 31, 1941.

140629 to 140887. Cucumis melo L. Cucurbitaceae.

Muskmelon.

140629. No. 5853. From Bushire, Fars, April 14, 1940.

140630. No. 5904. From Bushire, Fars, April 16, 1940.

140631. No. 5916. From Ahwaz, Khuzistan, April 20, 1940.

140632. No. 6053. From Dizful, Khuzistan, April 20, 1940.

- 140633. No. 6156. From Tehran, June 15, 1940. Fruit flattened, 4 by 2½ inches; orange-brown flesh, insipid; a very early sort, heavily netted.
- 140634. No. 6173. From Tehran, June 17, 1940. Fruit flattened, 4 by 3 inches, with large navel, yellow with green ribs, heavily netted; an early sort, fragrant but insipid.
- 140635. No. 6174. From Tehran, June 17, 1940. Fruit elongate, 7 by 3 inches, pointed at both ends, orange yellow, smooth; flesh orange, 34 inch thick, insipid.
- 140636. No. 6175. From Tehran, June 17, 1940. Fruit flattened, 8 by 5 inches, golden brown with heavy netting; flesh yellow orange, 1½ inches thick, insipid.
- 140637. No. 6176. From Tehran, June 17, 1940. A farmer's mixture.
- 140638. No. 6223. From Tehran, June 24, 1940. Fruit subglobose, 8 inches in diameter, heavily netted, yellow; flesh 5 inch thick, orange yellow, fragrant but insipid.
- 140639. No. 6235. From Tehran, July 4, 1940. Fruit subglobose, 5½ inches in diameter, heavily netted except for narrow, slightly indented rib lines; flesh 1½ inches thick, cream color, fragrant, fair flavor.
- 140640. No. 6236. From Tehran, July 5, 1940. Fruit yellow, subglobose, 8 inches in diameter, heavily netted except on the smooth slightly indented rib lines; flesh salmon, 1½ inches thick, early sort, fair quality.
- 140641. No. 6244. From Tehran, July 7, 1940. Fruit subglobose, 6 inches in diameter, yellow, blotched with green and orange, smooth; flesh salmon. fair quality.
- 140642. No. 6245. From Tehran, July 7, 1940. Pale-yellow fruit, 8 inches in diameter, heavily netted; flesh 1½ inches thick, cream, fair quality.
- 140643. No. 6246. From Tehran, July 7, 1940. Fruit subglobose, 8 inches in diameter, heavily netted, pale green; flesh 1½ inches thick, salmon, fair quality.
- 140644. No. 6247. From Tehran, July 7, 1940. Fruit flattened, 12 by 8 inches, heavily netted, yellow; flesh salmon, 134 inches thick, fair quality.
- 140645. No. 6251. From Bandari Shah, Mazenderan, July 9, 1940. Fruit globose, 10 inches in diameter, smooth, gray green with darker blotches; flesh green white, firm, crisp, and sweet.
- 140646. No. 6252. From Khatirabad, Gurgan, Mazenderan, July 10, 1940. Fruit smooth, globose, 5 inches in diameter, yellow; flesh cream, 1¼ inches thick, good.
- 140647. No. 6253. From Khatirabad, Gurgan, July 10, 1940. Fruit elongate, 10 by 6 inches, lemon, slightly ribbed; flesh white, 1½ inches thick, good.
- 140648. No. 6254. From Khatirabad, Gurgan, July 10, 1940. Fruit football-shaped, 12 by 6 inches, lemon mottled with green; flesh green white, 11/4 inches thick, fair.
- 140649. No. 6255. From Khatirabad, Gurgan, July 10, 1940. Fruit elongate, 6 by 4 inches, yellow blotched with orange, smooth; flesh green, changing to salmon, 1½ inches thick.
- 140650. No. 6256. From Khatirabad, Gurgan, July 10, 1940. Fruit elongate, 6 by 4 inches, orange yellow with green indented ribs; flesh salmon, 1¼ inches thick, good.
- 140651. No. 6257. From Khatirabad, Gurgan, July 10, 1940. Fruit globose, 5 inches in diameter, orange yellow with slightly indented green-yellow ribs; flesh green, 11/4 inches thick, fair.
- 140652. No. 6258. From Khatirabad, Gurgan, July 10, 1940. Fruit flattened, 6 by 4 inches, lemon, smooth; flesh hard and crisp, green, 1½ inches thick.
- 140653. No. 6259. From Khatirabad, Gurgan, July 10, 1940. Fruit elongate, 6 by 4 inches, yellow blotched with orange and indented ribs of yellow, large navel; flesh green changing to salmon, 1¼ inches thick, fair.

- 140654. No. 6262. From Khatirabad, Gurgan, July 10, 1940. Fruit subglobose, 6 inches in diameter, smooth, lemon dotted with green; flesh greenish, 1¼ to 2 inches thick, good.
- 140655. No. 6263. From Khatirabad, Gurgan, July 10, 1940. Fruit subglobose, 5 inches in diameter, orange, dotted green, with deeply indented ribs of a paler shade; flesh cream, 1¼ inches thick, very good.
- 140656. No. 6266. From Gurgan, July 10, 1940. Fruit flattened, 7 by 5 inches, lemon, finely dotted with blotch ribs of black green; flesh 1¼ inches thick, green, fine flavor.
- 140657. No. 6267. From Gurgan, July 10, 1940. Fruit flattened, 9 by 5 inches, rough surface, no netting; flesh green white, 1 inch thick, fair.
- 140658. No. 6268. From Gurgan, July 10, 1940. Fruit elongate, 8 by 5½ inches, lemon, finely sprinkled with green, smooth; flesh green changing to salmon, 1¼ inches thick.
- 140659. No. 6269. From Gurgan, July 10, 1940. Fruit globose, 6½ inches in diameter, pale green with fine darker spots; flesh green, faintly indented, 1¼ inches thick, fair.
- 140660. No. 6270. From Gurgan, July 10, 1940. Fruit subglobose, 5 inches in diameter, smooth, green white or green gray blotched with darker dots; flesh half green and half salmon; 1¼ inches thick, unripe.
- 140661. No. 6271. From Gurgan, July 10, 1940. Fruit football-shaped, 8 inches long, lemon blotched with dark green; flesh green white, crisp, sweet, 11/8 inches thick.
- 140662. No. 6272. From Gurgan, July 10, 1940. Fruit subglobose, 8 inches in diameter, green white obscurely sprinkled with green, smooth; flesh green white, sweet, 1½ inches thick, green.
- 140663. No. 6273. From Gurgan, July 10, 1940. Fruit subglobose, 5 inches in diameter, white, smooth, hard-shelled; flesh 1½ inches thick, green, excellent.
- 140664. No. 6274. From Gurgan, July 10, 1940. Fruit football-shaped, 9 inches in diameter, green white with green blotches; flesh cream, 1¾ inches thick, crisp, sweet.
- 140665. No. 6275. From Gurgan, July 10, 1940. Fruit flattened, 7 by 5 inches, lemon, irregular indented rib lines; flesh green white, sweet, 1½ inches thick.
- 140666. No. 6276. From Gurgan, July 10, 1940. Fruit football-shaped, 9 inches in diameter, green white with faint green dots and scarce dark-green blotches; flesh 1½ inches thick, green white, crisp, sweet.
- 140667. No. 6277. From Gurgan, July 10, 1940. Fruit elongate, 9 by 5 inches, green white with deeply indented ribs of green; flesh 1½ inches thick, green white, sweet.
- 140668. No. 6278. From Gurgan, July 10, 1940. Fruit subglobose, 8 inches in diameter, gray green with blotches of green and orange; flesh 11/4 inches thick, half green, half salmon, fair.
- 140669. No. 6279. From Gurgan, July 10, 1940. Fruit elongate, 6 by 4½ inches, faint net, yellow blotched and dotted with gray green; flesh ½ inches thick, salmon with heavy green layer next to rind.
- 140670. No. 6280. From Gurgan, July 10, 1940. Fruit football-shaped, 12 inches long, pale yellow with orange blotches; flesh 1½ inches thick, cream, sweet.
- 140671. No. 6281. From Gurgan, July 10, 1940. Fruit globose, 4 inches in diameter, whitish with heavily indented ribs of green; flesh 1 inch thick, half yellow, half orange.
- 140672. No. 6282. From Gurgan, July 10, 1940. Fruit subglobose, 8 inches in diameter, lemon, heavily and finely dotted green, deep and irregular indented ribs; flesh 1½ inches thick, cream, sweet.

- 140673. No. 6283. From Gurgan, July 10, 1940. Fruit globose, 4 inches in diameter, yellow with orange and green blotches, indented ribs of green; flesh 1 inch thick, green and white, sweet, soft-fleshed.
- 140674. No. 6284. From Gurgan, July 11, 1940. Fruit elongate, 8 by 6½ inches, smooth, pale yellow; flesh 1¾ inches, green white, crisp, sweet.
- 140675. No. 6285. From Gurgan, July 11, 1940. Fruit elongate, 7 by 4 inches, whitish with fine green specks, smooth; flesh 1½ inches thick, green white.
- 140676. No. 6286. From Gurgan, July 11, 1940. Fruit globose, 4 inches in diameter, smooth, pale yellow blotched with orange, indented ribs of green; flesh 1½ inches thick, half green, half salmon, soft.
- 140677. No. 6287. From Gurgan, July 11, 1940. Fruit elongate, 6 by 4½ inches, smooth, pale yellow with broken blotches of dark green; flesh salmon with broad layer of green next to rind.
- 140678. No. 6288. From Gurgan, July 11, 1940. Fruit subglobose, 8 inches in diameter, yellow with broad, broken ribs of green; flesh 1½ inches thick, whitish.
- 140679. No. 6289. From Gurgan, July 11, 1940. Fruit globose, smooth, 5 inches in diameter, yellow; flesh 1 inch thick, whitish, soft, sweet.
- 140680. No. 6290. From Gurgan, July 11, 1940. Fruit elongate, 9 by 5 inches; green-yellow, lemonlike surface with unevenly indented ribs; flesh 1 inch thick, green white, unripe.
- 140681. No. 6291. From Gurgan, July 11, 1940. Fruit subglobose, 7 inches in diameter, smooth, green; flesh  $1\frac{1}{4}$  inches thick, greenish, crisp.
- 140682. No. 6292. From Gurgan, July 11, 1940. Fruit elongate, football-shaped, 9 by 4 inches, lemon finely dotted with a darker shade, with broad gray-green unindented ribs; flesh 1¼ inches thick, greenish, unripe.
- 140683. No. 6303. From Gurgan, July 12, 1940. Fruit globose, 5 inches in diameter, smooth, pale yellow mottled with orange and green; flesh creamy white, 1½ inches thick, good.
- 140684. No. 6304. From Gurgan, July 12, 1940. Fruit subglobose, 6 by 5 inches, finely and sparsely netted, yellow mottled green; flesh 1½ inches thick, greenish.
- 140685. No. 6305. From Gurgan, July 12, 1940. Fruit football-shaped, 10 inches long, yellow mottled orange and green, smooth; flesh 13/4 inches thick, creamy.
- 140686. No. 6342. From Gurgan, July 20, 1940. Fruit 8 by 5 inches, smooth, faintly indented ribs, pale yellow, finely dotted with green; flesh 1¾ inches thick, salmon, good.
- 140687. No. 6367. From Gurgan, Mazenderan, July 27, 1940. Fruit globose, 10 inches in diameter, yellow mottled brown, smooth; flesh 3 inches thick, creamy.
- 140688. No. 6394. From Gurgan, July 29, 1940. Fruit 12 inches in diameter, yellow, blotched with green, smooth, with deeply indented rib lines; flesh 3 inches thick, half green and half cream.
- 140689. No. 6399. From Gurgan, July 29, 1940. Fruit subglobose, 8 inches in diameter, smooth, lemon; flesh green, 21/4 inches thick.
- 140690. No. 6409. From Gumbatigabus, July 30, 1940. Fruit football-shaped, 10 inches in diameter, obscurely netted, yellow with fine dots and blotches of green; flesh 2 inches thick, green, crisp.
- 140691. No. 6502. From Garmab, Khorassan, August 6, 1940. Fruit 12 by 9 inches, green, coarse, heavy net; flesh 1¾ inches thick, half green, half salmon.
- 140692. No. 6503. From Garmab, Khorassan, August 6, 1940. Fruit subglobose, 7 inches in diameter, yellow with indented green ribs; flesh 2 inches thick, creamy.
- 140693. No. 6504. From Garmab, Khorassan, August 6, 1940. Fruit elongate, 16 by 9 inches, smooth, ribs indented, yellow with scattered small green blotches; flesh 2 inches thick, whitish.

- 140694. No. 6514. From Bujmerd, Khorassan, August 8, 1940. A farmer's mixture.
- 140695. No. 6518. From Bujmerd, Khorassan, August 8, 1940. Fruit 15 by 9 inches, smooth, yellow with darker indented ribs; flesh 2 inches thick, yellow. Plants irrigated.
- 140696. No. 6523. From Bujmerd, Khorassan, August 8, 1940. Fruit 5 inches across, smooth with large navel, fragrant; flesh 1 inch thick, salmon, inedible.
- 140697. No. 6534. From Meshed, Khorassan, August 10, 1940. Fruit rounded on end, 12 by 7 inches, yellow, heavily dotted with green; flesh 2 inches thick, green white, crisp.
- 140698. No. 6535. From Meshed, Khorassan, August 10, 1940. Fruit elongate football-shaped, 16 inches long, green turning yellow; flesh 1¾ inches thick, crisp, green white.
- 140699. No. 6536. From Meshed, Khorassan, August 10, 1940. Fruit flattened, 10 by 8 inches, rough, lemon; flesh 2 inches thick, 3/8 inch green rind and the rest salmon; edible, sweet.
- 140700. No. 6538. From Meshed, Khorassan, August 10, 1940. Fruit elongate, football-shaped, 14 by 7 inches, netted, green with yellow blotches; flesh 1½ inch thick, crisp, green white.
- 140701. No. 6539. From Meshed, Khorassan, August 10, 1940. Fruit 12 by 9 inches, gold with fine dots of green, smooth except for coarse net at stem end; flesh 21/4 inches, green, juicy.
- 140702. No. 6540. From Meshed, Khorassan, August 10, 1940. Fruit globose, 7 inches, coarse net, green white with indented lead-green ribs and darker mottling; flesh 2 inches thick, creamy, juicy.
- 140703. No. 6541. From Meshed, Khorassan, August 10, 1940. Fruit football-shaped, 14 by 8 inches, lead green with well-marked indented ribs; flesh 2 inches thick, salmon.
- 140704. No. 6546. From Meshed, Khorassan, August 10, 1940. Fruit globose, 8 inches across, coarse, heavy net, black green with faintly indented broad stripes of lead green; flesh 2 inches thick, salmon.
- 140705. No. 6547. From Meshed, Khorassan, August 10, 1940. Fruit pointed at stem end, 16 by 6½ inches, green with indented paler ribs; flesh 2¼ inches thick, green white, juicy. A popular sort.
- 140706. No. 6548. From Meshed, Khorassan, August 10, 1940. Fruit football-shaped, 12 inches long, green turning yellow with deep-green ribs; flesh 2 inches thick, whitish, crisp, especially sweet.
- 140707. No. 6549. From Meshed, Khorassan, August 10, 1940. Fruit 10 by 7 inches, rounded ends, yellow and green with broad, faintly indented ribs of gray green; flesh 134 inches thick, salmon.
- 140708. No. 6550. From Meshed, Khorassan, August 10, 1940. Fruit 13 by 61/2 inches, lemon with narrow rib lines of green; flesh 13/4 inches thick, white, juicy.
- 140709. No. 6551. From Meshed, Khorassan, August 10, 1940. Fruit globose, 7 inches across, with large navel, white green, spotted and blotched with two shades of green and orange; flesh 2 inches thick, salmon.
- 140710. No. 6558. From Meshed, Khorassan, August 11, 1940. Fruit 13½ by 7 inches, deeply indented ribs unmarked, heavy green clouding and netting of yellow; flesh 1¾ inches thick, whitish, crisp.
- 140711. No. 6559. From Meshed, Khorassan, August 11, 1940. Fruit 15¾ by 6¼ inches, heavy, coarse, green turning yellow; flesh 1¾ inches thick, greenish.
- 140712. No. 6560. From Meshed, Khorassan, August 11, 1940. Fruit 10½ by 8 inches, black green with paler indented ribs; flesh 1¾ inches thick, green.
- 140713. No. 6561. From Meshed, Khorassan, August 11, 1940. Fruit 16¾ by 6¾ inches, lemon, coarse strong net; flesh 1¾ inches thick, creamy white, indifferent.

- 140714. No. 6562. From Meshed, Khorassan, August 11, 1940. Fruit 12½ by 6½ inches, green black, smooth except for netting on the lead-green rib line; flesh 1¾ inches thick, salmon.
- 140715. No. 6563. From Meshed, Khorassan, August 11, 1940. Fruit football-shaped, 11 by 7 inches, black green and gold, smooth with coarse net line of lead green; flesh half green, half salmon.
- 140716. No. 6564. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 8 inches in diameter, yellow green with faint indented ribs of green; flesh 2 inches thick, whitish, crisp.
- 140717. No. 6566. From Meshed, Khorassan, August 11, 1940. Fruit globose, 9 inches in diameter, coarse net, heavy around stem end, lemon; flesh 2 inches thick, whitish, exceptionally sweet.
- 140718. No. 6567. From Meshed, Khorassan, August 11, 1940. Fruit 13 by 5 inches, heavy net, green turning yellow; flesh 1¼ inches thick, crisp, sweet.
- 140719. No. 6568. From Meshed, Khorassan, August 11, 1940. Fruit elongate, football-shaped, 11 inches long, black green with broken stripes of yellow; flesh 1½ inches thick, salmon.
- 140720. No. 6569. From Meshed, Khorassan, August 11, 1940. Fruit elongate, football-shaped, 13 inches long, black green turning orange, with broken rib stripes of yellow; flesh 1½ inches thick, green white.
- 140721. No. 6570. From Meshed, Khorassan, August 11, 1940. Fruit flattened, 8 by 5½ inches, heavy, coarse net obscuring ground of yellow and green; flesh 2 inches thick, salmon.
- 140722. No. 6571. From Meshed, Khorassan, August 11, 1940. Fruit flattened, 6 by 5 inches, fine, dense net over ground of green and yellow; flesh 1¼ inches thick, white.
- 140723. No. 6573. From Meshed, Khorassan, August 11, 1940. Fruit 12 by 7 inches, yellow, heavily netted; flesh 1½ inches thick, white.
- 140724. No. 6574. From Meshed, Khorassan, August 11, 1940. Fruit 16 by 6 inches, orange; flesh 2 inches thick, green white; hard rind.
- 140725. No. 6575. From Meshed, Khorassan, August 11, 1940. Fruit 13 by 7 inches, orange red, smooth, hard-shelled; flesh 1% inches thick, orange, attractive.
- 140726. No. 6576. From Meshed, Khorassan, August 11, 1940. Fruit 14 by 5 inches, pale yellow; flesh 1¼ inches thick, green white, very sweet.
- 140727. No. 6577. From Meshed, Khorassan, August 11, 1940. Fruit football-shaped; 10 inches long, deeply indented yellow rib lines on green ground, traces of net; flesh green, 1¼ inches thick, good.
- 140728. No. 6578. From Meshed, Khorassan, August 11, 1940. Fruit globose, 6 inches across, creamy yellow, heavily netted; flesh 1¼ inches thick, pale salmon.
- 140729. No. 6579. From Meshed, Khorassan, August 11, 1940. Fruit 9 by 6 inches, pale yellow with broad, slightly indented white ribs; flesh whitish, 11/4 inches thick.
- 140730. No. 6580. From Meshed, Khorassan, August 11, 1940. Fruit football-shaped, 13 inches long, yellow with fine dots and blotches of green, with broad rib lines of pale yellow; flesh 1½ inches thick, green white.
- 140731. No. 6581. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 8 inches in diameter, lemon, hard-shelled; flesh 1½ inches thick, green.
- 140732. No. 6582. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 5 inches in diameter, lemon, sparse net; flesh 1¼ inches thick, white; hard shell.
- 140733. No. 6583. From Meshed, Khorassan, August 11, 1940. Fruit ovoid, 6 inches long, yellow, sparse net; flesh 1¼ inches thick, salmon.

- 140734. No. 6584. From Meshed, Khorassan, August 11, 1940. Fruit 12 by 5 inches, yellow with broad rib lines of green, netted; flesh 11/4 inches thick, green, crisp.
- 140735. No. 6586. From Meshed, Khorassan, August 11, 1940. Fruit ovoid, 9 inches long, orange yellow with fine green dots and blotch stripes of green, hard-shelled; flesh green white to salmon, 134 inches thick.
- 140736. No. 6589. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 9 inches across, yellow orange with coarse netting; flesh 1½ inches thick, green white, juicy.
- 140737. No. 6590. From Meshed, Khorassan, August 11, 1940. Fruit 10 by 6 inches, fairly smooth except for coarse netting around stem end, mixed dots of green and yellow; flesh 1½ inches thick; green, crisp.
- 140738. No. 6591. From Meshed, Khorassan, August 11, 1940. Fruit globose, 7 inches in diameter, smooth, pale yellow with green rib lines and blotches of green and orange; flesh salmon, 13/4 inch thick.
- 140739. No. 6592. From Meshed, Khorassan, August 11, 1940. Fruit 13 by 5 inches, orange green, netted weakly; flesh green, crisp; 1¾ inches thick.
- 140740. No. 6593. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 9 inches long, yellow white with scattered and unequal lines of green; flesh 2 inches thick, pale salmon.
- 140741. No. 6594. From Meshed, Khorassan, August 11, 1940. Fruit flattened, 7 by 5 inches, pale yellow with somewhat indented ribs of white; flesh 2 inches thick, salmon, insipid.
- 140742. No. 6595. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 7 inches across, pale yellow blotched with orange, with broad indented yellow ribs on the general ground; flesh 2 inches thick, salmon.
- 140743. No. 6596. From Meshed, Khorassan, August 11, 1940. Fruit 8 by 6 inches, smooth, yellow orange with green blotches and rib lines; flesh 1½ inches thick, pale salmon.
- 140744. No. 6597. From Meshed, Khorassan, August 11, 1940. Fruit pointed at both ends, 12 by 5 inches, orange yellow clouded green, with broad rib lines of two shades of green; flesh 1½ inches thick, green.
- 140745. No. 6598. From Meshed, Khorassan, August 11, 1940. Fruit subglobose, 8 inches across, lemon-clouded green with irregular and broken rib lines of yellow; flesh 2 inches thick, pale salmon.
- 140746. No. 6599. From Meshed, Khorassan, August 11, 1940. Fruit globose, 6 inches in diameter, mottled green and yellow, with broad lead-green, slightly indented ribs; flesh 1½ inches thick, salmon, excellent.
- 140747. No. 6600. From Meshed, Khorassan, August 11, 1940. Fruit ovoid, 10 inches long, sparse net, lemon yellow washed green in places, with lead-green indented rib lines; flesh white, crisp, 1½ inch thick.
- 140748. No. 6601. From Meshed, Khorassan, August 11, 1940. Fruit obovoid, 10 inches long, pale yellow, heavily netted with indented ribs of green white; flesh 1½ inches thick, firm, white, crisp.
- 140749. No. 6602. From Meshed, Khorassan, August 11, 1940. Fruit 12 by 5 inches, lemon, coarsely and sparsely netted; flesh 1½ inches thick, green white, crisp.
- 140750. No. 6603. From Meshed, Khorassan, August 11, 1940. Fruit globose, 10 inches in diameter, green white with black-green blotches and broad lead-green ribs; flesh salmon, 2 inches thick.
- 140751. No. 6610. From Meshed, Khorassan, August 12, 1940. Fruit slightly flattened, 6 inches across, lead green with darker indented ribs; flesh 1¼ inches thick, green.
- 140752. No. 6636. From Meshed, Khorassan, August 12, 1940. Farmer's mixture.

- 140753. No. 6700. From Karizinu, Khorassan, August 21, 1940. Fruit globose, 8 inches in diameter, pale yellow, spotted and mottled with green, smooth; flesh 1½ inches thick, white, sweet.
- 140754. No. 6702. From Turbati Shaikh Jam, Khorassan, August 21, 1940. Fruit subglobose, 10 inches long, yellow clouded with green, smooth; flesh 21/4 inches thick, salmon.
- 140755. No. 6703. From Turbati Shaikh Jam, Khorassan, August 21, 1940. Fruit subglobose, 10 inches long, deeply ribbed, green yellow; flesh 3 to 3¾ inches thick, greenish white, fine honeydew flavor.
- 140756. No. 6704. From Turbati Shaikh Jam, Khorassan, August 21, 1940. Fruit 10 by 6 inches, creamy; conspicuous ribs; flesh cream, 1¾ inches thick.
- 140757. No. 6705. From Turbati Shaikh Jam, Khorassan, August 21, 1940. Fruit football-shaped, 12 inches long, ribbed, green turning orange yellow; flesh 1½ inches thick, white, good.
- 140758. No. 6706. From Turbati Shaikh Jam, Khorassan, August 21, 1940. Fruit obovoid, 11 inches long, lemon, surface rough, firm rind; flesh 1¾ inches thick, green white. Good keeper.
- 140759. No. 6719. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 10 by 4 inches, green turning yellow with broad gray-green rib lines; flesh 1¼ inches thick, cream white.
- 140760. No. 6728. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 12 by 5 inches, black green with coarse, heavy netting; flesh 1½ inches thick, green white, picked green.
- 140761. No. 6729. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 9 by 4½ inches, lead green with thin, dark-green ribs; flesh 1¼ inches thick, crisp, green, sweet.
- 140762. No. 6730. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 9 inches long, pale lemon with indented green ribs, around which are grass-green, irregular stripes; flesh 1¼ inches thick, white.
- 140763. No. 6731. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 7 inches long, yellowish white with slightly indented green-white ribs, the body spotted with orange and green; flesh 1½ inches thick, green white, excellent.
- 140764. No. 6732. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 9 by 4 inches, green with black dots and blotches, broad slightly indented graygreen rib lines; flesh 1¼ inches thick, green, crisp.
- 140765. No. 6733. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 8 inches long, white with black-green mottling, green-white ribs; flesh 1¾ inches thick, greenish, fine.
- 140766. No. 6734. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, yellow spotted with green and orange, green-white slightly indented ribs; flesh 1½ inches thick, white.
- 140767. No. 6735. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 8 inches long, lemon with green ribs; flesh 1¾ inches thick, creamy white.
- 140768. No. 6736. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 12 inches long, pale green, not netted but a bit rough; flesh 2 inches thick, whitish.
- 140769. No. 6737. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 10 inches long, not netted but irregular surface, pale yellow; flesh 1½ inches thick, white.
- 140770. No. 6738. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 10 inches long, no netting but rough surface, pale lemon; flesh 2 inches thick, salmon; hard rind.

- 140771. No. 6739. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 12 by 6½ inches, cream with deeply indented paler ribs; flesh 2 inches thick, white.
- 140772. No. 6740. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, smooth, cream with green, indented ribs; flesh 2 inches thick, white, unripe.
- 140773. No. 6741. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit obovoid, 12 inches long, green turning yellow, smooth; flesh 1¾ inches thick, white.
- 140774. No. 6742. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 12 inches long, smooth, green; flesh cream, crisp, 2 inches thick.
- 140775. No. 6743. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit ovoid, 8 inches long, green turning yellow, smooth; flesh 2¼ inches thick, white.
- 140776. No. 6744. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit ovoid, 8½ inches long, hard-shelled, coarse net on stem end, green yellow, nearly obscured by green dots; flesh 2 inches thick, salmon.
- 140777. No. 6745. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 10 inches long, green, with slightly indented green-white ribs; flesh 2 inches thick, green white.
- 140778. No. 6746. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit obovoid, 7 inches long, lemon, with green and green-white dots, slightly indented ribs; flesh 1½ inches thick, green.
- 140779. No. 6747. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 11 by 5 inches, pale lemon with broad blotches and stripes of black; flesh 13/4 inches thick, green.
- 140780. No. 6748. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit ovoid, 11 inches long, creamy yellow, smooth; flesh 1¾ inches thick, creamy.
- 140781. No. 6749. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 7 inches long, smooth, pale yellow with slightly indented white ribs; flesh 2½ inches thick, green.
- 140782. No. 6750. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit ovoid, lemon, smooth, 9 inches long; flesh white, 2 inches thick.
- 140783. No. 6751. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit subglobose, 7 inches long, smooth, orange yellow with some green clouding; flesh 1½ inches thick, salmon.
- 140784. No. 6752. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit ovoid, 11 inches long, smooth except for coarse netting at stem end, grass green with black-green blotches; flesh 2 inches thick, creamy.
- 140785. No. 6753. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 7 inches in diameter, green white, smooth; flesh 2 inches thick, pale green.
- 140786. No. 6755. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit globose, 6 inches across, smooth, lemon with narrow broken green-black ribs; flesh 1¾ inches thick, cream green.
- 140787. No. 6756. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit 14 by 7½ inches, pale yellow green with dotting of black green; ribs green, indented; flesh 2 inches thick, green white.
- 140788. No. 6757. From Turbati Shaikh Jam, Khorassan, August 22, 1940. Fruit football-shaped, 10 inches long, black green, mottled whitish, smooth; flesh 1½ inches thick, green-white.
- 140789. No. 6760. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Fruit ovoid, 8 inches long, lemon with green dots, coarse net around stem end; flesh 2 inches thick, cream.
- 140790. No. 6761. From Ahmedabad, Khorassan, August 23, 1940. Fruit football-shaped, 12 inches long, no net, furrowed surface, pale lemon with green dots; flesh 2 inches thick, white; firm rind.

- 140791. No. 6762. From Ahmedabad, Khorassan, August 23, 1940. Fruit football-shaped, 10 inches long, smooth, pale yellow, with orange and green blotches, green ribs; flesh 2 inches thick, fine, white.
- 140792. No. 6763. From Ahmedabad, Khorassan, August 23, 1940. Fruit elongate, football-shaped, 10 inches long, lemon with green spots, coarse net on stemend; flesh 2 inches thick, creamy white.
- 140793. No. 6764. From Ahmedabad, Khorassan, August 23, 1940. Fruit elongate football-shaped, 12 inches long, smooth, green white with pale green ribs edged by broken deep-green elongate blotches; flesh 1½ inches thick, green white, crisp.
- 140794. No. 6765. From Ahmedabad, Khorassan, August 23, 1940. Fruit football-shaped, 7 inches long, smooth, lemon; indented ribs netted and edged by irregular black-green blotches; shell hard; flesh green white, 2 inches thick.
- 140795. No. 6766. From Ahmedabad, Khorassan, August 23, 1940. Fruit globose, 9 inches in diameter, pale yellow with fine green dots, slightly indented broad ribs of lead green; smooth; flesh 2¼ inches thick, green white.
- 140796. No. 6767. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A small sort said to ripen in 40 days; belong mostly to the Turkoman group that do not separate from the stem when ripe.
- 140797. No. 6796. From Meshed, Khorassan, August 24, 1940. Fruit flattened 5 by 4 inches, heavy ribs, ground yellow; flesh 1½ inches thick, cream, insipid.
- 140798. No. 6797. From Meshed, Khorassan, August 24, 1940. Fruit globose, 5 inches in diameter, orange, heavily netted; flesh 1½ inches thick, orange.
- 140799. No. 6798. From Meshed, Khorassan, August 24, 1940. Fruit 12 by 7 inches, lemon, coarse, sparse net; hard rind, saved for fall; flesh 2 inches thick, green.
- 140800. No. 6802. From Maina, Khorassan, August 26, 1940. Fruit globose, 8 inches in diameter, pale green with broad slightly indented ribs of same, heavily dotted with black green; flesh 2 inches thick, salmon.
- 140801. No. 6803. From Maina, Khorassan, August 26, 1940. Fruit subglobose, 6 by 5 inches, somewhat flattened, netted finely over surface, coarsely over the ribs, green; flesh 1¾ inches thick, salmon.
- 140802. No. 6804. From Gunabad, Khorassan, August 26, 1940. Fruit pointed at both ends, 20 by 9 inches, coarsely and sparsely netted, pale green turning yellow, with irregular black-green blotches; flesh 2 inches thick, green white, crisp.
- 140803. No. 6806. From Gunabad, Khorassan, August 26, 1940. Fruit football-shaped, 10 inches long, not netted but surface somewhat furrowed, pale yellow; flesh 2 inches thick, salmon.
- 140804. No. 6807. From Gunabad, Khorassan, August 26, 1940. Fruit football-shaped, 10 inches long, firm shell, green turning lemon; flesh white, 2 inches thick.
- 140805. No. 6808. From Gunabad, Khorassan, August 26, 1940. Fruit elongate, 10 by 7 inches, pale green with broad grass-green ribs; flesh 2 inches thick, cream.
- 140806. No. 6823. From Firdus, Khorassan, August 27, 1940.
- 140807. No. 6826. From Firdus, Khorassan, August 27, 1940. Fruit pointed at both ends, 18 by 9 inches, green with paler dots, broad ribs of gray green; flesh 1½ inches thick, greenish, crisp.
- 140808. No. 6832. From Firdus, Khorassan, August 28, 1940. Fruit pointed at both ends, 16 by 7 inches, green with fine dots; turning orange; flesh green.
- 140809. No. 6841. From Dahuk, Khorassan, August 31, 1940. Fruit football-shaped, 10 inches long, black-green with indented ribs, smooth; flesh 1½ inches thick, green white.
- 140810. No. 6842. From Dahuk, Khorassan, August 31, 1940. Fruit 10 by 6 inches, lemon with broad, broken blotch ribs of black green; flesh 1½ inches thick, green.

- 140811. No. 6851. From Tabas, Khorassan, August 31, 1940. Fruit 6 by 4 inches, green white with fine green dots; flesh 1¼ inches thick, creamy white.
- 140812. No. 6852. From Tabas, Khorassan, August 31, 1940. Fruit 6 by 4 inches, pale yellow nearly obscured by black marbling, smooth; flesh 11/8 inches thick, green.
- 140813. No. 6884. From Khaur, Khorassan, September 6, 1940. Fruit football-shaped, smooth, lemon, 14 inches long; flesh creamy white, crisp.
- 140814. No. 6885. From Khaur, Khorassan, September 6, 1940. Fruit like No. 6884, but flesh deep salmon.
- 140815. No. 6886. From Khaur, Khorassan, September 6, 1940. Fruit football-shaped, smooth, 14 inches long, deep gold; flesh 1½ inches thick, salmon, crisp.
- 140816. No. 6906. From Tabas, Khorassan, September 6, 1940.
- 140817. No. 6930. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 14 by 5 inches, coarsely netted, pale lemon with green dots; flesh 2 inches thick, green, crisp.
- 140818. No. 6931. From Turbat Haidari, Khorassan, September 11, 1940. Fruit football-shaped, 12 inches long, smooth, lemon; flesh 2 inches thick, white.
- 140819. No. 6932. From Turbat Haidari, Khorassan, September 11, 1940. Fruit football-shaped, 10 inches long, smooth, lemon; flesh 2 inches thick, salmon.
- 140820. No. 6933. From Turbat Haidari, Khorassan, September 11, 1940. Fruit football-shaped, 13 by 6½ inches, pale lemon, smooth; flesh 1¾ inches thick, pale green.
- 140821. No. 6934. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 15 by 6 inches, black green with indented ribs of mottled pale green; flesh 21/4 inches thick, pale green.
- 140822. No. 6935. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 12 by 6 inches, black green with narrow paler ribs, smooth; flesh 1½ inches thick, salmon.
- 140823. No. 6936. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 15 by 5½ inches, smooth, grass green with broader paler stripes; flesh 2 inches thick, white.
- 140824. No. 6937. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 16 by 5½ inches, green white with coarse black-green spots; flesh 2 inches thick, green.
- 140825. No. 6938. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 16 by 5 inches, coarsely netted, pale yellow, heavily mottled green, lighter over the broad slightly indented ribs; flesh green, 2 inches thick.
- 140826. No. 6939. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 12 by 5 inches, smooth, pale green white with green spots and broad, broken black rib bands; flesh 134 inches thick, green.
- 140827. No. 6940. From Turbat Haidari, Khorassan, September 11, 1940. Fruit smooth, 14 by 5 inches, pale lemon with paler indented ribs; flesh 2 inches thick, cream.
- 140828. No. 6941. From Turbat Haidari, Khorassan, September 11, 1940. Fruit football-shaped, 12 inches long, nearly smooth, green white with black-green spots; flesh salmon, 2 inches thick.
- 140829. No. 6942. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 12 by 6 inches, lemon with black-green spots and broken blotch stripes of the same; flesh 2 inches thick, green white.
- 140830. No. 6943. From Turbat Haidari, Khorassan, September 11, 1940. Fruit 12 by 6 inches, smooth, pale lemon with blotchings and spots of dark green, with broad lead-green rib stripes; flesh 2 inches thick, green white.

- 140831. No. 6982. From Turbat Haidari, Khorassan, September 12, 1940. Fruit subglobose, 8 inches long, pale yellow with fine pale-green dots; flesh 2 inches thick, white, crisp.
- 140832. No. 6983. From Turbat Haidari, Khorassan, September 12, 1940. Fruit 12 by 5 inches, black green with lead-green rib stripes, more or less netted; flesh 2 inches thick, green.
- 140833. No. 6984. From Turbat Haidari, Khorassan, September 12, 1940. Fruit 14 by 5 inches, obscurely netted, pale yellow with fine green dots; flesh 1¼ inches thick, green.
- 140834. No. 6985. From Turbat Haidari, Khorassan, September 12, 1940. Fruit 11 by 5 inches, pale green turning yellow with green spots, slightly indented rib lines of lead green; flesh 1¾ inches thick, green.
- 140835. No. 6986. From Turbat Haidari, Khorassan, September 12, 1940. Fruit like No. 6985, but with sweeter white flesh.
- 140836. No. 6987. From Turbat Haidari, Khorassan, September 12, 1940. Fruit football-shaped, 10 inches long, kemon, coarsely netted; flesh 1¾ inches thick, white.
- 140837. No. 6988. From Turbat Haidari, Khorassan, September 12, 1940. Fruit football-shaped, 10 inches long, pale green with darker dots, coarsely netted; flesh 2 inches thick, cream.
- 140838. No. 6995. From Turbat Haidari, Khorassan, September 12, 1940. Said to be an early sort, green-fleshed.
- 140839. No. 6996. From Turbat Haidari, Khorassan, September 12, 1940. Said to be an early variety.
- 140840. No. 6997. From Turbat Haidari, Khorassan, September 12, 1940. Said to be an early sort, globose, orange.
- 140841. No. 7027. From Turbat Haidari, Khorassan, September 12, 1940. Fruit pointed at both ends, 18 inches long, lemon with green spots, raised black-green blotches, not netted; flesh 13/4 inches thick, green.
- 140842. No. 7070. From Turbat Haidari, Khorassan, September 13, 1940. A farmer's sample; excellent.
- 140843. No. 7077. From Turbat Haidari, Khorassan, September 13, 1940. Fruit 15 by 10 inches, heavily netted, green turning yellow in blotches; flesh 2½ inches thick, salmon.
- 140844. No. 7082. From Meshed, Khorassan, September 15, 1940. Fruit 11 by 9 inches, heavily netted, lemon with green spots; flesh 2½ to 3 inches thick, green at rind, becoming whitish at center; rind hard. Good keeper.
- 140845. No. 7083. From Meshed, Khorassan, September 15, 1940. Fruit 14 by 7 inches, heavily netted, green turning yellow; flesh 1½ inches thick, salmon, very fragrant, sweet; hard shell, long keeper.
- 140846. No. 7084. From Meshed, Khorassan, September 15, 1940. Fruit football-shaped, 12 inches long, yellow, sparsely netted with elongate broken blotches of green; flesh 2 inches thick, cream, sweet.
- 140847. No. 7085. From Meshed, Khorassan, September 15, 1940. Fruit 18 by 6 inches, strongly netted, green; flesh 2 inches thick, green, crisp, sweet; hard shell, good keeper.
- 140848. No. 7086. From Meshed, Khorassan, September 16, 1940. Fruit football-shaped, 10 inches long, gold, hard shell, smooth; flesh 2 inches thick, white.
- 140849. No. 7088. From Meshed, Khorassan, September 16, 1940. Fruit 12 by 6 inches, cream, smooth, soft shell; flesh 1½ inches thick, white.
- 140850. No. 7089. From Meshed, Khorassan, September 16, 1940. Fruit football-shaped, 7½ inches long, heavily netted, green with yellowish indented ribs; flesh 1¾ inches thick, salmon, crisp. Good keeper.

- 140851. No. 7090. From Meshed, Khorassan, September 16, 1940. Fruit football-shaped, 12 inches long, pale yellow dotted green; flesh 2 inches thick, green.
- 140852. No. 7091. From Meshed, Khorassan, September 16, 1940. Fruit football-shaped, 11 inches long, smooth, green white with darker green and yellow blotches; flesh ¾ inch thick, salmon, melting.
- 140853. No. 7092. From Meshed, Khorassan, September 16, 1940. Fruit globose, 9 inches in diameter, pale yellow with broad, slightly indented pale-green ribs; flesh 1¾ inches thick, white, crisp; soft shell, good keeper.
- 140854. No. 7093. From Meshed, Khorassan, September 16, 1940. Fruit ovoid. 10 inches long, coarsely netted, gold, hard shell; flesh 2 inches thick, salmon; good keeper.
- 140855. No. 7094. From Meshed, Khorassan, September 16, 1940. Fruit 11 by 8 inches, coarse, strong netting, green; flesh 2 inches thick, white, crisp.
- 140856. No. 7095. From Meshed, Khorassan, September 16, 1940. Fruit 12 by 7 inches, green, hard shell; flesh 1¾ inches thick, green white, crisp; good keeper.
- 140857. No. 7096. From Meshed, Khorassan, September 16, 1940. Fruit ovoid, 10 inches long, gold with fine green dots, coarse net over stem end, hard shell; flesh 2¼ inches thick, white, melting; good keeper.
- 140858. No. 7097. From Meshed, Khorassan, September 16, 1940. Fruit 10 by 6½ inches, irregular and deeply ribbed, canary yellow, firm shell; flesh 1½ inches thick, cream; good keeper.
- 140859. No. 7110. From Nishabur, Khorassan, September 19, 1940. Fruit somewhat flattened, 6 by 5 inches, dark blue with black dots and broad green ribs; flesh 2 inches thick, green.
- 140860. No. 7112. From Nishabur, Khorassan, September 20, 1940. Fruit 9 by 7 inches, black green turning yellow with broad pale ribs, coarsely netted; flesh 2 inches thick, yellow green.
- 140861. No. 7113. From-Nishabur, Khorassan, September 20, 1940. Fruit 14 by 6 inches, coarsely netted, lemon with green ribs; flesh 134 inches thick, green.
- 140862. No. 7114. From Nishabur, Khorassan, September 20, 1940. Fruit 14 by 7 inches, heavily netted, lemon; flesh 2 inches thick, cream green.
- 140863. No. 7124. From Nishabur, Khorassan, September 20, 1940. A farmer's mixture.
- 140864. No. 7150. From Sultanabad, Khorassan, September 22, 1940. Fruit football-shaped, 12 inches long, surface not netted, lemonlike with irregular indented gray-green dots, elongate irregular dark-green blotches along the ribs; flesh 21/4 inches thick, salmon, sweet, crisp, distinctive.
- 140865. No. 7152. From Sultanabad, Khorassan, September 22, 1940. Fruit football-shaped, 11 inches long, smooth with broad deeply indented ribs; pale yellow green with dark dots and broken stripes of the same on either side of the ribs; flesh 1½ inches thick, salmon.
- 140866. No. 7157. From Sabzawar, Khorassan, September 22, 1940. Fruit football-shaped, 10 inches long, pale green with darker dots; flesh 2 inches thick, cream.
- 140867. No. 7158. From Sabzawar, Khorassan, September 22, 1940. Fruit 12½ by 5 inches, yellow green with slightly indented gray ribs; flesh cream green, 1½ inches thick.
- 140868. No. 7168. From Sabzawar, Khorassan, September 23, 1940. Fruit football-shaped, 10 inches long, firm shell, traces of net, yellow; flesh cream white, 134 inches thick, good keeper.
- 140869. No. 7169. From Sabzawar, Khorassan, September 23, 1940. Fruit 8 by 4½ inches, yellow with traces of slightly indented green ribs; flesh 1½ inches thick, white.

- 140870. No. 7170. From Sabzawar, Khorassan, September 23, 1940. Fruit football-shaped, 11 inches long, lemon clouded with black-green dots and elongate irregular blotches of the same; rind firm, ½ inch thick; flesh 2 to 3 inches thick, salmon, sweet; keep into winter.
- 140871. No. 7171. From Sabzawar, Khorassan, September 23, 1940. Fruit football-shaped to ovoid, 9 inches long, pale yellow clouded with fine black dots and elongate broken blotches of the same; flesh 2 inches thick, salmon; good keeper.
- 140872. No. 7179. From Sabzawar, Khorassan, September 23, 1940. A farmer's mixture.
- 140873. No. 7205. From Shahrud, Khorassan, September 26, 1940. Fruit globose, heavily netted, 6 inches in diameter, green turning yellow; flesh 1¾ inches thick, salmon.
- 140874. No. 7206. From Shahrud, Khorassan, September 26, 1940. Fruit sub-globose, 6 inches long, heavily netted, yellow with green dots and splashes; flesh 1½ inches thick, cream, unripe when seen.
- 140875. No. 7207. From Shahrud, Khorassan, September 26, 1940. Fruit globose, 6 inches in diameter, yellow with irregular long splashes of grass green; heavy net; flesh 1½ inches thick, cream, unripe.
- 140876. No. 7208. From Shahrud, Khorassan, September 26, 1940. Fruit football-shaped, 10 inches long, lemon with fine dots and splashes of black green; flesh 1½ inches thick, green, tinged salmon.
- 140877. No. 7209. From Shahrud, Khorassan, September 26, 1940. Fruit globose, 6 inches in diameter, lemon, coarsely netted; flesh 1½ inches thick, white, unripe.
- 140878. No. 7210. From Shahrud, Khorassan, September 26, 1940. Fruit 12 by 5 inches, coarsely netted, green with yellow dots; flesh 1½ inches thick, green, unripe.
- 140879. No. 7211. From Shahrud, Khorassan, September 26, 1940. Fruit obovoid, 8 inches long, coarsely netted; fine yellow and green dots; flesh 1¾ inches thick, white.
- 140880. No. 7212. From Shahrud, Khorassan, September 26, 1940. Fruit elongate ovoid, 10 inches long, lemon; flesh 1¼ inches thick, green, unripe.
- 140881. No. 7219. From Shahrud, Khorassan, September 27, 1940. Fruit football-shaped, 12 inches long, netted, lemon with grass-green dots; irregular indented ribs; flesh 2 inches thick, white, unripe.
- 140882. No. 7224. From Gurgan, September 29, 1940. Fruit flattened, 7 by 6 inches, gold clouded with brown; flesh 1¾ inches thick, rather like a pear in flavor.
- 140883. No. 7231. From Shahrud, Khorassan, September 27, 1940. A melon mixture for the colder parts of the melon zone where the usual Turkoman melon does not mature.
- 140884. No. 7272. From Garmsar, Tehran, October 2, 1940. Fruit 15 by 7 inches, yellow, netted; flesh 2½ inches thick, white, juicy, crisp, fairly sweet.
- 140885. No. 7278. From Tehran, October 6, 1940. Fruit 5 by 3½ inches, striped yellow and gold brown; flesh 1¼ inches thick, white, fragrant, edible.
- 140886. No. 7283. From Gurgan, October 1, 1940. Fruit flattened, 6 by 5 inches, gold to gold brown; flesh white, good flavor, keeps for several months.
- 140887. No. 7284. From Meshed, Khorassan, September 18, 1940.
- 140888 to 140901. Cucumis sativus L. Cucurbitaceae. Cucumber.
  - 140888. No. 5919. Balang. From Ahwaz, Khuzistan, April 20, 1940. Fruit short, about 6 inches long, yellow green; tender, flavor good.
  - 140889. No. 6199. Khiyarisalz. From Tehran, June 19, 1940. Fruit 6 by 21/2 inches, elongate, round ends; tender, quality excellent.

- 140890. No. 6300. Khiyar. From Gurgan, July 12, 1940. Fruit 13 by 5\\\^4\ inches, russet; good quality when young.
- 140891. No. 6382. Khiyar-i-chanbar. From Gurgan, July 28, 1940. Fruit 8 inches long, small; quality excellent.
- 140892. No. 6520. Khiyar. From Bujmerd, August 8, 1940. Fruit 8 by 5 inches, well-formed, smooth with inconspicuous spines; quality good.
- 140893. No. 6655. Khiyar. From Meshed, Khorassan, August 13, 1940. Fruit 7 inches long, cylindrical; quality good.
- 140894. No. 6722. Khiyar. From Turbati Shaikh Jam, Khorassan, August 23, 1940.
- 140895. No. 6821. Khiyar. From Firdus, Khorassan, August 27, 1940.
- 140896. No. 6907. Khiyar. From Tabas, Khorassan, September 8, 1940. Fruit 7 inches long, rounded at both ends; quality excellent.
- 140897. No. 6966. Khiyar. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 9 by 4½ inches, russet; tender, quality excellent.
- 140898. No. 7052. Khiyar. From Turbati Haidari, Khorassan, September 13, 1940. Fruit short, green; quality excellent.
- 140899. No. 7135. Khiyar. From Nishabur, Khorassan, September 20, 1940. Fruit 5 inches long, blunt round ends; flavor and texture excellent.
- 140900. No. 7195. Khiyar. From Sabzawar, Khorassan, September 24, 1940. Fruit 5 inches long, smooth, symmetrical, flavor delicate.
- 140901. No. 7239. Khiyar. From Shahrud, Khorassan, September 27, 1940. Fruit 6 inches long, usually cylindrical, symmetrical, quality good.

#### 140902 and 140903.

From Australia. Seeds presented by the Secretary of Agriculture, Hobart, Tasmania. Received March 31, 1940.

140902. AVENA BYZANTINA K. Koch. Poaceae.

Standard Algerian.

140903. AVENA BYZANTINA K. Koch.

Algerian Selection A 236.

For previous introduction see 135730.

### 140904 to 140947.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received March 24, 1941.

140904 to 1409014. ALLIUM spp. Liliaceae.

140904. [No Koelz number.]

- 140905. No. 6106. From Ti, Luristan, June 5, 1940. An allium 2½ feet high, with rose-purple flowers in heads 3 inches in diameter; leaves probably broad.
- 140906. No. 6119. From Durud, Luristan, June 7, 1940. An allium 4 feet high, with rose-purple flowers in heads up to 4 inches in diameter; leaves broad.
- 140907. No. 6317. From Shahkuh, Mazenderan, July 17, 1940. An allium 18 inches high, with rose flowers in heads 1½ inches in diameter.
- 140908. No. 6413. From Gumbatigabus, July 31, 1940. An allium 18 inches high, with white flowers in heads 1 inch in diameter.
- 140909. No. 6417. From Marave, Khorassan, July 31, 1940. A steppe plant 12 inches high, with flower head  $1\frac{1}{2}$  inches in diameter.
- 140910. No. 6469. From Kataliyekchinar, Khorassan, August 4, 1940. A steppe plant about 2 feet high, with flower head 1 foot across; rather rare.

### 140904 to 140947—Continued

140911. No. 6688. From Bardu Forest, Khorassan, August 20, 1940. An allium about 3½ feet high, with a spindle-shaped swelling in middle of stem, 1½ inches through; flower heads 2½ inches in diameter.

140912. No. 6689. From Bardu Forest, Khorassan, August 20, 1940. An allium 2 feet high, with flower heads 2 inches in diameter.

140913. No. 6698. From Bardu, Khorassan, August 21, 1940. A field plant 3 feet high, with a flower head 2 inches in diameter.

140914. No. 7230. From Shahrud, Khorassan, September 26, 1940. A wild allium, growing in an orchard, 3 feet high, with flower head 11/4 inches across.

#### 140915. ALTHAEA sp. Malvaceae.

No. 7020. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. A plant up to 6 feet high, with red-purple flowers 3½ inches across; leaves deeply palmate.

140916. ANCHUSA ITALICA Retz. Boraginaceae.

No. 6295. From Gurgan, June 11, 1940. A field weed 2 feet high, with attractive cobalt-blue flowers.

140917. Anthemis rigescens Willd. Asteraceae.

No. 6480. From Kataliyekchinar, Khorassan, August 5, 1940. A perennial daisy about 2 feet high.

140918. ASPARAGUS Sp. Convallariaceae.

No. 6477. From Kataliyekchinar, Khorassan, August 5, 1940. A woody climber about 12 feet high, growing among the shrubs of a dry, rocky stream bed.

140919. CELTIS sp. Ulmaceae.

Hackberry.

No. 6468. From Kataliyekchinar, Khorassan, August 4, 1940. A densely branched tree, with a trunk about 18 inches in diameter; growing in a dry, rocky place.

140920. CELTIS Sp.

No. 6878. From Khaur, Khorassan, September 6, 1940. A cultivated ornamental tree, with a trunk about 18 inches in diameter.

140921. COLUTEA sp. Fabaceae.

No. 6488. From Kataliyekchinar, Khorassan, August 6, 1940. A well-formed bush 6 feet high, with large yellow flowers.

140922 to 140927. Crataegus spp. Malaceae.

140922. CRATAEGUS Sp.

No. 6676. From Bardu Forest, Khorassan, August 18, 1940. A well-formed bush 7 feet high, with small scarlet fruits, 3% inch in diameter.

140923. CRATAEGUS Sp.

No. 6867. From Khaur, Khorassan, September 5, 1940. A small tree, growing in fields and orchards, with mahogany-red fruits,  $\frac{1}{2}$  inch in diameter.

140924. CRATAEGUS Sp.

No. 7035. From Turbati Haidari, Khorassan, September 13, 1940. A small cultivated tree, with attractive crimson fruits, ½ inch in diameter.

140925. CRATAEGUS SD.

No. 7140. From Nishabur, Khorassan, September 21, 1940. Fruits flat, 1 by ½ inches, yellow with pink wash.

140926. CRATAEGUS Sp.

No. 7266. From Gurgan, October 1, 1940. A small tree about 6 inches in diameter, with small, dull red-brown fruits.

#### 140927. CRATAEGUS Sp.

No. 7286. From Tehran, October 8, 1940. Fruits 1 by 3/4 inch, flat, yellow, dotted and washed with pink; edible.

## 140904 to 140947—Continued

140928. Dianthus sp. Silenaceae.

No. 6498. From Kataliyekchinar, Khorassan, August 6, 1940. A steppe annual about 18 inches high, with a single flower head.

140929. Daucus sp. Apiaceae.

No. 6043. From Gaomir, Bakhtiari, May 16, 1940. A common steppe annual about 3 feet high, with white flowers.

140930. EREMURUS sp. Liliaceae.

No. 6148. From Tehran, June 14, 1940. Plant 4 feet high, with 2½ foot spike of whitish flowers.

140931. EPHEDRA sp. Gnetaceae.

No. 6470. From Kataliyekchinar, Khorassan, August 4, 1940. A dense shrub about 3 feet high, with lovely cerise fruits.

140932. HYPERICUM sp. Hypericaceae.

No. 6374. From Khairat, Mazenderan, July 26, 1940. An open bush about 3 feet high, with large, black fruits.

140933. IPOMOEA sp. Convolvulaceae.

No. 6362. From Khairat, Mazenderan, July 26, 1940. A vine growing in thickets, with large, single white nocturnal flowers 2 inches across.

140934. JUNIPERUS Sp. Pinaceae.

No. 6678. From Bardu Forest, Khorassan, August 18, 1940. A handsome, dense tree 20 feet high, with a trunk 6 feet in diameter and gnarled twisted limbs that stand heavy pruning.

140935. Althaea Rosea (L.) Cav. Malvaceae.

Hollyhock.

No. 5940. From Ahwaz, Khuzistan, April 22, 1940. A bushy plant about 7 feet high, palmately lobed leaves, and single to semidouble pink flowers.

140936. LITHOSPERMUM sp. Boraginaceae.

No. 5961. From Saridasht, Bakhtiari, April 26, 1940. A perennial, with large rose-purple flowers, growing on rocks in low, well-rounded clumps.

140937. Lychnis coronaria (L.) Desr. Silenaceae.

No. 6496. Collected on the Steppe of Iran. A mullein pink about 3 feet high, with rose flowers.

140938. PAPAVER sp. Papaveraceae.

No. 6114. From Durud, Luristan, June 6, 1940. A perennial about 18 inches high, with large single burnt-orange flowers 2½ inches across.

140939. PARROTIA sp. Hamamelidaceae.

No. 7264. From Gurgan, October 1, 1940. A smooth-barked tree about 2 feet in diameter, with red leaves in the fall.

140940. Petroselinum crispum (Mill.) Nym. (P. hortense Hoffmann). Apiaceae. Parsley.

No. 6915. Jafri. From Tabas, Khorassan, September 8, 1940.

140941. Petroselinum crispum (Mill.) Nym. (P. hortense Hoffmann).

No. 7259. Jafri. From Shahrud, Khorassan, September 27, 1940.

140942. Plantago sp. Plantaginaceae.

No. 5908. From Ahwaz, Khuzistan, April 20, 1940. A dense plant growing about 8 inches high; much relished by goats.

140943. PLATANUS sp. Platanaceae.

No. 6881. From Khaur, Khorassan, September 6, 1940. A cultivated, handsome tree, with a trunk about 6 feet in diameter.

#### 140904 to 140947—Continued

140944. RHAMNUS sp. Rhamnaceae.

No. 5991. From Belu, Bakhtiari, May 8, 1940. A dense rounded shrub about 8 feet high, growing beside a spring; fruits red, edible.

140945. RHAMNUS Sp.

No. 6483. From Kataliyekchinar, Khorassan, August 6, 1940. A low, dense shrub about 3 feet high, growing in rocky places; berries dark-colored.

140946. Rosa sp. Rosaceae.

No. 7229. From Shahrud, Khorassan, September 26, 1940. A low shrub about 1 foot high, with simple, strongly toothed leaves.

140947. SOLANUM Sp. Solanaceae.

No. 7099. From Meshed, Khorassan, September 17, 1940. An ornamental pot plant with flat, red fruits resembling tomatoes.

# 140948 to 140964. Tritcum durum Desf. Poaceae. Durum wheat.

From Australia. Seeds presented by Dr. W. L. Waterhouse, University of Sydney, Sydney. Received March 31, 1941.

140948. Bobin  $\times$  Bobin  $\times$  Gaza, AB 7/9.2.4.2.5.

140949. Bobin × Bobin × Gaza, AB 21/1.1.1.5.

140950. Bobin × Bobin × Gaza, AB 6.1.1.1.4.

140951. Bobin  $\times$  Bobin  $\times$  Gaza, AB 21/9.3.1.1.3.

140952. Bobin  $\times$  Bobin  $\times$  Gaza, AB 26/1.5.1.1.6.

140953. Bobin × Bobin × Gaza, AB 27/2.2.1.3.3.

140954. Bobin  $\times$  Bobin  $\times$  Gaza, AB 28/1.1.1.4.

140955. Bobin  $\times$  Bobin  $\times$  Gaza, AB 29/2.1.3.1.3.

**140956.** Bobin  $\times$  Bobin  $\times$  Gaza, AB 31/3.2.1.1.5.

140957. Bobin  $\times$  Bobin  $\times$  Gaza, AB 31/7.2.1.1.6.

140958. Bobin × Bobin × Gaza, AB 32/2.1.1.1.

140959. Gaza 277.

140960. Gullen × Gullen × Gaza, AD 2/6.1.1.1.2.

140961. Gullen × Gullen × Gaza, AD 5/3.2.1.1.5.

140962. Gullen  $\times$  Gullen  $\times$  Gaza, AD 17/2.2.1.4.

140963. Gullen × Gullen × Gaza, AD 20/1.4.1.4.

140964. Gullen × Gullen × Gaza, AD 21/1.2.1.5.

### 140965. Brachychiton acerifolium F. Muell. Sterculiaceae.

From California. Seeds presented by William Hertrich, Curator, Huntington Botanic Garden, San Marino. Received April 7, 1941.

For previous introduction see 75547.

#### 140966 to 141083.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States
Department of Agriculture. Received March 21, 1941.

140966. Adonis sp. Ranunculaceae.

No. 5958. From Saridasht, Bakhtiari, April 26, 1940. An annual 18 inches high, with attractive, single red flowers.

140967. ALLIUM sp. Liliaceae.

No. 6150. From Tehran, June 14, 1940. Plant about 2 feet high, with large, rose-purple flowers in a large head 1 foot across.

140968 to 140984. ALTHAEA spp. Malvaceae.

140968. ALTHAEA OFFICINALIS L.

Marshmallow.

No. 6528. From Karak, Khorassan, August 7, 1940. A plant 4 feet high, growing along streams, with velvetlike leaves and small, pale rose-purple flowers, ½ inch across.

140969. АLТНАЕА sp.

No. 6164. From Tehran, June 16, 1940. A desert plant 2 feet high, with hirsute leaves and single, pale-yellow flowers, deeper in the throat, about 2 inches across.

140970. ALTHAEA ROSEA (L.) Cav.

Hollyhock

No. 6438. From Bujmerd, Khorassan, August 2, 1940. An unbranched plant 6 feet high, with deeply palmate leaves and single rose flowers, 4 inches across.

140971. ALTHAEA Sp.

No. 6040. From Labisufed, Bakhtiari, May 15, 1940. Plant about 4 feet high, growing on rocky slopes, with single, white flowers about 3 inches across.

140972. ALTHAEA Sp.

No. 6260. From Khatirabad, Gurgan, July 10, 1940. A much-branched plant, 5 feet tall, with single, white-with-yellow-throat flowers, 3 inches across.

140973. ALTHAEA Sp.

No. 6297. From Gurgan, July 11, 1940. A bushy plant, with flowers 4 inches across, pale yellow, deeper yellow in the throat.

140974. ALTHAEA Sp.

No. 6478. From Kataliyekchinar, Khorassan, August 5, 1940. A steppe plant 5 feet tall, with single, yellow flowers about 3 inches across.

140975 to 140984. ALTHAEA ROSEA (L.) Cav.

- 140975. No. 6531. From Shirvan, Khorassan, August 9, 1940. A plant 8 feet tall, freely branched from the base, with attractive single and double flowers.
- 140976. No. 6923. From Turbati Haidari, Khorassan, September 10, 1940. A plant 10 feet tall, with obscurely palmate leaves and single flowers 4 inches across, rose pink with yellow centers.
- 140977. No. 6693. From Fariman, Khorassan, August 14, 1940. A plant 7 feet high, with attractive double flowers.
- 140978. No. 6879. From Khaur, Khorassan, September 6, 1940. A cultivated plant 6 feet high.
- 140979. No. 7010. From Turbati Haidari, Khorassan, September 12, 1940. A plant 8 feet high, with palmate leaves and pink, semidouble flowers 3½ inches across.
- 140980. No. 7011. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. A plant more than 4 feet high, with obscurely palmate leaves and single, white flowers tinged pink, 2 inches across.
- 140981. No. 7012. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. A plant 3 feet high, with obscurely palmate leaves and deep-rose flowers with yellow centers, 3 inches across.
- 140982. No. 7018. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. Flowers single, maroon with yellow centers, 3½ inches across.
- 140983. No. 7021. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. A plant 6 feet high, with deeply palmate leaves and double pink flowers 3½ inches across.
- 140984. No. 7022. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. Leaves deeply cut, flowers semidouble, white tinged with pink, 31/2 inches across.

140985. ALYSSUM sp. Brassicaceae.

No. 6352. From Dimalu, Mezendaren, July 23, 1940. A low, bushy perennial of the high steppe, about 1 foot high, with very attractive flowers.

140986. ANCHUSA sp. Boraginaceae.

No. 6070. From Gaomir, Bakhtiari, May 16, 1940. A handsome plant, about 2 feet high, with large, broadly obovate leaves and abundant purple-blue flowers.

140987. Anemone sp. Ranunculaceae.

No. 5949-A. From Seshahan, Bakhtiari, April 25, 1940. A plant 18 inches high, with large, single blood-red flowers about 3 inches across.

140988. ARENARIA sp. Silenaceae.

No. 6345. From Dimula, Mazenderan, July 23, 1940. An attractive plant growing in mats, 12 inches high, with white flowers.

140989. ARISAEMA sp. Araceae.

No. 6322. From Shahkuh, Mazenderan, July 17, 1940. An ornamental, with a scarlet fruit head 3 inches long.

**140990.** Arisaema sp.

No. 6326. From Guzlu, Mazenderan, July 15, 1940. A forest plant, 2½ feet high, with scarlet fruits.

140991. ASTER sp. Asteraceae.

No. 7221. From Shahrud, Khorassan, September 27, 1940. A perennial 3½ feet high, with lanceolate-linear leaves and large, lavender flowers 1½ inches across.

140992. BERBERIS Sp. Berberidaceae.

No. 6340. From Karimserai, Mazenderan, July 21, 1940. A dense bush about 8 feet high, growing on dry slopes, with blue-black, acid fruits.

140993. BERBERIS Sp.

No. 6677. From Bardu Forest, Khorassan, August 18, 1940. An attractive, well-formed bush, about 7 feet high, with scarlet to crimson fruits in conspicuous clusters. 140994. Berberis sp.

No. 7033. Zareshk. From Turbati Haidari, Khorassan, September 13, 1940. A handsome, cultivated bush about 8 feet high, with clusters of scarlet-red, edible berries.

140995. CALENDULA GRACILIS DC. Asteraceae.

No. 5912. From Ahwaz, Khuzistan, April 20, 1940. A plant 18 inches high, growing in unwatered fields or dry mountains; ray flowers yellow, disk flowers darker.

140996. Specularia falcata (Ten.) A. DC. Campanulaceae.

No. 6036. From Cheshmashirin, Bakhtiari, May 14, 1940. A delicate annual about 6 inches high, growing in the cracks of shady dry lime cliffs; flowers purple.

140997. CAMPANULA sp. Campanulaceae.

No. 6038. From Labisufed, Bakhtiari, May 15, 1940. An attractive annual about 1 foot high, with large white flowers with broad purple margins.

140998. CAMPANULA STRIGOSA Banks and Sol.

No. 6108. From Ti, Luristan, June 5, 1940. A low annual about 12 inches high, with large, white flowers broadly edged in purple.

140999. CARAGANA sp. Fabaceae.

No. 5995. From Sachal, Bakhtiari, May 10, 1940. An attractive, dense bush about 4 feet high, growing on dry slopes; covered in spring with pink flowers, later with small pink pods.

141000. CRUPINA VULGARIS Cass. Asteraceae.

No. 5966. From Talemansur, Bakhtiari, April 27, 1940. An interesting, delicate, annual of open habit, with heads of rose-purple flowers.

141001. CENTAUREA sp. Asteraceae.

No. 6130. From Durud, Luristan, May 22, 1940. A perennial about 18 inches high, with large heads of blue-purple or rose-purple flowers.

### 141002. CENTAUREA Sp.

No. 6306. From Gurgan, July 12, 1940. A field perennial about 18 inches high, with rose flowers about 1 inch across; bracts with long feathery tips.

#### 141003. CHRYSANTHUMUM sp. Asteraceae.

No. 6346. From Dimalu, Mazenderan, July 23, 1940. A perennial 20 inches high, with a few large heads; found growing in dense shade.

#### 141004. Colchicum sp. Melanthiaceae.

No. 6690-A. From Bardu Forest, Khorassan, August 20, 1940.

### 141005. COLUTEA sp. Fabaceae.

No. 6360. From Khairat, Mazenderan, July 26, 1940. A well-formed bush about 7 feet high, with large, yellow flowers followed by large inflated pods.

#### 141006. Convolvulus sp. Convolvulaceae.

No. 6080. From Durud, Luristan, May 23, 1940. A creeping perennial, with an abundance of beautiful wine-colored flowers about 2 inches across.

#### 141007. CRATAEGUS Sp. Malaceae.

No. 7141. Zalzalak. From Nishabur, Khorassan, September 21, 1940. A wild tree, with yellow fruits ½ inch across.

## 141008 to 141011. DELPHINIUM spp. Ranunculaceae.

#### 141008. DELPHINIUM Sp.

No. 5953. From Seshahan, Bakhtiari, April 25, 1940. An annual about 3 feet high, growing on dry slopes, with large, rose to purple-blue flowers.

#### 141009. DELPHINIUM ATACIS L.

No. 6294. From Gurgan, July 11, 1940. A wild, attractive plant, 3 feet high, with small leaves and purple flowers.

#### 141010. DELPHINIUM Sp.

No. 6319. From Shahkuh, Mazenderan, July 17, 1940. A field weed 18 inches high, with large purple flowers.

#### 141011. DELPHINIUM Sp.

No. 6682. From Bardu Forest, Khorassan, August 19, 1940. An annual 3 feet high, growing on dry slopes; sparingly branched.

#### 141012 to 141015. DIANTHUS spp. Silenaceae.

#### 141012. DIANTHUS SD.

No. 6229. From Tehran, June 26, 1940. A desert ornamental growing in small clumps 4 inches high, with large flowers.

#### 141013. DIANTHUS Sp.

No. 6354. From Khairat, Mazenderan, July 25, 1940. An attractive plant growing in part shade in clumps 18 inches high, with rose flowers about 3/4 inch across.

#### 141014. DIANTHUS SD.

No. 6472. From Kataliyekchinar, Khorassan, August 4, 1940. A steppe plant growing in clumps about 18 inches high, with inconspicuous, awnlike leaves; the rose flowers with fringed petals are about 1 inch across.

#### 141015. DIANTHUS Sp.

No. 6686. From Bardu Forest, Khorassan, August 20, 1940. A plant growing in clumps 12 to 15 inches high, at an altitude of 7,000 feet.

141016. EREMURUS Sp. Liliaceae.

No. 6666. Serishk. From Abdullabad, Khorassan, August 14, 1940. A plant about 2½ feet high, with white flowers, the flower parts with colored ribs.

#### 141017. EREMURUS Sp.

No. 6674. Serishk. From Bardu Forest, Khorassan, August 17, 1940. A plant 31/2 feet high, growing on dry slopes, with the flower spikes 2 feet high and 3 to 4 inches in diameter.

141018. GYPSOPHILA sp. Silenaceae.

No. 6338. From Karimserai, Mazenderan, July 20, 1940. A perennial growing on bare dry slopes, with small white flowers.

#### 141019. GYPSOPHILA Sp.

No. 6443. From Bujmerd, Khorassan, August 2, 1940. A much-branched field annual.

#### 141020. Helianthus annuus L. Asteraceae.

Common sunflower.

No. 6515. Aftabgardan. From Bujmerd, Khorassan, August 8, 1940. A plant 6 feet high, with a flower head 15 inches across.

141021. IPOMOEA PURPUREA (L.) Roth. Convolvulaceae. Common morning-glory.

No. 6532. From Shirvan, Khorassan, August 9, 1940. Flowers 2 inches across, blue purple and wine red.

### 141022. ILEX sp. Aquifoliaceae.

No. 6347. From Dimalu, Mazenderan, July 23, 1940. An attractive bush about 3 to 4 feet high, with crimson fruits.

141023 to 141030. IRIS spp. Iridaceae.

141023. IRIS sp.

No. 5948. From Seshahan, Bakhtiari, April 25, 1940. Growing in clumps 15 inches in diameter; flowers purple.

141024. IRIS sp.

No. 6068. From Durud, Luristan, May 20, 1940. A rare plant, 5 feet high, growing at an altitude of 6,000 feet.

141025. IRIS sp.

No. 6079. From Durud, Luristan, May 24, 1940. A handsome clump species about 3½ feet high, with flowers 4 inches across; falls pale yellow edged with deeper yellow; standard pale purple blue with yellow base.

141026. IRIS PERSICA L.

No. 6339-A. From Karimserai, Mazenderan, July 20, 1940. A handsome plant 4 feet high, growing on bare dry plains; flowers blue and white, about 2 inches across.

For previous introduction see 106023.

141027. IRIS Sp.

No. 6530. From Shirvan, Khorassan, August 9, 1940. A cultivated plant growing in clumps, about 2 feet high.

141028. IRIS sp.

No. 6687-A. From Bardu Forest, Khorassan, August 20, 1940. A plant 4 feet high.

141029. IRIS sp.

No. 6694-A. From Bardu Forest, Khorassan, August 20, 1940. Growing in clumps 18 inches high on dry slopes; one to two flowers to a stalk, 18 inches high.

141030. IRIS sp.

No. 6920-A. From Tabas, Khorassan, September 8, 1940. A plant 18 inches high, with two to three flowers to a stalk.

141031. Malva sylvestris L. Malvaceae.

Mallow.

No. 6162. From Tehran, June 16, 1940. A garden weed about 2 feet high, with rose-purple flowers about  $\frac{1}{2}$  inch across.

141032. ALTHAEA CANNABINA L. Malvaceae.

No. 6461. From Kataliyekchinar, Khorassan, August 4, 1940. A much-branched plant about 5 feet high, with wine-colored flowers about 34 inch across.

141033. MALVA SYLVESTRIS L. Malvaceae.

Mallow.

No. 7016. Gulikhatmi. From Turbati Haidari, Khorassan, September 12, 1940. A garden weed 4 feet high, with single magenta-purple flowers about 1½ inches across. 141034. Lonicera sp. Caprifoliaceae.

No. 6314. From Mazenderan (Ahangarmahah), July 14, 1940. An attractive, open bush about 7 feet high, growing along streams and in hedges, with an abundance of scarlet-red fruits.

141035. Lychnis sp. Silenaceae.

No. 6499. From Kataliyekchinar, Khorassan, August 6, 1940. An annual about 15 inches high.

141036. LYCHNIS sp.

No. 6699. From Bardu Forest, Khorassan, August 21, 1940. A perennial growing on dry slopes in clumps 18 inches high.

141037. LYCHNIS Sp.

No. 6500. From Kataliyekchinar, Khorassan, August 6, 1940. A steppe annual about 18 inches high.

141038. Malva montana Forsk. Malvaceae.

No. 6025. From Cheshmashirin, Bakhtiari, May 13, 1940. A decumbent, steppe species with rose-purple flowers.

141039. MIRABILIS JALAPA L. Nyctaginaceae.

Four-o'clock.

No. 5828. From Shiraz, Fars, April 6, 1940. A cultivated ornamental.

141040 to 141047. Muscari spp. Liliaceae.

141040. MUSCARI Sp.

No. 5946. From Sarbesha, Bakhtiari, April 24, 1940. A plant 18 inches high, growing in a wheatfield.

141041. MUSCARI Sp.

No. 6325. From Shahkih, Mazenderan, July 17, 1940. Plant 18 inches high, growing at an altitude of 10,000 feet.

141042. MUSCARI Sp.

No. 5950. From Seshahan, Bakhtiari, April 25, 1940. A plant 1 foot high.

141043. Muscari sp.

No. 5978. From Tale, Bakhtiari, May 2, 1940. A plant 4 feet high, growing in a limestone crack.

141044. MUSCARI Sp.

No. 6006. From Cheshmashirin, Bakhtiari, May 13, 1940. An ornamental plant 2½ feet high.

141045. MUSCARI sp.

No. 6084. From Durud, Luristan, May 23, 1940. A low species, 6 inches high, growing chiefly along temporary rivulets; flowers probably blue purple.

141046. MUSCARI Sp.

No. 6085-A. From Durud, Luristan, June 23, 1940. A plant, 18 inches high, with a large open few-flowered raceme and broad basal leaves.

141047. Muscari sp.

No. 6098. From Kalvar, Luristan, May 29, 1940. A species 1 foot high.

141048. ORNITHOGALUM sp. Liliaceae.

No. 6081. From Durud, Luristan, June 23, 1940. An attractive species 18 inches high, with large, open racemes of light-blue flowers, growing along the temporary snow rivulets.

#### 141049 to 141054. PAPAVER spp. Papaveraceae.

141049. PAPAVER GLAUCUM Boiss. and Hausskn.

No. 6104. From Ti, Luristan, June 5, 1940. A steppe annual 12 to 18 inches high, with glaucous leaves and single cherry-red flowers, sometimes with a black spot on the petals.

141050. PAPAVER MACROSTOMUM Boiss and Huet.

No. 6111. From Chamchid, Luristan, June 6, 1940. A steppe annual 1 foot high, with hirsute, green leaves, and flowers about 2 inches across; petals red with a black spot at the base.

141051. PAPAVER SD.

No. 6327. From Kuhikakashan, Mazenderan, July 18, 1940. A low tufted rock plant about 4 inches high, with small brick-red flowers.

141052. PAPAVER sp.

No. 6331. From Shahkuh, Mazenderan, July 18, 1940. A biennial or perennial, growing in clumps about 1 foot high on bare gulch banks.

141053. PAPAVER DUBIUM L.

No. 6683. From Bardu Forest, Khorassan, August 19, 1940. A much-branched plant about 2 feet high, growing on rocky slopes.

141054. PAPAVER SOMNIFERUM L.

Opium poppy.

No. 7058. From Turbati Haidar, Khorassan, September 13, 1940. A variety with purple and white flowers.

141055 to 141062. Rosa spp. Rosaceae.

141055. Rosa sp.

No. 6086. From Durud, Luristan, May 23, 1940. A bush 4 feet high, growing along riverbank, with single, fragrant rose flowers 3 inches across.

141056. Rosa HEMISPHAERICA Herrmann.

Rose.

No. 6149. From Tehran, June 14, 1940. A low bush about 5 feet high, with yellow-orange hips and single, yellow flowers.

141057. Rosa sp.

No. 6446. From Bujmerd, Khorassan, August 2, 1940. A low bush, about 1 foot high, with simple leaves and very bristly fruits, growing on a dry bank of a canal.

141058. Rosa sp.

No. 6462. From Kataliyekchinar, Khorassan, August 4, 1940. A hardy rambler about 10 feet high, with yellow fruits growing in a dry gulch on the steppe.

#### 141059. Rosa sp.

No. 6673. From Bardu Forest, Khorassan, August 17, 1940. A well-formed bush, often spreading from the root to about 6 feet high, with single, white to palepink flowers about 2 inches across; hips small, crimson.

#### 140966 to 141083—Continued

141060. Rosa sp.

No. 6675. From Bardu Forest, Khorassan, August 18, 1940. A well-formed bush 6 feet high, with elongate orange-red hips.

141061. Rosa sp.

No. 6866. From Khaur, Khorassan, September 5, 1940. A cultivated dense bush from 2 to 6 feet high, with elongate crimson hips.

141062. Rosa sp.

No. 6883. From Khaur, Khorassan, September 6, 1940. A dense bush about 8 feet high, with small shiny leaves and cluster of three to five small crimson hips.

141063. SALVIA sp. Menthaceae.

No. 5967. From Talimansur, Bakhtiari, April 27, 1940. A scented plant, with basal leaves and purple-blue flowers with large calyces.

141064. SALVIA sp.

No. 6163. From Tehran, April 16, 1940. A desert species growing in mats, with small, woolly leaves and flower stalks up to 1 foot high.

141065. Sambucus sp. Caprifoliaceae.

No. 6355. From Khairat, Mazenderan, July 25, 1940. A perennial 3 to 6 feet high, growing in part shade or full sunshine, with flat corymbs of white, fragrant flowers and black, acrid fruits eaten by birds.

141066 to 141070. Scabiosa spp. Dipsacaceae.

141066. SCABIOSA PALESTINA L.

No. 6008. From Cheshmashirin, Bakhtiari, May 13, 1940. A steppe annual about 18 inches high, with attractive, fragrant white to rose-purple flowers in heads 2 inches across.

141067. SCABIOSA CALOCEPHALA Boiss.

No. 6041. From Gaomir, Bakhtiari, May 16, 1940. A loose-branching steppe annual, with large-rayed, 1-inch heads of lavender flowers that fade with the morning sun.

141068. SCABIOSA CALOCEPHALA Boiss.

No. 6107. From Ti, Luristan, June 5, 1940. An annual from dry places, 18 inches high, with lavender flowers with frilled rays.

141069. SCABIOSA MICRANTHA Desf.

No. 6418. From Marave, Khorassan, July 31, 1940. A steppe annual about 18 inches high.

141070. Scabiosa sp.

No. 6476. From Kataliyekchinar, Khorassan, August 5, 1940. A hardy perennial about 3 feet high, with dissected leaves and wine-colored flowers in heads  $3\frac{3}{4}$  inches across.

141071 to 141077. TULIPA spp. Liliaceae.

141071. TULIPA sp.

No. 6105. From Ti, Luristan, June 5, 1940. A low species about 6 inches high.

141072. TULIPA Sp.

No. 6118-A. From Durud, Luristan, June 7, 1940. A plant 1 foot high, with red flowers, the perianth segments with yellow and black blotches at the base.

141073. TULIPA MONTANA Lindl.

No. 6152. From Tehran, June 14, 1940. A plant 1 foot high, with large, red flowers, the segments with black spots in the throat.

# 140966 to 141083—Continued

141074. TULIPA Sp.

No. 6481-A. From Kataliyekchinar, Khorassan, August 6, 1940. A steppe plant 20 inches high, with yellow flowers.

141075. TULIPA Sp.

No. 6482. From Kataliyekchinar, Khorassan, August 6, 1940. A low plant 6 inches high, growing on dry bare rocky slopes.

141076. TULIPA Sp.

No. 6691-A. From Bardu Forest, Khorassan, August 20, 1940. A plant 18 inches high, growing at an altitude of 7,000 feet on a dry slope.

141077. TULIPA Sp.

No. 6692-A. From Bardu Forest, Khorassan, August 20, 1940. A hardy, low plant 6 inches high, growing on bare dry slopes.

141078 to 141083. VIOLA spp. Violaceae.

141078. VIOLA Sp.

No. 5986. From Tale, Bakhtiari, May 6, 1940. A low annual about 3 inches high, with very small tricolored flowers.

141079. VIOLA Sp.

No. 5974. From Pashinshurun, Bakhtiari, April 29, 1940. An annual 3 inches high, with small, white flowers marked with yellow spots on the lip.

141080. VIOLA Sp.

No. 6099. From Ti, Luristan, April 2, 1940. A plant growing in damp shade; resembles the common purple violet.

141081. VIOLA sp.

No. 6172. Banafsh. From Tehran, June 17, 1940. Cultivated in a shady garden; flowers blue.

141082. VIOLA SD.

No. 6315. From Gozlu, Mazenderan, July 15, 1940.

141083. VIOLA sp.

No. 6356. From Khairat, Mazenderan, July 25, 1940. A bushy plant about 6 inches high, growing in dense forest.

# 141084. CLAPPERTONI FICIFOLIA Dene. Tiliaceae.

From Tahiti. Seeds presented by Harrison Smith, Papeete, through Col. R. H. Montgomery, Coconut Grove, Florida. Numbered April 25, 1941.

A very striking ornamental shrub native to western tropical Africa. The branches are purplish and covered with yellowish hairs. The hairy leaves are more or less deeply three-lobed to seven-lobed, and the large purple flowers, 2 to 4 inches wide, are in terminal racemes.

For previous introduction see 80692.

#### 141085 to 141198.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States
Department of Agriculture. Received March 19, 1941.

141085 to 141119. Amygdalus spp. Amygdalaceae.

141085. Amygdalus persica var. nectarina Ait.

Nectarine.

No. 6222. Shalil or Shalu. From Tehran, June 24, 1940. Fruit green yellow, with crimson cheek; clingstone; flesh white; flavor good.

141086. AMYGDALUS PERSICA L. (Prunus persica Stokes).

Peach.

No. 6926. Shaftalu. From Turbati Haidari, Khorassan, September 10, 1940. Fruit globose, 2 inches in diameter; flesh yellow; freestone.

141087. AMYGDALUS PERSICA L.

No. 6615. Hulu. From Meshed, Khorassan, August 12, 1940. Fruit 3 inches in diameter; flesh white, red-stained; freestone.

#### 141088. AMYGDALUS PERSICA L.

No. 6684. Hulu. From Meshed, Khorassan, August 13, 1940. Fruit 3 inches in diameter; clingstone; flesh very firm, white.

141089. Amygdalus persica platycarpa (Decaisne) Ricker. Flat peach.

No. 6565. Hulueanjiri (fig peach). From Meshed, Khorassan, August 11, 1940. Fruit 2½ by 1 inch, yellow, washed with red; flesh cream, stained with red next to pit; clingstone.

141090 to 141111. AMYGDALUS PERSICA L. (Prunus persica Stokes). Peach.

- 141090. No. 6769. *Hulu*. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Fruit about 2 inches in diameter; flesh white to creamy yellow; freestone; flavor excellent.
- 141091. No. 6794. Hulu. From Meshed, Khorassan, August 24, 1940. Fruit handsome, globose, 3 inches in diameter, yellow with half of surface cerise; flesh white, strongly stained with crimson around the pit; flavor excellent; freestone.
- 141092. No. 6836. Shaftalu. From Firdus, Khorassan, August 30, 1940. Fruit globose, yellow; freestone; flesh white to pale yellow; flavor good, kernel edible.
- 141093. No. 6887. Shaftalu. From Khaur, Khorassan, at 5,000 feet. September 6, 1940. Fruit subglobose, 2 inches in diameter, green yellow with red cheek; freestone; flesh cream; flavor good.
- 141094. No. 6927. Shaftalu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit globose, 2¾ inches in diameter, yellow with a crimson blush; flesh yellow; freestone; flavor excellent.
- 141095. No. 6855. Shaftalu. From Tabas, Khorassan, September 1, 1940. Fruit globose, amygdaloid, beaked, 2 inches in diameter, yellow with crimson; freestone flesh, cream-colored; flavor good.
- 141096. No. 6928. Shaftalu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit amygdaloid, 2¼ inches in diameter, yellow with crimson cheek; freestone; flesh yellow, tinted pink around pit.
- 141097. No. 6944. Shaftalu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit subglobose, 21/4 inches in diameter, yellow, with faint suture; free-stone; flesh yellow.
- 141098. No. 6945. Shaftalu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit globose, yellow; freestone; flesh yellow, flavor good.
- 141099. No. 6975. Shaftalu. From Turbati, Hiadari, Khorassan, September 11, 1940. Fruit amygdaloid, faint suture, beaked, bright yellow; freestone; flesh yellow, flavor good.
- 141100. No. 6998. Shaftalu. From Turbati Haidari, Khorassan, September 12, 1940. Fruit globose, beaked, faint suture, 21/4 inches in diameter, deep yellow; freestone; flesh deep yellow, dry.
- 141101. No. 7029. Shaftalu. From Turbati Haidari, Khorassan, September 13, 1940. Fruit subglobose, beak faint, heavy pubescense, 2½ inches in diameter; freestone; flesh deep yellow, flavor good.
- 141102. No. 7030. Shaftalu. From Turbati Haidari, Khorassan, September 13, 1940. Fruit subglobose, suture distinct, skin color gold, heavily washed with crimson, 1% inches in diameter; freestone; flesh yellow, flavor good.
- 141103. No. 7031. Shaftalu. From Turbati Haidari, Khorassan, September 13, 1940. Fruit amygdaloid, beaked, suture conspicuous, skin yellow with crimson blush; freestone; flesh yellow, red at pit; flavor good.

- 141104. No. 7032. Shaftalu. From Turbati Haidari, Khorassan, September 13, 1940. Fruit subamygdaloid, beaked, yellow with deep-crimson cheek, 21/4 inches in diameter, suture conspicuous; freestone; flesh yellow, flavor good.
- 141105. No. 7087. *Hulu*. From Meshed, Khorassan, September 16, 1940. Fruit globose, 3 inches in diameter, pale yellow washed with crimson, faint beak; flesh white, flavor good; freestone; kernel edible.
- 141106. No. 7139. Shaftalu. From Nishabur, Khorassan, September 20, 1940. Fruit subglobose, 2 inches in diameter, beaked, yellow; freestone; flesh yellow.
- 141107. No. 7156. Shaftalu. From Sabzawar, Khorassan, September 22, 1940. Fruit subamygdaloid, 2¼ inches in diameter, beaked, yellow nearly submerged by crimson; freestone; flesh yellow; flavor good.
- 141108. No. 7201. *Hulu*. From Miami, Khorassan, September 25, 1940. Fruit amygdaloid, 2¾ inches in diameter, beaked, faint suture, green yellow heavily washed with crimson; freestone; flesh green white, flavor good.
- 141109. No. 7222. Hulu. From Shahrud, Khorassan, September 27, 1940. Fruit amygdaloid, 2¼ inches in diameter, beaked, green yellow with heavy crimson blush on cheek; freestone; flesh green white, red close to pit; flavor good. Kernel edible.
- 141110. No. 7225. Shaftalu. From Gurgan, September 29, 1940. Fruit globose, 2 inches in diameter, golden with faint blush, suture conspicuous; freestone; flesh yellow, flavor good.
- 141111. No. 7271. Shaftalu. From Garmsar, Tehran, October 2, 1940. Fruit amygdaloid, beaked, 1½ inches in diameter, yellow washed with crimson; flesh cream-colored, flavor strong; freestone.

#### 141112. AMYGDALUS Sp.

No. 5938. Badamiwashi. From Ahwaz, Khuzistan, April 21, 1940. A wild hill almond, edible, from Iraq.

#### 141113. AMYGDALUS Sp.

No. 6880. Badamikuhi. From Khaur, Khorassan, September 6, 1940. A small tree 10 feet high, with long green twigs and inconspicuous leaves; flowers write to pale pink.

# 141114. AMYGDALUS Sp.

No. 6889. From Khaur, Khorassan, September 6, 1940. A dense, thorny bush, 3 feet high, growing on dry rocky slopes; flowers pink, borne in early spring.

# 141115 to 141119. Amygdalus persica var. Nectarina Ait. Amygdalaceae.

- 141115. No. 6585. Shalil. From Meshed, Khorassan, August 11, 1940. Fruit handsome, 2½ inches in diameter, nearly all crimson; flesh cream, stained red around pit, flavor excellent; freestone.
- 141116. No. 6608. Shalil. From Meshed, Khorassan, August 12, 1940. Fruit subglobose, 1¼ inches in diameter, green yellow with rose-purple cheek; flesh cream, flavor good; freestone.
- 141117. No. 6792. Shalil. From Meshed, Khorassan, August 24, 1940. Fruit amygdaloid,  $2\frac{1}{2}$  inches in diameter, pale yellow with purplish cheek; freestone; flesh cream, flavor excellent; kernels edible.
- 141118. No. 6793. Shalil. From Meshed, Khorassan, August 24, 1940. Fruit subglobose, 2 inches in diameter, pale yellow with purplish cheek; freestone; flesh cream, flavor good.
- 141119. No. 6800. Shalil. From Meshed, Khorassan, August 25, 1940. Fruit subglobose, 1½ inches in diameter, yellow heavily mottled with crimson; freestone; flesh cream, flavor good; kernels edible.

#### 141120. DIOSPYROS LOTUS L. Diospyraceae.

Dateplum.

No. 7265. From Gurgan, October 1, 1940. An attractive tree about 18 inches in diameter, with elongated elliptical leaves 8 to 10 inches long; fruit small, yellow, 3/4 inch across.

141121 to 141147. Ficus spp. Moraceae.

#### 141121 to 141133. Figus carica L.

Common fig.

- 141121. No. 6414. Anjir. From Khaur, Khorassan, September 6, 1940. An early sort.
- 141122. No. 6572. Anjir. From Meshed, Khorassan, August 11, 1940. Fruit 1½ inches in diameter, yellow, sweet and honey-flavored.
- 141123. No. 6659. Anjir. From Meshed, Khorassan, August 13, 1940. Fruit 2½ inches across, rose purple; quality good.
- 141124. No. 6834. Anjir. From Firdus, Khorassan, August 30, 1940. Fruit yellow, 1½ inches high; honey-flavored.
- 141125. No. 6835. Anjir. From Firdus, Khorassan, August 30, 1940. A bushy variety, 1¾ inches in diameter, green yellow; sweet.
- 141126. No. 6861. Anjir. From Khaur, Khorassan, September 4, 1940. A wild bush 7 feet high, growing on walls of canyons in hot dry places; fruit green yellow outside, red purple inside, ¾ inch across.
- 141127. No. 6875. Anjir-i-zard. From Khaur, Khorassan, September 6, 1940. A cultivated tree 10 feet high; fruit 13/4 inches across, yellow tinged with rose purple inside.
- 141128. No. 7023. Anjir. From Turbati Haidari, Khorassan, September 12, 1940. Fruit 1¾ inches across, rose purple; quality good.
- 141129. No. 7024. Anjir-i-suja. From Turbati Haidari, Khorassan, September 12, 1940. Fruit black, 2 inches across; quality good.
- 141130. No. 7078. Anjir. From Khaur, Khorassan, September 6, 1940. A wild variety.
- 141131. No. 7079. Anjir. From Khaur, Khorassan, September 6, 1940. An early variety.
- 141132. No. 7161. Anjir. From Sabzawar, Khorassan, September 23, 1940. A bush type about 10 feet high.
- 141133. No. 7226. Anjir. From Gurgan, Khorassan, September 29, 1940. Fruit 2 inches across, red purple with strong bloom; flesh pale yellow with red-purple seeds; flavor good.

# 141134. Ficus sp.

No. 6396. Anjir. From Gurgan, July 29, 1940. An early sort with flattened fruit 1½ by 1 inches, green to lemon color, interior reddish; low in sugar, good flavor.

#### 141135. Ficus sp.

No. 6249. Anjir. From Tehran, July 7, 1940. Fruit 2 inches high, lemon with wine-red seeds; quality and flavor good.

#### 141136. Ficus sp.

No. 6404. From Nizamabad, Mazenderan, July 30, 1940. A wild tree 8 inches in diameter, with red-purple fruits 2 inches across, copious milky sap.

# 141137. Ficus sp.

No. 6490. From Kataliyekchinar, Khorassan, August 6, 1940. A bush, suckering from the root, 6 to 8 feet high, growing on limestone cliffs; fruit dry.

#### 141138. Ficus sp.

No. 6868. Maibut. From Khaur, Khorassan, September 5, 1940. A cultivated bush 10 inches in diameter, with green-yellow fruit, rose purple inside. 2 inches across; sweet, flavor excellent.

141139. Ficus sp.

No. 6869. Surkhak or Sharbati. From Khaur, Khorassan, September 5, 1940. A cultivated bush 10 feet high, with rose-purple fruits 1¾ inches in diameter; flavor good.

141140. Ficus sp.

No. 6870. From Khaur, Khorassan, September 6, 1940. A wild bush growing on the wall of a gulch, 6 feet high; fruit blackish, 1 inch across.

141141. Ficus sp.

No. 6871. Anjir-i-suja. From Khaur, Khorassan, September 6, 1940. A cultivated bush 10 feet high, with red-purple to black fruits 1½ inches across; flavor good.

141142. Ficus sp.

No. 6872. Anjir-i-sabzak. From Khaur, Khorassan, September 6, 1940. A cultivated bush 10 feet high, with yellow fruits tinged red purple inside, 2 inches across; flavor good.

141143. Ficus sp.

No. 6873. From Khaur, Khorassan, September 6, 1940. A wild bush 6 feet high, growing on rocky wall of dry gulch; fruit green, tinged red purple inside, 3/4 inch across.

141144. Ficus sp.

No. 6877. From Khaur Khorassan, September 6, 1940. A small tree with a trunk 6 to 8 inches in diameter, growing on dry slopes; fruit red purple to black, % inch across.

141145. Ficus sp.

No. 7026. From Turbati Haidari, Khorassan, September 12, 1940. A dense bush about  $3\frac{1}{2}$  feet high, with yellow fruits.

141146. Ficus sp.

No. 7281. From Gurgan, September 30, 1940. A wild forest tree 18 inches in diameter, with red-purple fruits.

141147. Ficus sp.

No. 7282. From Gurgan, September 30, 1940. A forest tree 18 inches in diameter, with large, red-purple edible fruits, 11/4 inches across.

141148. Fragaria vesca L. Rosaceae.

Strawberry

No. 6348. From Dimalu, Mazenderan, July 23, 1940. A plant growing in shade, fruit scarce.

141149 to 141153. Juglans regia L. Juglandaceae.

Persian walnut.

141149. No. 6890. Jauz. From Khaur, Khorassan, September 6, 1940. Fruit of good flavor; shell very fragile. Said to be propagated from seed.

141150. No. 6891. Jauzi Kafmad. From Khaur, Khorassan, September 6, 1940. A thin-shelled walnut.

141151. No. 6892. Jauzi Suznu. From Khaur, Khorassan, September 6, 1940.

141152. No. 6893. Jauziwasatt. From Khaur, Khorassan, September 6, 1940.

141153. No. 6894. Jauz. From Khaur, Khorassan, September 6, 1940.

141154 to 141157. Morus sp. Moraceae.

141154. MORUS ALBA L.

White mulberry.

No. 6864. Tut. From Khaur, Khorassan, September 5, 1940.

141155. Morus sp.

No. 6241. Shahtut. From Tehran, July 5, 1940. Fruit red black, 1 by % inch, resembling a loganberry; flavor subacid, refreshing.

141156. Morus sp.

No. 6658. From Meshed, Khorassan, August 13, 1940. Said to be a silkworm tree.

141157. Morus sp.

No. 6865. Shahtut. From Khaur, Khorassan, September 5, 1940. A splendid acid mulberry more than 1 inch long; fruit juicy, much like a loganberry in taste.

141158 to 141161. PISTACIA spp. Anacardiaceae.

141158. PISTACIA Sp.

No. 6860. Bene. From Rabat Khan, Khorassan, September 3, 1940.

141159. PISTACIA Sp.

No. 6874. Bene. From Khaur, Khorassan, September 6, 1940. A scrubby tree growing on dry limestone slopes.

141160. PISTACIA sp.

No. 6876. Bene. From Khaur, Khorassan, September 6, 1940. A scrubby tree, with white, pink-tinged fruits, growing on dry limestone slopes.

141161. PISTACIA sp.

No. 6882. Bene. From Khaur, Khorassan, September 6, 1940.

141162 to 141198. PRUNUS Spp. Amygdalaceae.

141162 to 141182. PRUNUS ARMENIACA L.

Apricot.

Zardalu is the vernacular name for the apricot in Iran.

- 141162. No. 6153. From Tehran, June 14, 1940. Fruits subglobose, 13/4 inches across, yellow; flesh creamy yellow; clingstone; sweet, flavor good.
- 141163. No. 6160. From Tehran, June 15, 1940. Fruits globose, 1¾ inches in diameter, deep suture, pale yellow; flesh pale cream, sweet, no fiber.
- 141164. No. 6161. From Tehran, June 15, 1940. Fruit globose, 13/4 inches in diameter, pale yellow; flesh white, sweet, no fiber.
- 141165. No. 6166. From Tehran, June 16, 1940. Fruit amygdaloid, 2 inches in diameter, yellow; flesh yellow, sweet, no fiber.
- 141166. No. 6202. From Tehran, June 22, 1940. Fruits amygdaloid, 2½ inches across, yellow with pink cheek, suture distinct; flesh pale yellow, sweet, no fiber.
- 141167. No. 6224. From Tehran, June 24, 1940. Fruit subglobose, 1¾ inches in diameter, yellow, half crimson, suture distinct; flesh pale yellow, sweet, no fiber.
- 141168. No. 6233. From Tehran, June 30, 1940. Fruit subglobose, 1% inches across, yellow, sometimes with faint rosy cheek, faint suture; flesh pale yellow, sweet.
- 141169. No. 6238. From Tehran, July 5, 1940. Fruits subglobose, 1½ inches across, pale yellow to golden, faint suture; flesh the same color, sweet, no fiber.
- 141170. No. 6239. From Tehran, July 5, 1940. Fruit subglobose, 1% inches in diameter, pale yellow, faint suture; flesh cream, sweet, no fiber.
- 141171. No. 6240. From Tehran, July 5, 1940. Fruit subglobose, 1 inch across, golden, suture distinct; no fiber, fair quality.
- 141172. No. 6250. From Tehran Province, near Firoz-Kuh, July 9, 1940. Fruits subglobose, 1¼ inches across, golden with large crimson-pink cheek; flesh golden, sweet, no fiber; flavor good.
- 141173. No. 6312. From Gurgan, July 13, 1940. Fruit subglobose, 1½ inches across, yellow with extensive rose-purple wash; flesh sweet, no fiber.
- 141174. No. 6313. From Gurgan, July 13, 1940. Fruit globose, 1¼ inches in diameter, gold with conspicuous red cheek; flesh gold, sweet, without fiber.

- 141175. No. 6424. From Bujmird, Khorassan, August 1, 1940.
- 141176. No. 6660. From Meshed, Khorassan, August 13, 1940. Fruits subglobose, 1½ inches across, gold; flesh firm, orange, sweet, without fiber.
- 141177. No. 6661. From Meshed, Khorassan, August 13, 1940. Fruit subglobose, 1½ inches across, yellow white with purplish cheek; flesh firm, creamy, sweet, without fiber.
- 141178. No. 6888. From Khaur, Khorassan, September 6, 1940. Trees with trunks up to 2 feet in diameter; seeds sweet.
- 141179. No. 6904. From Tabas, Khorassan, September 8, 1940. Trees thrifty; kernels edible.
- 141180. No. 7061. From Turbati Haidari, Khorassan, September 13, 1940. Trees common, thrifty; seeds edible.
- 141181. No. 7223. From Sabzawar, Khorassan, September 24, 1940. Fruit 11/4 inches in diameter; good flavor; kernels edible.
- 141182. No. 7248. From Shahrud, Khorassan, September 27, 1940. Fruit hardy; kernels edible.
- 141183 to 141187. Prunus bokhariensis Royle.

Plum.

- 141183. No. 6051. From Dizful, Khuzistan, May 18, 1940. Fruit globose, 11/4 inches in diameter, red, downy.
- 141184. No. 6157. From Tehran, June 15, 1940. Fruits subglobose, 1¼ inches in diameter, downy, red-cheeked, green to pale red, lacking suture; flesh cream; flavor good.
- 141185. No. 6203. Alu. From Tehran, June 22, 1940. Fruits subglobose, 1½ inches across, green gold, suture faint; flesh sweet, flavor good.
- 141186. No. 6685. Alu. From Karizan Ahmed, Khorassan, August 16, 1940. Fruits subglobose, 1¼ inches in diameter, blue black; flavor good.
- 141187. No. 6993. Alubalu. From Turbati Haidari, Khorassan, September 12, 1940. Fruits subglobose, 1¼ inches across, deep red purple with black; flesh yellow, flavor good.

#### 141188 to 141194. PRUNUS DOMESTICA L.

Common plum.

- 141188. No. 6237. Kaisi. From Tehran, July 5, 1940. Fruits subglobose, 1½ inches in diameter, crimson, downy; flesh sweet, flavor good.
- 141189. No. 6309. From Gurgan, July 12, 1940. Fruit globose, ¾ inch across, red purple with bloom; flavor good.
- 141190. No. 6310. Alu. From Gurgan, July 12, 1940. Fruits 1½ inches long, yellow; flavor good.
- 141191. No. 6395. Alu. From Gurgan, July 29, 1940. Fruits globose, 1½ inches across, black with bloom; flavor good.
- 141192. No. 6607. Alubakhara. From Meshed, Khorassan, August 12, 1940. Fruit globose, 1½ inches in diameter, blue black; quality good.
- 141193. No. 6654. Aluezard. From Meshed, Khorassan, August 13, 1940. Fruit in shape and size like our Golden Egg, but firmer and not so much acid in skin.
- 141194. No. 7220. Alu. From Shahrud, Khorassan, September 27, 1940. An excellent prune like our Golden Egg, but fruits smaller, about 1½ inches in diameter; flavor excellent.

#### 141195. PRUNUS Sp.

No. 5992. From Belu, Bakhtiari, May 8, 1940. A scraggly bush 7 feet high, growing on dry slopes; fruit yellow, edible.

#### 141196. PRUNUS SD.

No. 6204. Alu. From Tehran, June 22, 1940. Fruit globose, 1½ inches acrossmaroon, firm, line on cheek but not indented; flesh sweet; flavor good.

141197. PRUNUS sp.

No. 6234. Alu. From Tehran, July 1, 1940. Fruit subglobose, 11/4 inches across, deep maroon; flesh sweet; flavor good.

141198. PRUNUS sp.

No. 7081. Goje. From Meshed, Khorassan, September 15, 1940. Fruit globose, 1¼ inches across, silky green with bloom, suture distinct; indifferent flavor.

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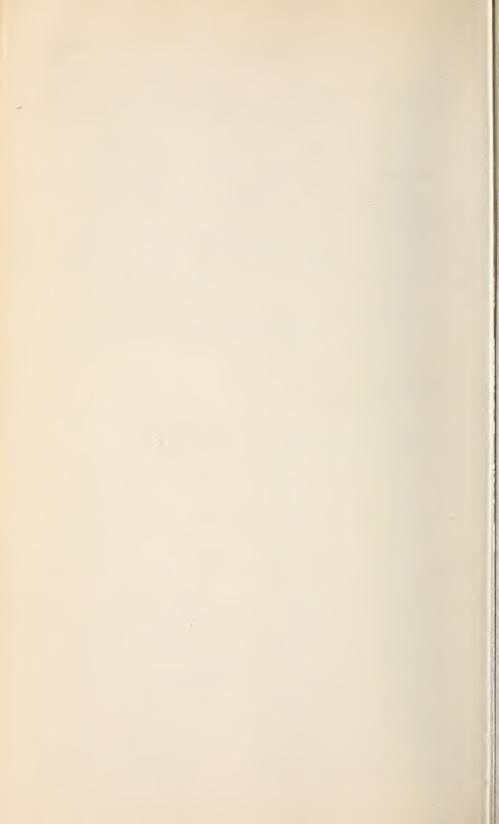
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# Plant Inventory No. 147

UNITED STATES DEPARTMENT OF AGRICULTURE Washington, D. C., January 1951



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, APRIL 1 TO JUNE 30, 1941 (Nos. 141199 to 142029)

#### 

This inventory, No. 147, lists the plant material (Nos. 141199 to 142029) received by the Division of Plant Exploration and Introduction during the period from April 1 to June 30, 1941. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Rotanist.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

# Plant Interiors No. 18

THE THE RESIDENCE OF THE PROPERTY OF THE PROPE

DOMESTIC OF STREET

SEC 130

10

#### INVENTORY

141199. Poa flabellata (Lam). Raspail. Poaceae. Tussock grass.

From the Falkland Islands. Seed purchased from the Department of Agriculture, Stanley. Received April 17, 1941.

For previous introduction see 139282.

#### 141200 to 141226.

From England. Trees and plants purchased from T. Hilling & Co., Chebham, Woking, Surrey. Received April 4, 1941.

141200 and 141201. Amygdalus davidiana (Carr). Zabel. davidiana (Prunus Franch.) Amygdalaceae. davidiana (Prunus Chinese wild peach.

141200. A variety with single pink flowers.

141201. Alba.

141202. Amygdalus persica L.

Peach.

Apple.

Alba Flore Pleno.

141203. Amygdalus.

Cambridge Carmine.

141204 to 141208. Amygdalus persica L.

141204. Foliis Purpureis.

141207. Pendula Rosea.

141205. Magnifica.

141208. Rosea Flore Pleno.

141206. Pendula Alba.

141209 to 141212. MALUS SYLVESTRIS Mill.

Malaceae.
141211. John Downie.

141209. Cheal's Crimson. 141210. Golden Gem.

141212. Laxton's Peerless.

141213. MALUS MAGDEBURGENSIS Zimmerm.

A small tree with ovate leaves, pubescent beneath, semidouble pinkish flowers, and yellow fruits 1 inch in diameter.

For previous introduction see 136019.

141214. Malus tschonoskyi (Maxim.) Schneid.

141215. MALUS BACCATA (L.) Moench.

Yellow Siberian.

141216 and 141217. PRUNUS ARMENIACA L.

Apricot.

141216. Hemskirk.

141217. Moorpark.

141218 to 141220. PRUNUS SPINOSA L.

Sloe blackthorn.

141218. Tricolor.

141219. Purpurea.

141220. Seedlings.

# 141200 to 141226—Continued

141221 to 141226. Pyrus communis L. Malaceae.

141224. Jargonelle.

141221. Bergamotte d'Espéren. 141222. Conference.

141225. Marie Louise.

141223. Dr. Jules Guyot.

141226. Philippe Chauveau.

#### 141227 to 141229. SACCHARUM. Poaceae.

Sugarcane.

Pear.

From Barbados, British West Indies. Cuttings presented by the Director of Agriculture. Received April 8, 1941.

141227. B 391.

141228. B 35187.

141229. B 35245.

141230. Xylosma senticosa Hance (Myroxylon senticosum (Hance) Warb.). Flacourtiaceae.

From California. Plant growing at the Plant Introduction Garden, Chico. Numbered May 12, 1941.

A thornless, staminate, selected seedling of P. I. 63629, which was collected by F. A. McClure near Chuklin, Kwantung, China, in January 1925.

#### 141231 to 141233. Trifolium pratense L. Fabaceae. Red clover.

From Canada. Seeds purchased from Prof. J. W. Bird, McDonald College, Quebec. Received April 7, 1941.

141231. Dollard Co.

141232. Chambly Co.

141233. Soulanges Co.

# 141234 to 141259.

From England. Trees purchased from the Barnham Nurseries, Barnham, Sussex. Received April 14, 1941. Apple.

141234 to 141248. MALUS SYLVESTRIS Mill.

Malaceae. 141242. Nanny.

141244. St. Edmund Russet.

141245. Sir John Thornycroft.

141234. Betty Geeson.

141235. Chorister Boy.

141236. Col. Vaughan.

141237. Herring's Pippin.

141238. Hollandbury.

141239. Lord Lennox.

141240. Mannington Pearmain.

141241. Middle Green.

141246. Striped Beaufin. 141247. Washington Nonpareil.

141248. Winter Peach.

141243. Rougemont.

141249 and 141250. MALUS. Malaceae.

Crabapple.

Pear.

141249. Cheal's Crimson.

141250. John Downie.

141251 to 141254. Prunus spp. Amygdalaceae.

141251. Black Heart cherry.

141253. Early Transparent plum.

141252. Comte d'Althan's Gage plum.

141254. July Greengage plum.

141255 to 141259. Pyrus communis L. Malaceae.

141258. Petite Marguerite.

141255. Jargonelle.

141256. Madame Trèuve.

141259. St. Luke.

141257. Marie Louise.

141260. Arachis hypogaea L. Fabaceae.

Peanut.

From Puerto Rico. Seed presented by W. K. Bailey, Agricultural Experiment Station, Mayaguez. Received April 14, 1941.

Mani. A small-fruited variety.

141261 to 141355.

From Guatemala. Seeds presented by Dr. F. W. McBryde, New Orleans, La. Received April 18, 1941.

141261. Cajanus cajan (L.) Druce. Fabaceae.

Pigeonpea.

No. 48.

141262. Canavalia ensiformis (L.) DC. Fabaceae.

Jackbean.

Watermelon.

141263 to 141268. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

141263. No. 4.

141266. No. 17-A.

141264. No. 62. 141265. No. 17. 141267. No. 61. 141268. No. 62-B.

141269 to 141272. Cucumis melo L. Cucurbitaceae.

Muskmelon.

141269. No. 17-B.

141271. No. 61-A.

141270. No. 17-C.

141272. No. 62-A.

141273. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

No. 61.

141274. Phaseolus Calcaratus Roxb. Fabaceae.

No. 9.

Rice bean.

Common bean.

141275 to 141289. Phaseolus vulgaris L.

141275. No. 1. Black kidney bean.

141276. No. 2. Long, tan bean.

141277. No. 4. White kidney pole bean.

141278. No. 4-A. Small, black bush bean.

141279. No. 4-B. Small, black kidney pole bean.

141280. No. 5. Brown bush kidney bean.

141281. No. 5-A. Black.

141282. No. 6. Brown kidney bean.

141283. No. 7. Small, black kidney bean.

141284. No. 8. Red kidney bean.

141285. No. 8-A. Santos. Red kidney bean.

141286. No. 9. Santos. Red kidney bean.

141287. No. 10. Black kidney bush bean.

141288. No. 11. Small, black kidney bean.

141289. No. 11-A. Large, black kidney bean.

141290. Phaseolus lunatus L.

Lima bean.

No. 11-b. Large, yellow bean.

141291 to 141320. Phaseolus vulgaris L.

Common bean.

141291. No. 12 Black bush bean.

141292. No. 13. Large kidney bean.

141293. No. 15. Large kidney bean.

141294. No. 15-A. Black kidney pole bean.

#### 141261 to 141355—Continued

141295. No. 17. Red kidney bush bean.

141296. No. 17-a. Black kidney pole bean.

141297. No. 17-b. Red kidney bean.

141298. No. 19. Large, variegated kidney bean.

141299. No. 20. Brown bush bean.

141300. No. 21. Black kidney pole bean.

141301. No. 21-a. Red kidney pole bean.

141302. No. 22. Black kidney bean.

141303. No. 22-a. White kidney bean.

141304. No. 23. Black kidney pole bean.

141305. No. 26. White kidney bean.

141306. No. 26-a. Black pole bean.

141307. No. 27. Large, red kidney bean.

141308. No. 27-a. White and yellow kidney beans.

141309. No. 29. Variegated.

141310. No. 29-a. Black.

141311. No. 29-b. White.

141312. No. 29-c. Brown.

141313. No. 29-d. Black pole beans.

141314. No. 30. Black kidney bean.

141315. No. 30-a. White bean.

141316. No. 30-b. Black kidney bush bean.

141317. No. 32. Large, black kidney beans.

141318. No. 32-a. Large, brown "perennial" bean.

141319. No. 32-b. Black kidney bush bean.

141320. No. 33. Black kidney pole bean.

141321. Phaseolus lunatus L.

No. 33-a. Large brown beans.

141322 to 141325. Phaseolus vulgaris L.

**141322.** No. 33-b. Large black bean.

141323. No. 33-c. Large yellow bean.

141324. No. 35. Small, red pole bean.

141325. No. 37. Black pole bean.

141326. Phaseolus lunatus L.

No. 37-a. Large, red kidney bean.

141327 to 141342. Phaseolus vulgaris L.

141327. No. 37-b. Black bush bean.

141328. No. 37-c. White pole bean.

141329. No. 38. Black bean.

141330. No. 38-a. White bean.

141331. No. 38-b. Large, red kidney bean.

141332. No. 39. Black bean.

141333. No. 39-b. Long, red kidney bean.

141334. No. 39-c. White bean.

Lima bean.

Common bean.

Lima bean.

Common bean.

# 141261 to 141355-Continued

141335. No. 40. Black pole bean.

141336. No. 41. Small, red kidney bean.

141337. No. 45. Black kidney bean.

141338. No. 45-a. White lima bean.

141339. No. 48. Large kidney bean, variegated colors.

141340. No. 49. Black kidney bean.

141341. No. 49-a. Long, red kidney bean.

141342. No. 49-b. Small, red kidney bean.

141343. Phaseolus lunatus L.

No. 55. Small, red bean.

141344 to 141347. Phaseolus vulgaris L.

**141344.** No. 56. Long, red kidney bean.

141345. No. 56-a. Black kidney bean.

141346. No. 56-b. Light red kidney bean.

141347. No. 57. Black kidney bean.

141348. Phaseolus lunatus L.

No. 61. Small, pink bean.

141349. Phaseolus vulgaris L.

No. 62. Black bush bean.

141350 to 141353. PISUM SATIVUM L. Fabaceae.

141350. No. 29.

141351. No. 33. White pea.

141352. No. 39-A.

141353. No. 56.

141354. GLYCINE MAX (L.) Merrill. Fabaceae.

No. 9.

141355. VIGNA SINENSIS (Torner) Savi. Fabaceae.

No. 62.

#### 141356 and 141357.

From California. Seedlings and plants presented by Dr. T. H. Goodspeed, University of California, Berkeley. Received April 21, 1941.

141356. LAPAGERIA ROSEA Ruiz and Pav. Liliaceae.

Copihue.

An evergreen climber of slow growth, with slender wiry stems, alternate, narrowly ovate leaves, and bright-crimson, pendent, tubular flowers about 3 inches long in the axils of the upper leaves or in terminal racemose clusters. The *copihue* is the national flower of Chile.

For previous introduction see 129336.

141357. Lapageria Rosea var. albiflora Hook.

Received as "variety alba."

# 141358 and 141359. Triticum Aestivum L. Poaceae. Common wheat.

From Argentina. Seed presented by Eduardo Sackman Saia, Director of Agriculture, Buenos Aires. Received April 24, 1941.

141358. Klein Triunfo.

141359. Litoral.

Lima bean.

Common bean.

Lima bean.

Common bean.

Pea.

Soybean.

Cowpea.

#### 141360 to 141368.

From England. Trees purchased from Thompson and Morgan, Ispwich. Received April 25, 1941.

141360. Amygdalus persica L. Amygdalaceae.

Peach.

Russell's Red.

141361 to 141363. Malus sylvestris Mill. Malaceae.

Apple.

141361. Fearn's Pippin.

141362. James Kirk.

141363. Juneating.

141364. Prunus sp. Amygdalaceae.

Plum.

Prince of Wales.

141365. Prunus cerasifera var. atropurpurea Jaeger.

Hazeldene. Received as Prunus pissardii, now referred to the above.

141366 and 141367. Pyrus communis L. Malaceae.

Common pear.

141366. Jean Van Geert.

141367. Winter Orange.

141368. Malus prunifolia (Willd.) Borkh. Malaceae.

Pearleaf crab.

Golden Gem.

For previous introductions see 136653.

141369. Centella asiatica (L.) Urban. Apiaceae.

From Java. Seeds presented by the Director, Botanic Garden, Buitenzorg. Received April 24, 1941.

#### 141370 to 141546.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 9, 1941.

141370. Aegilops aucheri Boiss. Poaceae.

Grass.

No. 6044. From Gaomir, Bakhtiari, May 16, 1940. An annual steppe grass about 3 feet high.

141371. AEGILOPS CRASSA Boiss.

No. 6121. From Durud, Luristan, June 7, 1940. A rare annual pasture grass about 1 foot high.

141372. Aegilops heldreichii (Boiss.) Nyman.

No. 6026. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about  $2\frac{1}{2}$  feet high.

141373. AEGILOPS OVATA L.

No. 6017. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass, about 1 foot high.

141374. Aeluropus littoralis (Gouan) Parl. Poaceae.

Grass

No. 6805. From Gunabad, Khorassan, August 26, 1940. A creeping grass about 15 inches high; grows near alkaline pools or on the desert.

141375. AGROPYRON INTERMEDIUM (Host) Beauv. (A. glaucum R. and S.) Poaceae.

Grass.

No. 6681. From Bardu Forest, Khorassan, August 19, 1940. A pasture perennial growing in clumps 4 feet high on dry slopes.

141376. AGROPYRON sp.

No. 6363. From Khairat, Mazenderan, July 26, 1940. A common pasture grass growing in the forest or dense shade to about 3 feet high.

141377. AGROPYRON Sp.

No. 6484. From Kataliyekchinar, Khorassan, August 6, 1940. A steppe annual about  $2\frac{1}{2}$  feet high.

141378. AVENA Sp. Poaceae.

Grass.

No. 6011. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 18 inches high.

141379. AVENA Sp.

No. 6489. From Kataliyekchinar, Khorassan, August 6, 1940. Steppe seeds from the crop of a partridge.

141380. Brachypodium sp. Poaceae.

Grass.

No. 6027. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 18 inches high.

141381. Bromus Brizaeformis Fisch, and Mey. Poaceae. Quaking bromegrass.

No. 6486. From Kataliyekchinar, Khorassan, August 6, 1940. An annual steppe grass 18 inches high, used for ornamental and fodder purposes.

141382 and 141383. Bromus Danthoniae Trin.

Grass.

141382. No. 6014. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass 15 inches high.

141383. No. 6028. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 2 feet high.

141384. Bromus sterilis L.

No. 6012. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 2 feet high.

141385. Bromus sp.

No. 6018. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 15 inches high.

141386 and 141387. Ammi copticum (L.) Benth. & Hook. Apiaceae.

141386. No. 6972. Badiun. From Turbati Haidari, Khorassan, September 11, 1940. A cultivated medicinal plant.

141387. No. 6994. Khardana. From Turbati Haidari, Khorassan, September 12, 1940. A cultivated medicinal plant.

141388. CICER sp. Fabaceae.

No. 6321. From Shahkuh, Mazenderan, July 17, 1940. A pasture plant growing on bare slopes.

141389. Coronilla scorpioides (L.) Koch. Fabaceae.

No. 6095. From Kalvar, Luristan, May 28, 1940. A rare, prostrate plant growing in open dry places.

141390. CORONILLA VARIA L.

No. 6444. From Bujmerd, Khorassan, August 2, 1940. A semidecumbent legume, with umbrella heads of attractive pink and white flowers; used for ornamental and pasture purposes.

141391 to 141394. CUCURBITA PEPO L. Cucurbitaceae.

Pumpkin.

141391. No. 6795. Kaduenaranji. From Meshed, Khorassan, August 24, 1940. Fruit globose, 2¼ inches in diameter, orange, smooth; ornamental.

141392. No. 6967. Kaduetamasha. From Turbati Haidari, Khorassan, September 11, 1940. Fruit obovoid, 2¼ inches in diameter, orange; ornamental.

141393. No. 7019. Kaduetamasha. From Turbati Haidari, Khorassan, September 12, 1940. Fruit ovoid, 2¼ inches long, yellow; ornamental.

141394. No. 7028. From Turbati Haidari, Khorassan, September 13, 1940. Fruit round, 3½ inches in diameter, yellow, half-covered with large irregular warts about ¼ inch high; ornamental.

141395. Cuminum cyminum L. Apiaceae.

Cumin

No. 7065. *Karawirja*. From Turbati Haidari, Khorassan, September 13, 1940. Used as medicine.

141396. Cynosurus cristatus L. Poaceae.

Crested dogtail.

No. 6007. From Cheshmashirin, Bakhtiari, May 13, 1940. A steppe grass 18 inches high.

For previous introduction see 111283.

141397. Dactylis glomerata L. Poaceae.

Orchard grass.

No. 6464. From Kataliyekchinar, Khorassan, August 4, 1940. A steppe perennial grass growing in clumps to about 3 feet high.

141398 and 141399. Dolichos Lablab L. Fabaceae.

Hyacinth-bean.

141398. No. 6167. Labiaigul. From Tehran, June 16, 1940. An ornamental.

141399. No. 7039. From Turbati Haidari, Khorassan, September 13, 1940. A rare food crop.

141400 to 141402. Dracocephalum moldavica L. Menthaceae.

141400. No. 6437. Rehan. From Bujmerd, Khorassan, August 3, 1940. Used as flavor for salads.

141401. No. 6790. Badranjobe. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A salad plant.

141402. No. 7001. Badranjua. From Turbati Haidari, Khorassan, September 12, 1940. Grown for medicine.

141403. ECHINARIA CAPITATA (L.) Desf. Poaceae.

Grass.

No. 5990. From Belu, Bakhtiari, May 7, 1940. A rather rare steppe grass of pasture value.

141404 and 141405. Elymus caput-medusae L. Poaceae.

Grass.

141404. No. 6019. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 15 inches high.
141405. No. 6485. From Kataliyakchinar, Khorassan, August 6, 1940. An annual

141405. No. 6485. From Kataliyekchinar, Khorassan, August 6, 1940. An annual steppe grass about 1 foot high.

141406 and 141407. ELYMUS FRAGILIS (Boiss.) Griseb.

Grass

141406. No. 6151. From Tehran, June 14, 1940. A perennial growing in clumps  $2\frac{1}{2}$  feet high.

141407. No. 6353. From Dimalu, Mazenderan, July 23, 1940. A pasture grass growing in clumps on dry slopes.

141408. Festuca elation L. Poaceae.

Fescue.

No. 6337. From Karimserai, Mazenderan, July 20, 1940. A thrifty, wild grass, about  $3\frac{1}{2}$  feet high, used as good fodder.

141409. Heracleum sp. Apiaceae.

No. 6097. From Kalvar, Luristan, May 29, 1940. A low plant, about 1 foot high, growing in dry places.

141410. Heteranthelium Piliferum (Russ.) Jaub. & Spach. Poaceae.

No. 6016. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 1 foot high.

141411. Hordeum bulbosum L. Poaceae.

Grass.

No. 6147. From Tehran, June 14, 1940. A perennial up to 4 feet high.

141412. HORDEUM MURINUM L.

No. 6410. From Gumbatigabus, July 30, 1940. A secondary grass of the steppe that forms a thick growth up to about 2 feet high.

141413. Hordeum Bulbosum L.

No. 6416. From Marave, Khorassan, July 31, 1940. A locally common perennial grass about 4 feet high.

141414. HORDEUM MURINUM L.

No. 6009. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 18 inches high.

141415. Hordeum Gussoneanum Parl.

No. 6010. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 12 or 15 inches high.

141416. HORDEUM DISTICHON L.

No. 5845. Jao. From Kazerun, Fars, April 11, 1940.

141417. HORDEUM VULGARE L.

Barley.

No. 5876. Jaoesurkh. From Bushire, Fars, April 15, 1940. Heads about  $2\frac{1}{2}$  inches long.

141418. HORDEUM DISTICHON L.

No. 5905. Jaoisiya. From Ahwaz, Khuzistan, April 19, 1940. Two-rowed heads, 2 to 3 inches long; grown without irrigation.

141419. HORDEUM VULGARE L.

No. 5906. From Ahwaz, Khuzistan, April 19, 1940. A multiple-rowed barley, with heads up to  $3\frac{1}{2}$  inches long; grown without irrigation.

141420. HORDEUM VULGARE L.

No. 5944. Jao. From Ahwaz, Khuzistan, April 22, 1940.

141421. HORDEUM SPONTANEUM C. Koch.

No. 6000. From Cheshmashirin, Bakhtiari, May 12, 1940. A wild grass, growing up to  $3\frac{1}{2}$  feet on the steppe.

141422. Hordeum distichon L.

No. 6057. Jau. From Dizful, Khuzistan, May 21, 1940. A black barley.

141423. Hordeum distiction L.

No. 6067. Jao. From Durud, Luristan, May 20, 1940. Fall-sown, unirrigated.

141424. HORDEUM VULGARE L.

No. 6406. Jao. From Gumbatigabus, July 30, 1940. Spring-sown, unirrigated. 141425. Hordeum spontaneum L.

No. 6183. From Tehran, July 17, 1940. A desert plant growing up to 18 inches

high. **141426 to 141428.** Hordeum vulgare L.

141426. No. 6333. Joi-payiz. From Shahkuh, Mazenderan, July 19, 1940. Fallsown, 2 feet high.

141427. No. 6334. Joi-bahari. From Shahkuk, Mazenderan, July 19, 1940. Spring-sown.

141428. No. 6366. Jao. From Gurgan, Mazenderan, July 27, 1940. Spring-sown and irrigated.

141429. HORDEUM DISTICHON L.

No. 6420. From Garamale, Khorassan, August 1, 1940. Spring-sown and grown without irrigation.

141430. Hordeum vulgare L.

No. 6344. Jaoebahari. From Karimserai, Mazenderan, July 21, 1940. Springgrown and irrigated.

141431. HORDEUM VULGARE L.

No. 6405. From Gumbatigabus, July 30, 1940. Spring-sown, unirrigated, and of superior quality.

141432. Hordeum distiction L.

No. 6667. Jaoeturush. From Abdullabad, Khorassan, August 14, 1940. Fallsown and irrigated.

141433. Hordeum vulgare L.

No. 6668. Jaoebahari. From Abdullabad, Khorassan, August 14, 1940. Two-rowed heads; spring-sown and irrigated.

141434. Hordeum distiction L.

No. 6669. Jaodaima. From Abdullabad, Khorassan, August 14, 1940. Fallsown and unirrigated.

#### 141435 to 141445. Hordeum vulgare L.

141435. No. 6829. *Jaoiabi*. From Firdus, Khorassan, August 28, 1940. Fallsown, irrigated.

141436. No. 6830. Jaoedahimi. From Firdus, Khorassan, August 28, 1940. Fall-sown, unirrigated.

141437. No. 6863. Jau. From Khaur, Khorassan, September 5, 1940. Springsown and irrigated.

141438. No. 7004. Jaoeturush. From Turbati Haidari, Khorassan, September 12, 1940. Fall-sown, irrigated; fed to animals only.

141439. No. 7005. *Jaoesiya*. From Turbati Haidari, Khorassan, September 12, 1940. Fall-sown, irrigated; stock feed.

141440. No. 7006. Jaoezard. From Turbati Haidari, Khorassan, September 12, 1940. Fall-sown, irrigated; used for flour.

141441. No. 7190. Jaoebahari Dehimi. From Sabzawar, Khorassan, September 24, 1940. Spring-sown; irrigated.

141442. No. 7193. *Jaozina abi*. From Sabzawar, Khorassan, September 24, 1940. Fall-sown; irrigated.

141443. No. 7200. Jao. From Sabzawar, Khorassan, September 24, 1940. Mill sample.

141444. No. 7238. *Jao Kuhsar*. From Shahrud, Khorassan, September 27, 1940. Fall-sown and irrigated.

141445. No. 7240. *Jaobahari*. From Shahrud, Khorassan, September 27, 1940. Spring-sown; irrigated.

141446. LINUM sp. Linaceae.

No. 5932. From Ahwaz, Khuzistan, April 21, 1940. A variety with attractive crimson flowers, blooming at the end of the cold season.

141447. LINUM sp.

No. 6023. From Cheshmashirin, Bakhtiari, May 13, 1940. A common steppe plant 18 inches high, much-branched, with frail stalks and purple-blue flowers.

141448. LATHYRUS sp. Fabaceae.

No. 5988. From Tale, Bakhtiari, May 7, 1940. A rare, low plant 6 inches high, growing on a dry, rainless slope.

141449. LATHYRUS Sp.

No. 5933. From Ahwaz, Khuzistan, April 21, 1940. A plant 2 to 3 feet high, bearing an abundance of rose-purple flowers, the standard usually of a different shade from the rest.

#### 141450. Lathyrus sp.

No. 6122. From Durud, Luristan, June 7, 1940. A low plant, common as an escape; also cultivated for fodder.

141451. LOLIUM MULTIFLORUM Lam. Poaceae.

Italian ryegrass.

No. 6020. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about 3 feet high, growing in large pure stands on level ground.

141452. Lotus sp. Fabaceae.

No. 6033. From Cheshmashirin, Bakhtiari, May 14, 1940. An erect annual steppe plant about 1 foot high, with yellow flowers; growing in barren places.

141453. Lotus sp.

No. 5857. From Bushire, Fars, April 14, 1940. A prostrate plant that grows with winter rains and dries up through the summer.

141454. MEDICAGO LUPULINA L. Fabaceae.

Black medic.

No. 6100. From Ti, Luristan, June 2, 1940. A decumbent yellow-flowered plant. 141455. Medicago lupulina L.

No. 6350. From Dimalu, Mazenderan, July 23, 1940. A prostrate plant growing in half shade.

141456. MEDICAGO RADIATA L.

Medic.

No. 6093. From Chamchid, Luristan, May 27, 1940. A prostrate plant growing in barren sandy places.

141457 to 141465. MEDICAGO SATIVA L.

Alfalfa.

141457. No. 6208. Yonje. From Tehran, June 22, 1940. A fodder crop.

141458. No. 6423. Yonje. From Bujmerd, Khorassan, August 1, 1940. Cut 7 to 8 times a year.

141459. No. 6787. Yonje. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A thrifty desert type; irrigated.

141460. No. 6902. Yonje. From Tabas, Khorassan, September 8, 1940.

141461. No. 7048. Yonje. From Turbati Haidari, Khorassan, September 13, 1940. Said to be cut 6 to 7 times a year.

141462. No. 7136. Orunja. From Nishabur, Khorassan, September 20, 1940.

141463. No. 7185. Yurunje. From Sabzawar, Khorassan, September 23, 1940.

141464. No. 7236. Ar Yonje. From Shahrud, Khorassan, September 27, 1940.

141465. No. 5945. From Ahwaz, Khuzistan, April 22, 1940. A cultivated forage plant.

141466. MEDICAGO MUREX Willd.

Medic.

No. 6002. From Cheshmashirin, Bakhtiari, May 12, 1940. A prostrate plant with yellow flowers, growing on the steppe.

141467. Medicago orbicularis (L.) All.

No. 6004. From Cheshmashirin, Bakhtiari, May 12, 1940. A prostrate steppe plant.

141468. MEDICAGO RIGIDULA VAR. CINERASCENS (Jord.) Rouy & Fouc.

No. 6083. From Durud, Luristan, May 23, 1940. A prostrate variety growing in barren sandy places.

141469. MEDICAGO MINIMA VAR. BRACHYODON Rchb.

No. 6094. From Kalvar, Luristan, May 28, 1940. A prostrate plant of open dry places.

141470. Medicago minima (L.) Grufberg.

No. 6308. From Gurgan, July 12, 1940. A prostrate plant growing on the sand. 141471. Medicago sp.

No. 6324. From Shahkuh, Mazenderan, July 17, 1940. A prostrate plant growing on dry slopes.

141472. MEDICAGO SATIVA L.

Alfalfa.

No. 6465. From Kataliyekchinar, Khorassan, August 4, 1940.

141473. MEDICAGO SATIVA L.

No. 6497. From Kataliyekchinar, Khorassan, August 6, 1940. A decumbent variety growing on dry steppe.

141474. MEDICAGO LACINIATA (L.) Mill.

Medic.

No. 5907. From Ahwaz, Khuzistan, April 20, 1940. A prostrate desert plant with yellow flowers; eaten by sheep.

141475. Medicago hispida var. apiculata (Willd.) Urban.

No. 5910. From Ahwaz, Khuzistan, April 20, 1940. A prostrate desert plant often 2 feet across, with yellow flowers; found most often in fields, unwatered.

141476. Medicago minima (L.) Grufberg.

No. 6030. From Labissufed, Bakhtiari, May 15, 1940. A prostrate plant with yellow flowers.

141477. Medicago hispida Gaertn.

No. 6034. From Cheshmashirin, Bakhtiari, May 14, 1940. A steppe plant about 15 inches high, with yellow flowers; semidecumbent.

141478. MEDICAGO Sp.

No. 6031. From Labisufed, Bakhtiari, May 15, 1940. A semidecumbent steppe plant with yellow flowers, growing in rather barren places.

141479. Melilotus sp. Fabaceae.

No. 5902. Yonje. From Bushire, Fars, April 16, 1940.

141480. Melilotus sp.

No. 5911. From Ahwaz, Khuzistan, April 20, 1940. A desert clover 18 inches high, with fragrant leaves and yellow flowers.

141481. Melilotus sp.

No. 6492. From Kataliyekchinar, Khorassan, August 6, 1940. A rare annual about 4 feet high, with white flowers.

141482. Phalaris minor Retz. Poaceae.

Grass.

No. 6013. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe grass about  $3\frac{1}{2}$  feet high.

141483. Phalaris sp.

Grass.

No. 6311. From Gurgan, July 12, 1940. A thrifty annual about 3 feet high.

141484. Phleum Paniculatum Huds. Poaceae.

Timothy.

No. 6408. From Gumbatigabus, July 30, 1940. A secondary grass of the steppe, about 2 feet high.

141485. Physalis sp. Solanaceae.

No. 6402. From Nizamabad, Mazenderan, July 30, 1940. A plant 2 feet high; the fruits have large orange-red calyces.

141486. Poa bulbosa L. Poaceae.

Grass.

No. 6029. From Cheshmashirin, Bakhtiari, May 13, 1940. A rather rare annual steppe grass.

141487. Polypogon monspeliensis (L.) Desf. Poaceae.

Grass.

No. 6015. From Chesmashirin, Bakhtiari, May 13, 1940. An annual steppe grass  $2\frac{1}{2}$  feet high, found in low places.

141488 and 141489. SECALE CEREALE L. Poaceae.

Rye.

141488. No. 6519. From Bujmerd, Khorassan, August 8, 1940. A plant with short-bearded heads about 5 inches in diameter; fall-sown and unirrigated.

141489. No. 7073. Jaudar. From Turbati Haidari, Khorassan, September 13, 1940. A few heads found in a strawpile.

141490. Sesamum indicum L. Pedaliaceae.

Sesame.

No. 7057. Kunjib. From Turbati Haidari, Khorassan, September 13, 1940. An irrigated crop plant grown for oil.

141491 to 141495. Sorghum vulgare Pers. Poaceae.

Sorghum.

141491. No. 6517. Zauratijharu. From Bujmerd, Khorassan, August 8, 1940. An irrigated plant about 6 feet high; very high in sugar.

141492. No. 6924. Zaurat. From Turbati Haidari, Khorassan, September 10, 1940. A cultivated irrigated plant 5 feet high.

141493. No. 7041. Zauratisufed. From Turbati Haidari, Khorassan, September 13, 1940. An irrigated plant with solid heads about 8 inches long.

141494. No. 7071. Zauratisurkh. From Turbati Haidari, Khorassan, September 13, 1940. A cultivated and irrigated plant with rather loose heads about 1 foot high.

141495. No. 7262. Zauratijaru. From Shahrud, Khorassan, September 27, 1940. 141496. Trifolium pratense L. Fabaceae. Red clover.

No. 6442. From Bujmerd, Khorassan, August 2, 1940. A semidecumbent clover about 18 inches high.

141497 to 141503. Trifolium resupinatum L.

Persian clover.

141497. No. 6109. From Ti, Luristan, June 5, 1940. A thrifty, cultivated form about 2 feet high.

141498. No. 6919. Shabdar. From Tehran, June 19, 1940. An annual fodder crop.

141499. No. 6522. Shabdar. From Bujmerd, Khorassan, August 8, 1940. A thrifty clover.

141500. No. 6776. Shabdar. From Turbati Shaikh Jam, Khorassan, August 23, 1940.

141501. No. 7050. Shabdar. From Turbati Haidari, Khorassan, September 13, 1940.

141502. No. 7133 Shabdar. From Nishabur, Khorassan, September 20, 1940.

141503. No. 7253. Shabdar. From Shahrud, Khorassan, September 27, 1940.

141504. Trifolium sp. Fabaceae.

No. 5954. From Saridasht, Bakhtiari, April 26, 1940. A steppe clover growing to a height of 2 feet, with fragrant pink flowers.

141505. Trifolium sp.

No. 5955. From Saridasht, Bakhtiari, April 26, 1940. An annual steppe clover about 1 foot high, with whitish flowers.

141506. Trifolium sp.

No. 5962. From Saridasht, Bakhtiari, April 26, 1940. An annual, growing to about 1 foot on the steppe, with large, few-flowered head of rose flowers.

141507. Trifolium sp.

No. 5963. From Saridasht, Bakhtiari, April 26, 1940. A prostrate clover with small heads of pale rose-purple flowers.

141508. Trifolium sp.

No. 5964. From Saridasht, Bakhtiari, April 26, 1940. A steppe clover, semi-decumbent, growing to about 1 foot high, with fragrant pink flowers.

141509. Trifolium sp.

No. 5971. From Talimansur, Bakhtiari, April 28, 1940. An annual steppe clover, semierect to 18 inches, with pale rose-purple flowers.

141510. Trifolium sp.

No. 5999. From Cheshmashirin, Bakhtiari, May 12, 1940. A rather coarse steppe clover, prostrate to semierect.

# 141511. Trifolium sp.

No. 6003. From Cheshmashirin, Bakhtiari, May 12, 1940. A rare steppe clover, about 1 foot high, with a globular head of rose flowers.

# 141512. Trifolium sp.

No. 6022. From Cheshmashirin, Bakhtiari, May 13, 1940. An annual steppe clover about 1 foot high, with rigid awns and pink flowers.

#### 141513. Trifolium sp.

No. 6037. From Cheshmashirin, Bakhtiari, May 14, 1940. An annual steppe clover about 1 foot high, with soft awns and globular heads.

#### 141514. TRIFOLIUM Sp.

No. 6091. From Chamchid, Luristan, May 27, 1940. An erect steppe clover about 1 foot high.

#### 141515. Trifolium sp.

No. 6092. From Chamchid, Luristan, May 27, 1940. A rare attractive clover 1 foot high, growing in dry rather shady places.

#### 141516. Trifolium sp.

No. 6298. From Gurgan, July 11, 1940. A field clover about 15 inches high, with small globular heads about ½ inch across.

#### 141517. Trifolium sp.

No. 6301. From Gurgan, July 12, 1940. A weak field clover about 15 inches high, with small globular heads about ½ inch across.

#### 141518. Trifolium sp.

No. 6307. From Gurgan, July 12, 1940. A clover about 1 foot high, growing in fields and dry river beds.

#### 141519. TRIFOLIUM SD.

No. 6316. From Gozlu, Mazenderan, July 15, 1940. A prostrate clover with white flowers.

#### 141520. Trifolium sp.

No. 6351. From Dimalu, Mazenderan, July 23, 1940. A prostrate clover growing in half shade.

#### 141521. Trifolium sp.

No. 6439. From Bujmerd, Khorassan, August 2, 1940. A prostrate clover, with rose flowers on a long peduncle, growing along watercourses.

#### 141522. Trifolium sp.

No. 5965. From Saridasht, Bakhtiari, April 26, 1940. A semierect steppe clover with small heads of golden flowers.

#### 141523. Trifolium sp.

No. 5997. From Belu, Bakhtiari, May 8, 1940. A small, prostrate clover, growing on the steppe.

#### 141524. Trifolium sp.

No. 6302. From Gurgan, July 12, 1940. A weak clover about 1 foot high, with yellow flowers.

#### 141525. Trigonella p. Fabaceae.

No. 6088. From Chamchid, Luristan, May 26, 1940. A prostrate annual growing on bare places.

141526. TRIGONELLA Sp.

No. 5941. From Ahwaz, Khuzistan, April 22, 1940. A prostrate fragrant field weed, growing in winter rains.

141527. TRIGONELLA Sp.

No. 5871. From Bushire, Fars, April 15, 1940. A prostrate perennial legume, growing with winter rains.

141528. TRIGONELLA ANGUINA Delile.

No. 5909. From Ahwaz, Khuzistan, April 20, 1940. A prostrate desert legume with yellow flowers.

141529. TRIGONELLA Sp.

No. 6072. From Durud, Luristan, May 22, 1940. A rare annual legume about 6 inches high, growing on the dry isolated sandbank of the river.

141530. TRIGONELLA Sp.

No. 6074. From Durud, Luristan, May 22, 1940. A prostrate legume growing in dry isolated sandbanks.

141531. TRIGONELLA Sp.

No. 6075. From Durud, Luristan, May 22, 1940. An erect, annual legume growing in meadows or on dry sunny sandbanks.

141532. TRIGONELLA Sp.

No. 6089. From Chamchid, Luristan, May 26, 1940. A semidecumbent legume growing on dry open places.

141533. No. 6090.

From Chamchid, Luristan, May 26, 1940. A semidecumbent legume growing on dry open places.

141534 to 141536. VICIA FABA L. Fabaceae.

Broadbean.

141534. No. 5937. Bakla. From Ahwaz, Khuzistan, April 21, 1940.

**141535.** No. 6516. Bakla. From Bujmerd, Khorassan, August 8, 1940.

**141536.** No. 6897. Bagla. From Tabas, Khorassan, September 8, 1940.

141537. VICIA HYBRIDA L.

Vetch.

No. 6021. From Cheshmashirin, Bakhtiari, May 13, 1940. A weak steppe plant about  $2\frac{1}{2}$  feet high.

141538. Lathyrus sp. Fabaceae.

No. 6103. From Ti, Luristan, June 3, 1940. A perennial, matted species growing to about 2 feet high in open places near oaks; flowers attractive, blue purple; plant cut for hay.

141539. Vicia serratifolia f. integrifolia Beck. Fabaceae.

No. 6123. From Durud, Luristan, June 7, 1940. A low vetch 18 inches high, with large purple flowers.

141540. VICIA Sp.

No. 6320. From Shahkuh, Mazenderan, July 17, 1940. A browsed plant growing in mats, with attractive rose flowers.

141541. LATHYRUS APHACA L. Fabaceae.

Pea.

No. 6005. From Cheshmashirin, Bakhtiari, May 13, 1940. Plant grows without summer rain.

141542 to 141546. Vigna sinensis (Torner) Savi. Fabaceae. Cowpea.

141542. No. 5935. Lobia. From Ahwaz, Khuzistan, April 21, 1940.

141543. No. 6207. Lobia. From Tehran, June 22, 1940.

141544. No. 6895. *Lobia*. From Tabas, Khorassan, September 8, 1940.

141545. No. 7046. Lobiaesiya. From Turbati Haidari, Khorassan, September 13, 1940. A thrifty food crop.

141546. No. 7068. Lobia. From Turbati Haidari, Khorassan, September 13, 1940. A thrifty food crop.

# 141547. Solanum quitoense Lam. Solanaceae.

Naranjilla.

From Cali, Colombia. Seeds presented by Dr. George Baekeland, through David Fairchild, Coconut Grove, Fla. Numbered May 2, 1941.

An ornamental shrub about 3 feet high; native to Peru; the oblong-ovate, deep-green leaves are soft, hairy, and the large white flowers are in short axillary clusters. The aromatic orange-colored juicy fruits are nearly spherical and about 2 inches in diameter. They are used in the preparation of refreshing drinks.

For previous introduction see 129350.

#### 141548 to 141552.

From Cuba. Seeds presented by F. G. Walsingham, Atkins Institute of the Arnold Arboretum, Cienfuegos. Received April 29, 1941.

141548. Albizzia procera (Roxb.) Benth. Mimosaceae.

A tall, handsome tree, with large compound leaves and terminal panicles of vellow-white flowers. Native to eastern and southern India.

For previous introduction see 116456.

141549. Bauhinia pauletia Pers. Caesalpiniaceae.

An erect shrub up to 16 feet high, armed with short spines and with 2-lobed leaves and greenish-white inconspicuous flowers. Native to Central America.

141550. BAUHINIA PICTA (H.B.K.) DC.

Mottled bauhinia

For previous introduction see 31836.

141551. Cassia nodosa Buch.-Ham. Caesalpiniaceae.

For previous introduction see 123169.

141552. Rhipsalis cassutha Gaertn. Cactaceae.

Mistletoe cactus.

For previous introduction see 99056.

#### 141553 to 141730.

From Iran. Seeds presented by Walter Koelz, Bureau of Plant Industry, United States Department of Agriculture. Received April 9, 1941.

141553. ALLIUM CEPA L. Liliaceae.

Onion.

Dill.

No. 5957. From Saridasht, Bakhtiari, April 26, 1940. Plant 4 feet high, with large heads of large pink flowers 4 inches across.

141554 to 141561. Anethum graveolens L. Apiaceae.

The vernacular name for dill is shenet in Iran.

141554. No. 7051. From Turbati Haidari, Khorassan, September 13, 1940. Leaves and seeds used for flavoring.

141555. No. 6455. From Bujmerd, Khorassan, August 2, 1940. Used as spice.

141556. No. 6193. From Tehran, June 18, 1940. Eaten raw as a salad or relish.

141557. No. 6433. From Bujmerd, Khorassan, August 2, 1940. A potherb.

141558. No. 6642. From Meshed, Khorassan, August 12, 1940. A salad herb.

141559. No. 6791. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Leaves used as salad and seeds for flavor.

141560. No. 6824. From Firdus, Khorassan, August 27, 1940. Leaves used for flavoring, cooked or raw; widely grown in Iran.

141561. No. 6917. From Tabas, Khorassan, September 8, 1940. A potherb.

141562 to 141565. APIUM GRAVEOLENS L. Apiaceae.

Celery.

**141562.** No. 6226. *Jafri*. From Tehran, June 26, 1940. Used in salad when young.

141563. No. 6427. *Jafri*. From Bujmerd, Khorassan, August 2, 1940. Eaten raw or as potherb.

141564. No. 6782. Jafri. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A salad plant.

141565. No. 6833. *Jafri*. From Firdus, Khorassan, August 28, 1940. A common plant used for flavor, raw or cooked.

141566. Brassica Juncea (L.) Coss. Brassicaceae. Chinese mustard.

No. 5903. Khardil. From Bushire, Fars, April 16, 1940. Seeds used as condiment.

141567 and 141568. Brassica oleracea var. botrytis L. Cauliflower.

141567. No. 6214. Kalmigul. From Tehran, June 24, 1940.

141568. No. 6385. Kalmigul. From Gurgan, July 28, 1940.

141569 to 141576. Brassica oleracea var. capitata L.

Cabbage.

141569. No. 6191. Kalmipich. From Tehran, June 18, 1940. Head flat, hard, about 18 inches across.

141570. No. 6380. Kalmipich. From Gurgan, July 28, 1940.

141571. No. 6430. Kalmi. From Bujmerd, Khorassan, August 2, 1940. Head round, flat, and peaked.

141572. No. 6619. Kalmipich. From Meshed, Khorassan, August 12, 1940. Head flattened, 8 to 10 inches across; tender and of good flavor.

141573. No. 6778. Kalmipich. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Head somewhat flattened.

141574. No. 7076. *Kalmibarg*. From Turbati Haidari, Khorassan, September 13, 1940. Head flat.

141575. No. 7245. Kalmibarg. From Shahrud, Khorassan, September 27, 1940. Head globular, about 9 inches in diameter.

141576. No. 5869. Kilamipich. From Bushire, Fars, April 16, 1940. Head rather loose but well-balanced, about 10 inches across; leaves very crinkly.

141577 to 141582. Brassica oleracea var. gongylodes L.

Kohlrabi.

141577. No. 6220. Kalmigomri. From Tehran, June 24, 1940.

141578. No. 6623. Kalmisang. From Meshed, Khorassan, August 12, 1940. Huge green corms about 12 inches in diameter.

141579. No. 6910. Kalmisang. From Tabas, Khorassan, September 8, 1940. Corm green, 8 inches in diameter, with fair texture, flavor not strong.

141580. No. 7075. Kalmisang. From Turbati Haidari, Khorassan, September 13, 1940. Corm globose, green, to 7 inches, tender, mild.

141581. No. 7132. Kalmisang. From Nishabur, Khorassan, September 20, 1940.

141582. No. 7244. Kalmigomri. From Shahrud, Khorassan, September 27, 1940.

141583 to 141596. Brassica Rapa L.

Turnip.

The vernacular name for turnip is shelgam in Iran.

141583. No. 5898. From Bushire, Fars, April 16, 1940. Globose, white.

141584. No. 5922. From Ahwaz, Khuzistan, April 20, 1940. Globose, white.

141585. No. 6063. From Dizful, Khuzistan, May 18, 1940.

141586. No. 6219. From Tehran, June 24, 1940.

141587. No. 6452. From Bujmerd, Khorassan, August 2, 1940.

- 141588. No. 6621. From Meshed, Khorassan, August 12, 1940. Red and white sorts.
- 141589. No. 6773. From Turbati Shaikh Jam, Khorassan, August 23, 1940.
- 141590. No. 6816. From Firdus, Khorassan, August 27, 1940. A mixture of red and white sorts.
- 141591. No. 6909. From Tabas, Khorassan, September 8, 1940. A mixture with 3 to 4 leaves.
- 141592. No. 7064. From Turbati Haidari, Khorassan, September 13, 1940. Globose, walnut size or smaller, white and purple.
- 141593. No. 7122. From Nishabur, Khorassan, September 20, 1940. A mixture of red-purple and white sorts.
- 141594. No. 7146. Shelghami Khirmiz. From Nishabur, Khorassan, September 21, 1940. A very small red turnip.
- 141595. No. 7191. From Sabzawar, Khorassan, September 24, 1940. A mixture.
- 141596. No. 7243. From Shahrud, Khorassan, September 27, 1940. A mixture of red and white sorts.

#### 141597. Brassica sp.

No. 7025. Mandao. From Turbati Haidari, Khorassan, September 12, 1940. Seeds used as source of oil for illumination.

141598. CITRULLUS COLOCYNTHIS (L.) Schrad. Cucurbitaceae. Colocynth.

01.1040

No. 7147. Hinduanaeabujahi. From Nishabur, Khorassan, September 21, 1940. A wild plant with subglobose fruits  $3\frac{1}{2}$  inches across; used for medicine.

#### 141599 to 141613. CITRULLUS VULGARIS Schrad.

Watermelon.

The vernacular name for watermelon is hinduana in Iran.

- 141599. No. 6368. From Gurgan, Mazenderan, July 28, 1940. Fruit globose, 8 inches in diameter, dark green with a lighter chain stripe; rind 1½ inches thick; flesh rose, fair.
- 141600. No. 6390. From Gurgan, July 29, 1940. Fruit elongated, 11 by 6 inches, white green with narrow pea-green chain stripe; rind hard, 7/8 inch thick; flesh rose, streaked yellow, fair.
- 141601. No. 6391. From Gurgan, July 29, 1940. Fruit elongated, 11 by 6 inches, sea green with faint dark-green reticulations; rind  $\frac{7}{8}$  inch thick; flesh pink, streaked yellow, good texture; flavor poor.
- 141602. No. 6392. From Gurgan, July 29, 1940. Fruit elongated, 11 by 6 inches grass green with darker clouded broad ribs; rind 1/8 inch thick; flesh pink, fair-
- 141603. No. 6398. From Gurgan, July 29, 1940. Fruit globose, 8 inches in diameter, green white with narrow sea-green stripes; rind 5% inch thick; flesh pink, firm, good.
- 141604. No. 6422. From Garamab, Khorassan, August 1, 1940. Fruit globose, 7 inches in diameter, grass green with paler mottlings; rind ½ inch thick; flesh rose; quality good.
- 141605. No. 6458. From Garamab, Khorassan, August 3, 1940. Fruit elongated, 10 by 7 inches, pale green with darker chain stripes; rind ½ inch thick; flesh pink red, mixed white, seedy and juicy; quality good.
- 141606. No. 6505. From Bujmerd, Khorassan, August 8, 1940. Fruit small, globose, 8 inches across, grass green with faint indicated and broken stripes of light green; rind ¼ inch thick; flesh pink, fewer air cells; quality good.
- 141607. No. 6507. From Bujmerd, Khorassan, August 8, 1940. Fruit globose, 10 inches in diameter, dark green; rind ½ inch thick; flesh yellow, juicy, much air in cells; quality fair.
- 141608. No. 6525. From Bujmerd, Khorassan, August 8, 1940.

- 141609. No. 6529. From Bujmerd, Khorassan, August 8, 1940. Fruit subglobose, 10 inches in diameter, black green; rind  $\frac{3}{4}$  inch thick; flesh yellow, fair.
- 141610. No. 6552. From Meshed, Khorassan, August 10, 1940. Fruit globose, 9 inches in diameter, dark green with broad black ribs; rind ½ inch thick; flesh white, stained rose; quality good.
- 141611. No. 6557. From Meshed, Khorassan, August 10, 1940. Fruit green, often blotched yellow; rind firm; good shipper and keeper.
- 141612. No. 6652. From Meshed, Khorassan, August 13, 1940. Fruit globose, 9 inches long, black green with paler green stripes; rind ½ inch thick; flesh pink, good.
- 141613. No. 6158. From Tehran, June 15, 1940. Fruit globose,  $5\frac{1}{2}$  inches across, dark green; rind  $\frac{1}{2}$  inch thick; flesh yellow, insipid.
- 141614 and 141615. Coriandrum sativum L. Apiaceae. Coriander.
  - 141614. No. 5852. Gishniz. From Bushire, Fars, April 14, 1940.
  - 141615. No. 6630. Girshniz. From Meshed, Khorassan, August 12, 1940. Salad flavoring.
- 141616 to 141623. Cucumis melo L. Cucurbitaceae. Muskmelon.
  - 141616. No. 5931. Khujarichamber. From Ahwaz, Khuzistan, April 21, 1940.
  - 141617. No. 6771. Dastiambur. From Turbati Shaikh Jam, Khorassan, August 23, 1940. Fruit small, globose, 2 inches in diameter, yellow, ribbed brown.
  - 141618. No. 7014. Dastambul. From Turbati Haidari, Khorassan, September 12, 1940. Fruit dry, 1½ inches across.
  - 141619. No. 7014. Dastambul. From Turbafi Haidari, Khorassan, September 12, 1940. Fruit dry, 1½ inches across.
  - 141620. No. 7053. Khiyarichambar. From Turbati Haidari, Khorassan, September 13, 1940. Fruits long, thin, furrowed.
  - 141621. No. 7187. Dastambul. From Sabzawar, Khorassan, September 24, 1940. Fruit 4 by  $2\frac{1}{2}$  inches, golden brown with yellow stripes, traces of netting; fragrant, inedible.
  - 141622. No. 7242. Khiyarichambar. From Shahrud, Khorassan, September 27, 1940. Fruit resembles the long "Chinese" cucumber.
  - 141623. No. 7275. Dastambul. From Tehran, October 4, 1940. Fruits globose, 4 inches in diameter, golden brown with broken irregular yellow stripes, sparse, coarse netting; fragrant, inedible.
- 141624 to 141630. Cucumis sativus L.

Cucumber.

- 141624. No. 6061. Khiyaribalang. From Dizful, Khuzistan, May 18, 1940. Fruit 8 inches long, tender, very agreeable.
- **141625.** No. 6062. *Khiyarichambar*. From Dizful, Khuzistan, May 18, 1940. Fruit resembles the ribbed "Chinese" cucumber; quality poor.
- 141626. No. 6194. Khiyarichambar. From Tehran, June 18, 1940. A long, thin, furrowed cucumber, used for salad.
- 141627. No. 6370. Dastambul. From Gurgan, Mazenderan, July 28, 1940. Fruit flattened, 3 by  $2\frac{1}{2}$  inches, onion skin brown, smooth; fragrant, not edible.
- 141628. No. 6371. Dastambul. From Gurgan, Mazenderan, July 28, 1940. Fruits flattened, 3½ by 3 inches, red brown with broken, mottled yellow stripes, smooth; kept for fragrance, inedible.
- 141629. No. 6381. Khiyaritarmi. From Gurgan, July 28, 1940. Fruit resembles long "Chinese" cucumber.
- 141630. No. 6640. Khiyarichambar. From Meshed, Khorassan, August 13, 1940. Fruit resembles the long "Chinese" cucumber.

**141631.** Cucumis sp.

No. 6265. From Gurgan, Gurgan, July 10, 1940. A thrifty, prostrate field weed, growing in clumps up to 3 feet across; fruit hairy, lime-shaped,  $2\frac{1}{2}$  inches long, green with darker blotches and stripes.

141632 to 141640. Cucurbita maxima Duchesne.

Squash.

- 141632. No. 6672. Kadu. From Karizan Ahmad, Khorassan, August 16, 1940. Mixture of local sorts.
- 141633. No. 6697. Kadu. From Bardu, Khorassan, August 21, 1940. Fruits oblong, 8 inches long, orange red, smooth; flesh yellow, 1½ inches thick, insipid.
- 141634. No. 6951. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit subglobose, 10 inches in diameter, red orange with pink stripes and blotches of green; flesh orange, 1¾ inches thick, insipid.
- 141635. No. 6958. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 13 by 7½ inches, irregular surface, creamy white; flesh pale orange, 2 inches thick, insipid.
- 141636. No. 6968. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit obovoid, 14 inches in diameter, gray green, blotched and lined with a paler green; flesh pale orange, 1½ inches thick, insipid.
- 141637. No. 6969. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit flattened, 10 by 7 inches, deeply and irregularly ribbed with pale salmon; flesh pale orange,  $1\frac{1}{2}$  inches thick, insipid.
- 141638. No. 6970. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit flattened, 12 by 9 inches, gray green with deep and irregular ribs; flesh 1¾ inches thick, pale orange, insipid.
- 141639. No. 6971. Kaduetambal. From Turbati Haidari, Khorassan, September 11, 1940. Fruit flattened, 12 by 8 inches, orange, deeply and irregularly ribbed; flesh 2 inches thick, pale orange, insipid.
- 141640. No. 7060. Kadu. From Turbati Haidari, Khorassan, September 13, 1940.

141641 to 141656. Cucurbita moschata Duchesne.

Cushaw.

- 141641. No. 6180. From Tehran, June 17, 1940.
- 141642. No. 7258. From Shahrud, Khorassan, September 27, 1940.
- 141643. No. 5900. From Bushire, Fars, April 16, 1940. Fruit football-shaped, 15 inches long, pink brown, blotched paler with heavy ribs; flesh orange, 2 inches thick, fairly sweet, good texture.
- 141644. No. 5942. From Ahwaz, Khuzistan, April 22, 1940. Fruit irregular-elongate, 15 by 10 inches, buff with deep ribs; flesh about 2 inches thick, deep orange, rather sweet, coarse-grained.
- 141645. No. 5943. From Ahwaz, Khuzistan, April 22, 1940. Fruit globose, 12 inches in diameter, brown buff with lighter blotches, indented ribs; flesh about 2 inches thick, orange, rather sweet, coarse-grained.
- 141646. No. 6218. Kaduehaluai. From Tehran, June 24, 1940.
- 141647. No. 6513. *Kadu*. From Bujmerd, Khorassan, August 8, 1940.
- 141648. No. 6625. Kaduehaluai. From Meshed, Khorassan, August 12, 1940.
- 141649. No. 6929. Kadueorganji. From Turbati Haidari, Khorassan, September 11, 1940. Fruit oblong, 15 inches long, pink buff with paler spots; flesh orange, sweet.
- 141650. No. 6950. Kadueorganji. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 23 inches long, 4 to 6 inches wide, with a small seed cavity at one end, otherwise solid; flesh salmon, sweet.
- 141651. No. 5895. From Bushire, Fars, April 15, 1940.
- 141652. No. 7197. Kadueorganji. From Sabzawar, Khorassan, September 24, 1940. Fruit gourd-shaped.

- 141653. No. 6810. Kaduetambal. From Firdus, Khorassan, August 27, 1940. Fruit globose, 11 inches in diameter, white with deep ribs; flesh 2 inches thick, creamy, insipid.
- 141654. No. 6812. Kaduemecca. From Firdus, Khorassan, August 27, 1940. Fruit 20 by 9 inches, salmon with irregular white stripes; flesh yellow, 1½ inches thick, insipid.
- 141655. No. 6989. Kaduetambal. From Turbati Haidari, Khorassan, September 12, 1940. Fruit 12 by 6 inches, orange, obscurely striped and spotted yellow; flesh 1½ inches thick, yellow, insipid.
- 141656. No. 6383. *Kadu*. From Gurgan, July 28, 1940. Fruit 10 by 6 inches, green.

#### 141657 to 141678. CUCURBITA PEPO L.

umpkin.

- 141657. No. 6065. From Dizful, Khuzistan, May 18, 1940. An egg-shaped gourd; may be edible.
- 141658. No. 6460. Kaduekhurushi. From Bujmerd, Khorassan, August 7, 1940.
- 141659. No. 6959. Kaduebadenjan. From Turbati Haidari, Khorassan, September 11, 1940. Fruit subglobose, somewhat flattened, up to about 7 inches long, cream buff.
- 141660. No. 7059. Kadu. From Turbati Haidari, Khorassan, September 13, 1940.
- 141661. No. 7138. Kadu. From Nishabur, Khorassan, September 20, 1940.
- 141662. No. 7173. Kaduetamasha. From Sabzawar, Khorassan, September 23, 1940. Fruit flattened, 2½ by 2 inches, obscurely ribbed.
- 141663. No. 7189. Kaduebadenjan. From Sabzawar, Khorassan, September 24, 1940.
- 141664. No. 5879. Kadu. From Bushire, Fars, April 15, 1940.
- 141665. No. 5927. From Ahwaz, Khuzistan, April 21, 1940. Small, immature fruits, both round and elongate.
- 141666. No. 6213. Kaduemasmali. From Tehran, June 24, 1940. Fruit globose.
- 141667. No. 6216 Kaduekombar. From Tehran, June 24, 1940.
- 141668. No. 6921 Kadu. From Tabas, Khorassan, September 8, 1940. Fruit 8 by 6 inches, orange with yellow stripes; flesh ¾ inch thick, yellow, eaten young.
- 141669. No. 6946. Kadu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit globose, 7 inches in diameter, orange, netted yellow; flesh  $1\frac{1}{2}$  inches thick, yellow, insipid; eaten when young.
- 141670. No. 6949 Kadu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit subglobose, 6 inches long, yellow; flesh ¾ inch thick, yellow; eaten young.
- 141671. No. 6961. Kaduebadenjan. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 9 by  $4\frac{1}{2}$  inches, orange with yellow spots; flesh  $\frac{3}{4}$  inch thick; eaten young.
- 141672. No. 6963. Kaduebadenjan. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 9 by 4½ inches, green; flesh 1½ inches, yellow; eaten young.
- 141673. No. 7148. Kaduebadenjani. From Nishabur, Khorassan, September 21, 1940.
- 141674. No. 7234. Kadu. From Shahrud, Khorassan, September 27, 1940.
- 141675. No. 7261. *Kadu*. From Shahrud, Khorassan, September 27, 1940.
- 141676. No. 6622. *Kaduebanjani*. From Meshed, Khorassan, August 12, 1940. Fruits 8 by 4 inches, yellow; eaten young.
- 141677. No. 6947. Kadu. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 11 by 4 inches, cream with raised ridge ribs; flesh 1¼ inches thick, white; eaten young.

141678. No. 6948. Kaduebadenjan. From Turbati Haidari, Khorassan, September 11, 1940. Fruit elongate, 11 by 4 inches, cream buff; flesh 1¼ inches thick, white; eaten young.

141679. DAUCUS CAROTA L. Apiaceae.

Carrot.

No. 7235. Zardak. From Shahrud, Khorassan, September 27, 1940. Root purple; coarsely cut.

141680 to 141683. Lactuca sativa L. Cichoriaceae.

Garden lettuce.

141680. No. 6055.

141681. No. 6195. Kahu. From Tehran, June 19, 1940. A short-leaved head type.

141682. No. 6212 Kahuepich. From Tehran, June 24, 1940. A short-leaved head sort.

141683. No. 7256. Kahu. From Shahrud, Khorassan, September 27, 1940.

141684. LACTUCA Sp.

No. 6096. From Kalvar, Luristan, May 28, 1940. A species growing in a dry oak forest in shade; small yellow flowers, 2 feet high.

141685. LACTUCA Sp.

No. 6101. From Ti, Luristan, June 2, 1940. A tall species, 2 to 3 feet high, growing on dry, open places.

141686. LACTUCA Sp.

No. 6110. From Chamchid, Luristan, June 6, 1940. A species 2 feet high, with rose-purple flowers 1 inch across.

141687. LACTUCA Sp.

No. 6296. From Gurgan, July 11, 1940. A field weed 7 feet high.

141688. LACTUCA Sp.

No. 6474. From Kataliyekchinar, Khorassan, August 5, 1940. A conspicuous steppe plant, 10 feet high.

141689 to 141698. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

141689. No. 6190. Kaduekalmi. From Tehran, June 18, 1940.

141690. No. 6453. *Kaduechilimi*. From Bujmerd, Khorassan, August 2, 1940. An ornamental with a short neck.

141691. No. 6656. Kaduechamberi. From Meshed, Khorassan, August 13, 1940.

141692. No. 6811. Kaduechilimi. From Firdus, Khorassan, August 27, 1940. Fruit 16 inches long.

141693. No. 6960. Kaduechalami. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 12 inches long, with a short turtlehead neck.

141694. No. 6964. Kaduechalami. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 5 to 8 inches long; ornamental.

141695. No. 6965. Kaduechalami. From Turbati Haidari, Khorassan, September 11, 1940. Fruit 5 inches long, with a thin neck 2¾ inches long; ornamental.

141696. No. 6974. Kaduechalami. From Turbati Haidari, Khorassan, September 11, 1940. Fruit similar to No. 6960 but with much longer neck; ornamental.

141697. No. 6992. From Turbati Haidari, Khorassan, September 12, 1940. Fruit turtlehead-necked, 4 inches long.

141698. No. 7123. Kaduejoli. From Nishabur, Khorassan, September 20, 1940.

141699 to 141701. Lepidium sativum L. Brassicaceae. Garden cress.

141699. No. 5899. Taratezak. From Bushire, Fars, April 16, 1940. A salad green and potherb.

141700. No. 7232. *Taratezak*. From Shahrud, Khorassan, September 26, 1940. A salad plant.

141701. No. 7127. Taratezak. From Nishabur, Khorassan, September 20, 1940. A salad plant.

141702 to 141704. Luffa acutangula (L.) Roxb. Cucurbitaceae.

Singkwa towelgourd.

141702. No. 6200 Tori. From Tehran, June 21, 1940. Tender fruits used as vegetable.

141703. No. 6648. Tori. From Meshed, Khorassan, August 13, 1940. A rare vegetable.

141704. No. 7066. *Tori*. From Turbati Haidari, Khorassan, September 13, 1940. A rare vegetable.

141705. LUFFA AEGYPTIACA Mill.

Suakwa towelgourd.

No. 6209. Tori. From Tehran, June 24, 1940. Tender fruits used as vegetable.

141706. Rubus sp. Rosaceae.

No. 6361. From Khairat, Mazenderan, July 26, 1940. A prostrate plant, with white flowers and rather inferior black fruits lacking bloom, growing in part shade in forest.

141707. Rubus sp.

No. 6299. From Gurgan, Mazenderan, July 12, 1940. A dense shrub about 6 feet high, with an abundance of small rose-purple flowers; fruit small, good flavor.

141708. Rubus sp.

No. 6403. From Nizamabad, Mazenderan—July 30, 1940. A prostrate plant bearing black fruits without bloom; flowers white.

141709. Rubus sp.

No. 6491. Tamishk. From Kotaliyekchinar, Khorassan, August 6, 1940. A dense bushy form about 7 feet high, with small rose-purple flowers ½ inch across and good-flavored firm black fruits.

141710. Solanum sp. Solanaceae.

No. 6679. From Bardu Forest, Khorassan, August 19, 1940. A scandent plant with scarlet fruits, found along streams.

141711. Solanum sp.

No. 6373. From Khairat, Mazenderan, July 25, 1940. A low plant 8 inches high, with entire elliptical leaves and 1 to 2 fruits, growing in dense shade.

141712 to 141717. Spinacia oleracea L. Chenopodiaceae. Common spinach.

The vernacular name for spinach is isfinaj in Iran.

141712. No. 5893. From Bushire, Fars, April 15, 1940.

141713. No. 5893-A. From Bushire, Fars, April 15, 1940.

141714. No. 7196. From Sabzawar, Khorassan, September 24, 1940.

141715. No. 7196-A. From Sabzawar, Khorassan, September 24, 1940.

141716. No. 6779. From Turbati Shaikh Jam, Khorassan, August 23, 1940.

141717. No. 6918. From Tabas, Khorassan, September 8, 1940.

141718. Tragopogon sp. Cichoriaceae.

No. 5993. From Pashimshurun, Bakhtiari, May 9, 1940. A low plant 6 inches high, growing on a steppe without summer rains.

141719. Tragopogon sp.

No. 6069. From Durud, Luristan, May 20, 1940. A plant about 1½ feet high, with purple flowers; growing in wet meadows.

141720. Tragopogon sp.

No. 6447. From Bujmerd, Khorassan, August 2, 1940. A field weed 2 feet high, with small yellow flowers  $\frac{5}{8}$  inch across.

141721 to 141730. Trigonella foenum-graecum L. Fabaceae. Fenugreek.

141721. No. 5929. Halba. From Ahwaz, Khuzistan, April 21, 1940. A potherb.

141722. No. 6431. Shamblili. From Bujmerd, Khorassan, August 2, 1940. potherb.

141723. No. 6649. Halim. From Meshed, Khorassan, August 13, 1940. A potherb.

141724. No. 6789. Shamblili. From Turbati Shaikh Jam, Khorassan, August 23, 1940. A potherb.

141725. No. 6817. Shamblili. From Firdus, Khorassan, August 27, 1940. A potherb.

141726. No. 6911. Shamblili. From Tabas, Khorassan, September 8, 1940. A potherb.

141727. No. 7054. Shamblili. From Turbati Haidari, Khorassan, September 13, 1940. Seeds and leaves used as flavoring.

141728. No. 7128. *Halba*. From Nishabur, Khorassan, September 20, 1940. A flavoring plant.

141729. No. 7255. Shamblili. From Shahrud, Khorassan, September 27, 1940. A flavoring plant.

141730. No. 6170. Shamblili. From Tehran, June 16, 1940. A potherb.

## 141731. Schefflera sp. Araliaceae.

From California. Plant presented by Dr. C. Franceschi, Santa Barbara. Numbered July 14, 1941.

An evergreen large shrub or small tree, which has grown to about 12 feet high at Coconut Grove, Florida. The leaves are palmately 5- to 7-foliolate and nearly a foot across; the flowers are inconspicuous.

For previous introduction see 79145.

#### 141732 to 141737.

From Palestine. Seeds presented by Rudolf Samisch, Director of Horticulture, Agricultural Research Station, Rehovot. Received April 21, 1941.

141732. PISTACIA ATLANTICA Desf. Anacardiaceae. Mount Atlas pistache.

Huleh. A tree, native to northern Africa, up to 50 feet high, with many woody branches that form a dense head. The blue, somewhat fleshy drupes are about the size of peas. A resinous gum flows from the bark of the trunk and branches at various times of the year, especially in summer, and hardens to a pale-yellow color. This gum has a pleasant aromatic odor and taste, and thickens in plates covering the branches. The Arabs collect this substance in autumn and winter and chew it to whiten the teeth and sweeten the breath.

For previous introduction see 127867.

#### 141733. PISTACIA LENTISCUS L.

Lentisk.

No. 1 Jalameh. An attractive shrub, with dense clusters of bright-red berries that become black.

For previous introduction see 109552.

#### 141734 to 141737. PISTACIA TEREBINTHUS L.

False terebinth.

A handsome tree, up to 30 feet high, with small ovoid fruits ½ inch long. Native to Asia Minor.

141734. Mt. Tabor.

141736. No. 5 Jalameh.

141735. No. 4 Jalameh.

141737. Ibtin, Shefa Amer.

#### 141738 to 141742.

From Canada. Presented by G. H. Corsan, Islington, Ontario. Received May 6, 1941.

141738. Carya sp. Juglandaceae.

Corsan. Seeds from a tree 3 years old.

141739. CARYA Sp.

Corsan. Scions.

141740. CARYA Sp.

Schick. An excellent variety. Scions.

141741 and 141742. JUGLANS NIGRA L.

Black walnut.

141741. Gifford. Seedling of Ohio; nuts much larger. Scions.

141742. Neilson. Scions.

141743. PANDANUS PACIFICUS Veitch. Pandanaceae. Pacific screwpine.

From Puerto Rico. Plants presented by Claud L. Horn, Agricultural Experiment Station, Mayaguez. Received May 7, 1941.

A shrub or small tree with dark-green glossy leaves, which make it most desirable as an ornamental or hedge plant for tropical regions. Native to the Pacific Islands.

For previous introduction see 99610.

#### 141744 and 141745.

From Australia. Seeds presented by Russell Grimwade, Melbourne, Victoria. Received May 2, 1941.

141744. EUCALYPTUS CALOPHYLLA Lindl. Myrtaceae.

Port Gregory gum.

Var. Rosea. A form with large clusters of pink flowers.

141745. EUCALYPTUS FICIFOLIA F. Muell.

Scarlet gum.

A handsome small tree up to 30 feet high, with scarlet flowers.

141746. Rooseveltia frankliniana O. F. Cook. Phoenicaceae. Palm.

From Costa Rica. Seed presented by Dr. Waldo L. Schmitt, United States National Museum. Received May 12, 1941.

A tall handsome palm with a rigid, columnar trunk, the base rather abruptly thickened, and a crown of large pinnate leaves with many long and pendent pinnae. It is very similar in size and general appearance to the coconut palm. Native to the Cocos Islands.

For previous introduction see 129769.

141747. Andropogon saccharoides var. Berteronianus (Steud.) Hack. Poaceae. Grass.

From Chile. Seed presented by the Departmento de Genetica Fitotecnica, Ministerio de Agricultura, Santiago. Received May 9, 1941.

141748 to 141759. Oryza sativa L. Poaceae.

Rice.

From Peru. Seeds presented by the Estación Experimental Agricola "La Molina," Lima. Received May 19, 1941.

141748. Chino Colorado.

141749. E.A.S. No. 3.

141750. Fortuna Negro.

141751. Fortuna Mulato.

141752. Honduras.

141753. Jamaica.

141754. Java Barba Azul.

141755. Mejicano.

141756. Nira.

141757. Tambo.

141758. Valencia.

141759. Vialone.

141760. Carica Papaya L. Papayaceae.

Papaya.

From Honduras. Seed presented by Edward T. Stanwood, Lancetilla. Received May 19, 1941.

141761. Prestonia mollis H. B. K. Apocynaceae.

From Ecuador. Seeds collected by H. L. Blood, Agricultural Experiment Station, Logan, Utah. Received May 26, 1938. Numbered May 21, 1941.

No. 602. From Pasaje, Province of El Oro, April, 1938. A woody twiner, with opposite, petiolate, ovate-oblong, subcordate leaves  $2\frac{1}{2}$  to 3 inches long and large, showy, salver-shaped yellow flowers. Native to tropical South America.

141762. Saccharum. Poaceae.

Sugarcane.

From India. Cuttings presented by the Central Farm, Pyinamana, Burma. Received May 24, 1941.

Pyinmana Red Sugarcane.

## 141763 and 141764. Hibiscus. Malvaceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered in May, 1941.

141763. A hybrid variety. The flower is 5 to 6 inches or more in diameter, circular, flat; petals very broad, full, and overlapping, the overlapping edge crimped; color Antimony yellow (Ridgway) to paler, with white center flushed pink at base of petals; column white, thick, and stiff; stigma Nepal red to Brazil red. The plant is of moderate vigor, but cuttings root with much difficulty.

141764. David May. This attractive flower is 7 inches in diameter, with moderately full petals, which are white, very close to yellow, but which in the newly opened flower are touched with purplish pink; this color fades out later in the day. The stigmas range from lemon to yellow. Cuttings root with some difficulty, and the variety is best propagated by grafting.

## 141765. Ficus columnaris C. Moore & F. Muell. Moraceae.

From Australia. Seed presented by H. Wenholz, Department of Agriculture, Sydney' New South Wales. Received May 24, 1941.

A tree of the banyan type, native to Lord Howe Island, having up to a hundred stems formed from aerial roots. It is said to bear some resemblance to *Ficus macrophylla*. The domelike top of the tree, resting on these stems, is covered with dark evergreen foliage.

## 141766 to 141809. Rhododendron. Ericaceae.

From Maryland. Plants originated at the United States Plant Introduction Garden, Glenn Dale. Numbered May 29, 1941.

141766. Dimity. Early, up to 6 feet high; flowers white, slightly flaked and striped with brick red.

141767. Limerick.

141768. Mayourneen.

141769. Caress.

141770. Alabaster. Late, of medium height; habit somewhat spreading; flowers hose-in-hose, white with occasional pink flecks.

141771. Stardust. Midseason, tall, erect; in effect a "late white Kaempferi."

141772. Minuet. Early, tall, erect; flowers  $1\frac{1}{2}$  to 2 inches across, white, slightly flaked with magenta.

141773. Juneglow.

141774. Geisha. Flowers white with occasional purple lines.

141775. Fantasy. Early, of medium height and rather spreading; flowers white, broadly rayed and striped with dull red, occasionally entirely red.

## 141766 to 141809-Continued

141776. Carmel. Early, tall; flowers single, 2 inches across, Spinel red with blotch of Indian-red dots.

141777. Pixie. Early, medium tall; flowers rather small, starlike with revolute lobes, white ground with a central ray of Spinel pink and Spinel red blotch on upper lobe.

141778. [No special data.]

141779. Festive.

141780. Dayspring. Early, erect; flowers like large Kurume's, single, white center shading gradually to clear pale pink.

141781. Jubilant. Midseason, of moderate height, spreading; flowers hose-in-hose, salmon pink.

141782. Candlelight.

141783. Melanie. Late; flowers bright salmon to coppery old rose with darker markings.

141784. Romance.

141785. Epilogue.

141786. Satin Robe.

141787. Pirate.

141788. Fashion. Midseason; flowers hose-in-hose, salmon.

141789. Magic.

141790. Pastel.

141791. Samite. Late; flowers hose-in-hose, white.

141792. Caprice. Midseason, of moderate height, upright; flowers white, rayed and flaked with coral red.

141793. Mayflower. Flowers hose-in-hose, light salmon pink.

141794. Lullaby.

141795. Pontiff.

141796. Alexandria.

141797. Jongleur. Late; flowers very large, fuchsine purple with dark spots.

141798. Horus.

141799. Touchstone.

141800. Kenwood.

141801. Berceuse.

141802. Lustre.

141803. Delos.

141804. Naxos.

141805. Archer.

141806. Aries.

141807. Ranger.

141808. Mountebank.

141809. Fénelon.

141810. Caesalpinia spinosa (Mol.) Kuntze. Caesalpiniaceae.

From Peru. Seed donated by F. H. Analt, Bureau of Foreign and Domestic Commerce, United States Department of Commerce. Received May 29, 1941.

Tara. A tall, upright spiny shrub or small tree, often used as a hedge in Peru. The foliage is deep green with the leaflets smooth and polished on the upper surface. The greenish-yellow flowers, in cylindrical open spikes, are not very conspicuous, but the pods are produced in large clusters and the exposed surfaces show bright scarlet for a long time before maturing. The pods contain a high percentage of tannin.

For previous introduction see 138416.

#### 141811 to 141814.

From California. Bulbs purchased from Dr. T. H. Goodspeed, University of California, Berkeley. Received June 6, 1941.

141811 and 141812. (Undetermined).

141811. An amaryllidaceous plant from Peru.

141812. An amaryllidaceous plant.

141813. Crocopsis fulgens Pax. Amaryllidaceae.

No. 39-1039.

141814. HIPPEASTRUM CHILENSE (Ruiz & Pav.) Baker. Amaryllidaceae.

#### **141815 to 141819.** Gossypium. Malvaceae.

Cotton.

From Peru. Seeds presented by C. Saettone, Canete. Received June 6, 1941.

Tanguis seed cotton, hairy types.

141815. No. 224.

141818. No. 308.

141816. No. 225.

141819. No. 491.

141817. No. 307.

# 141820. Adenocalymna alliaceum (Lam.) Miers. Bignoniceae.

From Puerto Rico. Seed presented by H. T. Cowles, Professor of Horticulture, College of Agriculture and Mechanic Arts, University of Puerto Rico, Mayaguez. Received May 29, 1941.

An excellent tropical climber, growing to about 40 feet long with 5 to 6 large clusters of lavender flowers each year. Native to tropical South America.

#### 141821 to 141865.

From Brazil. Seeds presented by Dr. Edmundo Navarro de Andrade, Rio Claro, São Paulo. Received May 27, 1941.

A collection of seeds from trees that grew well at Rio Claro.

141821. Eucalyptus triantha Link (E. acmenioides Schauer). Myrtaceae.

141822. EUCALYPTUS ALBA Reinw.

White Gum. A tall, evergreen tree, with ash-colored, rough, persistent bark and glaucous leaves, varying from ovate-oblong and 3 inches long to ovate-lanceolate and 6 inches long. The small white flowers are in panieles at the ends of the branches, and the top-shaped fruits are ½ inch in diameter. It is native to New Guinea and Java, and has been successfully established in Brazil, where it is considered of much value.

For previous introduction see 136427.

141823. Eucalyptus angulosa Schauer.

A desert shrub or small tree native to Australia, up to 25 feet high, with lanceolate to ovate-lanceolate, rather obtuse leaves 2 to 4 inches long. Flowers and fruits variable in size, the fruits up to 34 inch across. For trial in the milder parts of southern California and the Southwest.

#### 141824. Eucalyptus botryoides J. E. Smith.

Bangalay

A tall handsome tree, native to Australia, with beautiful dark-green horizontal lanceolate leaves, umbels of small sessile white flowers, and obovate fruits. In Australia it is used as a windbreak and as a shade tree. The wood is hard, tough, and durable.

For previous introduction see 118380.

141825. EUCALYPTUS CAPITELLATA J. E. Smith.

Stringy Bark. A large tree, native to Australia, with dark-gray, furrowed, fibrous bark and thick, shining, sword-shaped leaves 3 to 6 inches long. The small sessile flowers are in axillary clusters of 5 to 10, and the depressed-globose fruits, nearly half an inch in diameter, have a prominent reflexed rim.

For previous introduction see 93229.

## 141821 to 141865-Continued

141826. Eucalyptus citriodora Hook.

For previous introduction see 135474.

141827. Eucalyptus gummifera (Gaertn.) Hochr. (E. corymbosa J. E. Smith).

A medium-sized evergreen tree, native to Australia, with leathery, lanceolate leaves and large corymbs of fragrant yellowish-white flowers.

For previous introduction see 132627.

# 141828. Eucalyptus crebra F. Muell.

Narrowleaf ironbark.

A slender tree of pleasing aspect, growing about 100 feet high, with a trunk commonly straight and even, 2 to 3 feet in diameter. The bark is rough and persistent and the wood reddish. The tree is adapted to a variety of climatic conditions, enduring minimum temperatures of 18° to 20°F., and is said to be content with poor soil. On account of its tough and elastic character and its durability underground, the timber is useful for a great variety of purposes. It is one of the highly valued timber trees of Australia.

For previous introduction see 36619.

#### 141829. Eucalyptus Eugenioides Sieber.

A tall tree, native to New South Wales, with fibrous bark, thick oblique leaves 2 to 6 inches long, flowers in axillary clusters of 6 to 12, and ovoid fruits ¼ inch in diameter.

#### 141830. Eucalyptus eximia Schauer.

A large tree, native to New South Wales, with scaly bark, falcate-lanceolate leaves, white flowers, and urn-shaped fruits. The wood is soft and used only for fuel. It is a stately tree and very beautiful when in full bloom.

For previous introduction see 75627.

#### 141831. Eucalyptus exserta F. Muell.

A medium-sized tree with rough, fissured, ash-brown bark, sword-shaped leaves 3 to 6 inches long, axillary clusters of 3 to 8 flowers on long pedicels, and nearly globular fruits  $\frac{1}{3}$  inch in diameter.

For previous introduction see 90694.

#### 141832. Eucalyptus sp.

Introduced under the name of "grandiflora," for which a place of publication has not been found.

#### 141833. Eucalyptus Haemastoma J. E. Smith.

A large tree, with a smooth mottled trunk, coriaceous, lanceolate-falcate leaves, small white flowers in axillary clusters of small terminal panicles, and small globular or pear-shaped fruits less than  $\frac{1}{2}$  inch in diameter.

For previous introduction see 132628.

#### 141834 and 141835. X Eucalyptus kirtoniana F. Muell.

For previous introduction see 41623.

#### 141836. Eucalyptus linearis Dehnh.

A graceful shade tree 20 to 50 feet high, with deciduous bark that leaves the tree smooth and white throughout. Native to Tasmania, where the tree is reported to grow in poor, light soils.

#### 141837. Eucalyptus longifolia Link.

Woollybutt.

For previous introduction see 24408.

#### 141838. Eucalyptus camaldulensis Dehnh. (E. longirostris F. Muell).

A tall Australian tree, up to 200 feet high, with smooth dark-gray bark, narrowly lanceolate leaves 6 inches or more long, stalked umbels of small flowers attractive to bees, and globular fruits with conical tops. The heavy red wood is durable both above and below the ground and is used for railroad ties, piles, and fence posts.

For previous introduction see 77610.

## 141821 to 141865-Continued

141839. EUCALYPTUS MACULATA Hook.

A tall tree with smooth light-colored bark, deciduous in large patches. The timber is useful for tool handles, building, and as a general hardwood. The species is adapted to the coast ranges in Australia and occurs in sandy clay and deep loamy soils.

141840. Eucalyptus melanophloia F. Muell.

A small tree with persistent, dark-furrowed bark and sessile, orbicular to ovatelanceolate, glaucous or white-mealy leaves.

141841. Eucalyptus melliodora A. Cunn.

Honey gum.

Yellow Box Gum. A spreading tree up to 150 feet high, with drooping branches, narrow lanceolate leaves 3 to 5 inches long, and small white flowers particularly rich in nectar. The timber is used in Australia by wheelwrights and shipbuilders.

141842. Eucalyptus microcorys F. Muell.

A tall tree, with persistent wrinkled bark, thin, broadly lanceolate leaves, and small white flowers. The yellowish timber is especially useful for ballroom floors because of its greasy nature. Native to Australia.

For previous introduction see 123777.

141843. Eucalyptus sp.

Introduced as Eucalyptus microphylla, a name of doubtful botanical position.

141844. Eucalyptus obliqua L'Her.

Messmate gum.

For previous introduction see 75640.

141845. Eucalyptus obtusiflora DC.

A shrub or small tree, with stringy bark and thick, rather broad, shining leaves.

141846. EUCALYPTUS.

Var. oranensis. A supposed natural hybrid variety, originating in Algeria, received as Eucalyptus occidentalis var. oranensis, one of the parents of which is believed to be E. occidentalis. It is reported to be a tree of fine appearance, with the flowers and capsules borne on long, slender peduncles and pedicels.

141847. EUCALYPTUS PANICULATA J. E. Smith.

For previous introduction see 75642.

141848. EUCALYPTUS PAUCIFLORA Sieber.

White-gum.

An Australian tree, 10 feet in height and about 4 feet in diameter. It grows well in swampy lowlands, and the timber is used for general building purposes.

For previous introduction see 124640.

141849. X Eucalyptus paulistana Navarro.

A hybrid between Eucalyptus globulus and E. robusta, the detailed characters of which are not known.

141850. Eucalyptus pilularis J. E. Smith.

Blackbutt.

A slender tree, reported to average 100 to 150 feet high, with a trunk diameter of 3 to 5 feet. The bark of the trunk is dark gray, rough, and partially persistent. It is considered one of the best of all-purpose timbers and is reported to be especially valuable for fence posts and telegraph poles. The honey from the flowers is reported to be of especially good quality. In California the tree grows well near the coast but does not thrive in the dry, hot interior valleys.

141851. Eucalyptus Polyanthemos Schauer.

Redbox.

For previous introduction see 38722.

141852. EUCALYPTUS PROPINQUA Deane and Maiden.

A large tree, 120 feet high and 5 feet in diameter, native to New South Wales. The lanceolate leaves are 5 inches long, and the timber is durable either in or out of the ground.

For previous introduction see 75647.

## 141821 to 141865—Continued

#### 141853. EUCALYPTUS PUNCTATA DC.

Leatherjacket.

A medium-sized tree of spreading habit, especially when young, attaining in Australia a height of about 100 feet. The species thrives at and near the coast but does not do well in the dry interior. The wood of this tree is tough, hard, close-grained, and very durable. It is useful for fence posts, railway ties, and other purposes.

141854. Eucalyptus redunca Schauer.

A shrub or tree which reaches a height of 120 feet in Western Australia where it is native. It furnishes a pale, hard, particularly tough and durable timber, much prized for building purposes, various implements, and other items. The seasoned wood weighs about 70 pounds per cubic foot.

For previous introduction see 75648.

141855. Eucalyptus regnans F. Muell.

An Australian tree, up to 325 feet high. The trunk is very straight and whitish, and the narrow leaves, shining on both sides, are of rather thin texture. The wood is well adapted for shingles, planking, and general construction.

For previous introduction see 75649.

#### 141856. Eucalyptus resinifera J. E. Smith.

Mahogany gum.

A large tree with rough, reddish, fibrous bark persistent to the small branches. The heavy timber is a rich red and is said to be strong and durable; because of the color the tree is also called "red mahogany."

For previous introduction see 38724.

#### 141857. Eucalyptus robusta J. E. Smith.

Brown gum.

A handsome, symmetrically branched tree of moderate height, with bark of trunk persistent, rough, dark brown, and that of the branches reddish. It would be of value also as a street tree but for the brittle wood and heavy foliage, which cause breaking of the top in heavy winds. It is adapted to a moist atmosphere but also flourishes in a dry one when sufficient water is given, but it does not endure heavy frosts.

For previous introduction see 28682.

#### 141858. EUCALYPTUS RUDIS Endl.

Desert gum.

A rapid-growing tree attaining a height of 50 to 75 feet. The grayish bark of the trunk is usually rough and persistent but sometimes flakes off. In Australia the tree grows naturally near streams, while in our Southwest, when supplied with water, it has thrived near the coast, on dry mesas, and in the hot valleys of the interior; it has endured minimum temperatures of 15° to 18° F. and maximum temperatures of 110° to 118°.

For previous introduction see 24411.

#### 141859. EUCALYPTUS SALIGNA J. E. Smith.

A tall tree with silvery-gray bark, native to New South Wales. The narrowly lanceolate leaves are 4 to 6 inches long, and the clusters of four to eight white flowers are on short peduncles.

For previous introduction see 75650.

#### 141860. Eucalyptus stuartiana F. Muell.

Apple gum.

A stocky, erect tree that becomes 30 to 40 feet high, with a trunk 1 foot in diameter, and drooping foliage. It is closely related to *Eucalyptus viminalis*. The timber is hard but, not being straight-grained, is difficult to split. It is used for fence posts and fuel.

For previous introduction see 133137.

141861. Eucalyptus tereticornis J. E. Smith.

Slaty gum.

For previous introduction see 118382.

## 141821 to 141865—Continued

141862. X EUCALYPTUS TRABUTI Vilm.

A remarkable hybrid between *Eucalyptus botryoides* Sm. and *E. rostrata* Schlecht, discovered by L. Trabut. The characters of the leaves are intermediate; the capsules could not well be more nearly intermediate. The great value of this hybrid is in its unusually rapid growth.

For previous introduction see 63581.

141863. Eucalyptus umbra R. T. Baker.

A small to moderately large tree, with thick, coarse, fibrous, persistent bark and alternate thick, shining, lanceolate to falcate-lanceolate mature leaves. The timber is inferior. In Australia this tree grows on poor saline flats and ridges in proximity to salt water.

141864. Eucalyptus viminalis Labill.

Manna gum.

A graceful Australian tree up to 300 feet high, with rough bark from which exudes the bonelike substance that gives the tree its name of manna gum. The leaves are lanceolate and falcate; the white flowers are in threes and are attractive to bees; and the fruits are flattened globose with sharp-pointed tops. The wood is used only for rough building purposes.

For previous introduction see 77612.

141865. EUCALYPTUS Sp.

141866. Vigna sinensis (Torner) Savi. Fabaceae.

Cowpea.

From Nigeria. Seeds presented by the Director of Agriculture, Department of Agriculture, Obadan. Received May 28, 1941.

Yawa.

#### 141867 to 141877.

From Canada. Trees purchased from the Manitoba Hardy Plant Nursery, Dropmore, Manitoba. Received May 21, 1941.

141867. Malus sp. Malaceae.

Adam.

141868 to 141871. MALUS SYLVESTRIS Mill.

Apple.

141868. Battleford No. 1.

141869. Blushred Calvilla Hybr. No. 2.

141870. Northern Queen  $\times$  Cranberry Pippin.

141871. Red Apple.

141872. Malus sp.

Red Siberian.

141873. Malus sp.

Sougog.

141874. Malus sylvestris Mill.

Apple.

Skinner's Hybrid No. 1-38.

141875. Malus sp.

Sylvia.

141876 and 141877. Pyrus communis L.

Common pear.

141876. Pioneer.

141877. Tait-Dropmore.

#### 141878 to 141882.

From Manchuria. Seed presented by L. Ptitsin, Harbin. Received June 3, 1941.

141878 and 141879. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

## 141878 to 141882—Continued

141878. Cultivated.

141879. Cultivated. A superior strain.

141880 and 141881. Prunus Mandshurica (Maxim.) Koehne.

141880. Cultivated; from Syaolin Station, east of Harbin.

141881. Wild: from Syaolin Station, east of Harbin.

141882. PRUNUS SIBIRICA L.

Siberian apricot.

Wild; from Lahassusu Station, west of Harbin.

#### 141883 to 141885.

From Brazil. Seed received from the Botanic Garden, Rio de Janeiro, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. Received June 4, 1941.

141883. Acacia sp. Mimosaceae.

Introduced as Cassia nigra, but the seeds are not of that genus.

141884. Cassia fastuosa Vog. Caesalpiniaceae.

141885. Barbieria pinnata (Pers.) Baill. Fabaceae.

#### 141886 and 141887.

From Manchuria. Seed presented by L. Ptitsin, Harbin. Received May 27, 1941.

141886. Prunus sp. Amygdalaceae.

Plum.

Local mixed varieties.

141887. PRUNUS GLANDULOSA Thunb.

Flowering almond.

141888. Albizzia adinocephala (J. D. Sm.) Britton & Rose. Mimosaceae.

From Cuba. Seed presented by F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos. Received June 7, 1941.

A small unarmed tree, with rather small compound leaves composed of one or two pairs of lanceolate leathery leaflets 1 or 2 inches long, and flower heads in terminal panicles about 4 inches long. Native to Costa Rica.

For previous introduction see 103026.

141889 and 141890. Coix Lacryma-Jobi var. Ma-Yuen (Rom.) Stapf. Adlay. Poaceae.

From Panama. Seeds presented by Charles L. Luedtke, United States Agricultural Attaché, American Embassy. Received June 13, 1941.

141889. Adlay wheat, No. 2.

141890. Adlay wheat, No. 3.

#### 141891 to 141896.

From England. Seeds presented by C. D. Bell, School of Agriculture, Cambridge. Received June 11, 1941.

141891. PISUM ELATIUS Bieb. Fabaceae.

Pea.

141892 to 141895. PISUM SATIVUM L.

Pea.

141892. 13/134.

**141894.** 16/134.

141893. 14/1934.

141895. 545<sup>1</sup>/38.

141896. Pisum sp.

A cultivated variety from Tibet.

Pea.

141897. Urginea maritima (L.) Baker. Liliaceae. Sea-onion.

From New York. Bulbs purchased from S. B. Pennic & Co., New York. Received June 19, 1941.

Red variety.

## 141898 to 141911. Rhododendron. Ericaceae.

From Maryland. Plants originated at the United States Plant Introduction Garden, Glenn Dale. Numbered June 20, 1941.

141898. Aphrodite. Flowers rose pink.

141899. Picador. Midseason, of moderate height, rather spreading; flowers brilliant orange red, burns in full sun.

141900. Anchorite. Late, of medium height, rather spreading; flowers 2 inches across, rose with orange undertone.

141901. Greeting. Midseason, of medium height, rather spreading, very floriferous; flowers coral rose, with edges of lobes somewhat wavy.

141902. Revery. Late, of medium height, rather spreading, mucronatum type (indica alba), but flowers very nearly circular in outline, pale rose with no blotches.

141903. Buccaneer. Midseason, of medium height, rather spreading; flowers brilliant red, but with darker blotch than Tanager; burns in full sun.

141904. Pilgrim.

141905. Joya. Late, of medium height, with mucronatum habit; flowers brilliant rose pink, large.

141906. Trilby.

141907. Tanager. Late; flowers large, fuchsine pink with darker spots.

141908. Glamour. Late, of medium height, rather spreading; flowers very brilliant rose red.

141909. Remembrance.

141910. Gaiety. Late, of medium height, rather spreading; flowers bright clear pink with a rather heavy blotch of deep rose red.

141911. Opera.

## 141912. Triticum aestivum L. Poaceae.

Common wheat.

From Australia. Seed presented by A. T. Pugsley, Assistant Plant Geneticist, University of Adelaide, Waite Agricultural Research Institute, Adelaide, South Australia. Received June 23, 1941.

 $Nabawa \times Hope.$ 

# 141913. Allium sp. Liliaceae.

Onion.

From Brazil. Bulbs presented by Erwin P. Keeler, Agricultural Attaché, American Embassy, Rio de Janeiro. Received June 23, 1941.

#### 141914 and 141915.

From Florida. Plants presented by Mrs. Clifford C. Cole, Coconut Grove. Numbered June 24, 1941.

141914. Habranthus robustus Herb. (Zephyranthes robusta (Herb.) Baker).

A variety with white flowers, flushed with pale amaranth pink (Ridgway), up to  $3\frac{1}{2}$  inches across. The leaves are 18 inches long and  $\frac{1}{2}$  inch broad.

## 141915. Cooperia pedunculata Herb. Amaryllidaceae.

Zephyrlily.

A zephyrlily, with leaves a foot or more long and about a quarter of an inch wide, and a scape with flower reaching a height of 11 inches. The flower, measuring 2½ inches across, is clear white, with the tips of the outer perianth segments touched with cream on the outer, or lower, surface. It closely resembles Zephyranthes carinata.

#### 141916 to 141975.

From Manchuria. Bulbs and seeds presented by L. Ptitsin, Harbin. Received June 18, 1941.

Unless otherwise mentioned, the material was introduced as seeds.

1/1916 to	0 141975-	Continued	ı
141710 0	1 1417/0	-communeu	

141916. Allium sativum L. Liliaceae.

Garlic.

No. 1. Bulbs.

141917. APIUM GRAVEOLENS L. Apiaceae.

Celery.

Chinese Green celery.

141918 to 141923. Beta vulgaris L. Chenopodiaceae.

Common beet.

141918. No. 1. Early, red.

Late, red. 141921. No. 1.

141919. No. 2. Early, red.

141922. No. 2. Late, red.

141920. No. 3. Early, red.

141923. No. 3. Late, red.

141924. Brassica oleracea var. Botrytis L. Brassicaceae. Cauliflower. An early variety.

141925. Brassica oleracea val. capitata L.

Cabbage.

141926 to 141928. Capsicum frutescens L. Solanaceae.

Redpepper.

Chinese, hot varieties.

141926. No. 1.

141927, No. 2.

141928, No. 3.

141929 to 141934. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

141929. No. 1. Early.

141932. No. 1. Chinese.

141930. No. 2. Early.

141933. No. 2. Chinese. 141934. No. 3. Chinese.

141931. No. 3. Early.

Muskmelon.

141935 to 141938. Cucumis melo L. 141935. No. 1. Chinese, sweet.

141937. No. 3. Chinese, sweet.

141936. No. 2. Chinese, sweet.

141938. Siberian, sweet. Cucumber.

141939 to 141952. Cucumis sativus L. Numbers 141939 to 141942 are of Chinese origin.

141939. No. 1. 141940. No. 2.

141941. No. 3.

141942. No. 4.

141943. No. 1. Russian.

141944. No. 4. A short, Russian variety.

141945. Murmansk. A small, round Russian sort.

141946. No. 2. Siberian.

141947. No. 3. Siberian.

Numbers 141948 to 141952 are of Japanese origin.

141948, No. 1.

141949. No. 2.

141950. No. 3.

141951. No. 4.

141952. No. 5.

141953. CUCURBITA MAXIMA Duchesne. Cucurbitaceae.

Squash.

No. 3. Green squash.

141916 to 141975—Continued

141954. Cucurbita moschata Duchesne.

Cushaw.

No. 2.

141955 to 141958. Cucurbita Pepo L.

Pumpkin.

141955. No. 1. A very large variety.

141957. No. 2. Chinese.

141956. No. 1. Chinese.

141958. No. 3. Chinese.

141959 and 141960. DAUCUS CAROTA L. Apiaceae. 141959. Carrot.

141960. A long, red Chinese carrot.

141961 and 141962. Lactuca sativa L. Chicoriaceae. Chinese head lettuce.

Garden lettuce.

141963. Lycoperscion esculentum Mill. Solanaceae.

A Chinese variety.

Tomato.

141964. Pastinaca sativa L. Apiaceae.

Parsnip.

A variety with large roots.

141965. Phaseolus vulgaris L. Fabaceae.

Common bean.

Chinese bush bean.

141966. PISUM SATIVUM L.

Pea.

A Chinese, garden variety.

141967. Rheum undulatum L. Polygonaceae.

Rhubarb.

A very hardy variety.

141968 to 141970. Solanum melongena I.

Eggplant.

141968. No. 1. Chinese.

141969. No. 2. Chinese.

141970. No. 3. Chinese, white.

141971 to 141974. Spinacia oleracea L. Chenopodiaceae.

Common spinach.

Nos. 141971 to 141974 are of Chinese origin.

141973. No. 3.

141971. No. 1. 141972. No. 2.

141974. No. 4.

Solanaceae.

141975. Zea mays L. Poaceae.

. 4.

10.0. Bill Mills II. I diocad.

Corn.

A very early-maturing sweet corn.

141976. Citrus sp. Rutaceae.

From the Fiji Islands. Seed collected by Otto Degener, Arnold Arboretum, Jamaica Plain, Massachusetts. Received June 24, 1941.

From Belo,  $1\frac{1}{2}$  miles from Valukarasa, Viti Leon, May 15, 1941. A native species with thick-skinned edible fruits.

#### 141977 and 141978.

From California. Seed presented by William Hertrich, Huntington Botanical Gardens, San Marino. Received in July and October, 1940. Numbered July 7, 1941.

141977. ACACIA MELANOXYLON R. Br. Mimosaceae.

Blackwood acacia.

141978. AGAPANTHUS AFRICANUS (L.) Hoffmannsegg. Liliaceae.

#### 141979 to 142011.

From the Belgian Congo. Seed presented by A. Beirnaert, Director of the Yangambi Experimental Station, Yangambi. Received June 27, 1941.

141979 to 141992. Sorghum vulgare Pers.	Poaceae.	Sorghum.
141979. No. 1.	141986. No. 31.	
141980. No. 8.	141987. No. 40.	
<b>141981.</b> No. 9.	141988. No. 41.	
<b>141982.</b> No. 12.	141989. No. 66.	
<b>141983.</b> No. 15.	141990. No. 70.	
<b>141984.</b> No. 20.	141991. No. 72.	
<b>141985.</b> No. 23.	141992. No. 85.	
141993 to 142011. Zea mays L.		Corn.
141993. No. 2430.	142003. No. 2754.	
<b>141994.</b> No. 2438.	142004. No. 2555.	
141995. No. 2500.	142005. No. 2759.	
141996. No. 2503.	142006. No. 2568.	
141997. No. 2509.	142007. No. 2570.	
141998. No. 2510.	142008. No. 2572.	
<b>141999.</b> No. 2513.	142009. No. 2547.	
<b>142000.</b> No. 2548.	142010. No. 2752.	
<b>142001.</b> No. 2750.	142011. No. 2756.	
142002. No. 2553.		

## 142012 to 142029.

From the Union of Soviet Socialist Republics. Seed presented by G. N. Shlykov, Chief of the Department of Plant Introduction, Institute of Plant Industry, Leningrad. Received June 27, 1941.

142012. AGROPYRON ELONGATUM (Host) Beauv. Poaceae.

Grass.

No. 20102. From Odessa Province.

142013. Astragalus amygdalinus Bunge. Fabaceae.

No. 12234. From South Kasakhstan.

142014 to 142016. Astragalus uliginosus L.

142014. No. 13223. From West Siberian Province.

142015. No. 18878. From Tevrigski region.

142016. No. 18879. From the Tarsk Expedition.

142017 to 142019. Festuca ovina ssp. sulcata Hack. Poaceae.

Grass.

142017. No. 12088. From Azerbaijan.

142018. No. 14050. From the central Volga region.

142019. No. 15907. From Ural Province.

142020. FESTUCA Sp.

No. 12050. From Kasakhstan.

142021. MEDICAGO COERULEA Ledeb. Fabaceae.

No. 12820. From Daghestan, Kisliar Region.

142022 and 142023. MEDICAGO HEMICYCLA Grossheim.

142022. No. 16720. From Transcaucasia, Agbulakh.

142023. No. 16651. From Armenia.

### 142012 to 142029—Continued

142024. Melilotus wolgica Poir. Fabaceae.

Sweetclover.

No. 11455. From Ural, Okhansk.

142025. Onobrychis Biebersteinii Sirjaev. Fabaceae.

No. 16560. Grown in Kursk Province; originally from Paraguay.

142026. Onobrychis oxytropoides Boiss.

No. 15415. From Armenia.

142027. Trifolium ambiguum Bieb. Fabaceae.

Clover.

No. 22021. Originally from North Caucasus, Thuntuk.

142028. VICIA SATIVA L. Fabaceae.

Common vetch.

No. 1579. Originally from Blagovestchensk, Far Eastern Republic.

142029. VICIA VARIABILIS Freyn & Sint.

No. 3176. Originally from Temipalatinsk, Kasakhstan Province. A herbaceous perennial with ascending stems, linear-lanceolate leaflets, and blue or purplish flowers in a dense raceme. Native to Armenia.

For previous introduction see 108743.

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# Plant Inventory No. 148

UNITED STATES DEPARTMENT OF AGRICULTURE Washington, D. C. January 1951



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JULY 1 TO SEPTEMBER 30, 1941 (NOS. 142030 TO 142270)

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This inventory, No. 148, lists the plant material (Nos. 142030 to 142270) received by the Division of Plant Exploration and Introduction during the period from July 1 to September 30, 1941. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Botanist.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup> Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

#### INVENTORY

142030. Centella asiatica (L.) Urban. Apiaceae.

From India. Seeds presented by the Professor of Botany, Punjab Agricultural College, Lyallpur. Received July 15, 1941.

For previous introduction see 141369.

#### 1242031 to 142037.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received July 15, 1941.

142031. Chloris capensis (Houtt.) Thell. Poaceae.

Grass.

A Koppie grass collected at the rock garden of the McGregor Museum, sometimes called *woolly fingergrass*.

142032. DIGITARIA Sp. Poaceae.

Woolly Fingergrass. From the Kimberley rock garden.

142033. Eragrostis lehmanniana var. ampla Stapf. Poaceae.

Grass.

Not as hardy as the typical species.

142034. Eragrostis superba Peyr.

Bosluis grass. A tick grass from the open grasveld.

142035. Poganarthria squarrosa (Licht.) Pilger. Poaceae.

Grass.

From the rock garden of the McGregor Museum.

142036. Sporobolus fimbriatus Nees. Poaceae.

Grass.

A tall perennial grass, densely tufted, found commonly along the banks of streams.

For previous introduction see 52223.

142037. TRICHOLAENA Sp. Poaceae.

Grass.

A rare grass collected near Kimberley.

## 142038. Tigridia sp. Iridaceae.

From Mexico. Plants presented by Christian Halbinger, "El Troquel," Mexico, D. F. Received July 23, 1941.

A variety with dark-blue flowers.

#### 142039 to 142047.

From Washington. Seeds purchased from W. J. Eyerdam, Seattle. Received July 16, 1941.

Originally collected from Thum Bay, Prince William Sound, Alaska,

142039. ASTER Sp. Asteraceae.

142040. Fritillaria camschatcensis (L.) Ker. Liliaceae.

A lilylike perennial, with 1- to 3-flowered stems 6 to 18 inches high. The 10 to 15 leaves are lanceolate, the lower ones in whorls, and the chocolate-purple flowers are about 1 inch long. Native to Siberia and Alaska.

For previous introduction see 95424.

142041. LUETKEA PECTINATA (Pursh) Kuntze. Rosaceae.

A prostrate trailing undershrub with rooting branches, native to north-western North America. The small alternate bright-green leaves are 3-lobed with each lobe 3-cleft, and the erect flowering branches, 2 to 6 inches high, bear upright racemes of small white flowers.

For previous introduction see 95443.

## **142039 to 142047**—Continued

142042. MYRICA GALE L. Myricaceae.

142043. Nephrophyllidium crista-galli (Menzies) Gilg. Gentianaceae. Deer-cabbage.

142044. Spiranthes romanzoffiana Cham. & Schlecht. Orchidaceae.

142045. Tofieldia occidentalis S. Wats. Melanthiaceae.

142046. Tofieldia sp.

142047. SWERTIA PERENNIS L. Gentianaceae.

142048. Citrus sp. Rutaceae.

From the Fiji Islands. Seeds presented by Otto Degener, Rewasa, Viti Levu. Received July 30, 1941.

A native species with fruits the size of a grapefruit.

## 142049. Ceroxylon ferrugineum André. Phoenicaceae.

From Colombia. Seeds collected by David Fairchild, Bureau of Plant Industry, United States Department of Agriculture. Received August 4, 1941.

A wax palm from north of Cali.

#### 142050 to 142057.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received July 3, 1941.

142050. Anthephora pubescens Nees. (Cenchrus pubescens Steud.) Poaceae. Grass.

For previous introduction see 51111.

142051. Anthoschmidtia bulbosa (Stapf) Peter. Poaceae.

Grass.

142052. Cymbopogon plurinodis (Stapf) Burtt-Davy. Poaceae.

Grass.

Introduced under the name "busseana," for which a place of publication has not been found.

142054. Eragrostis porosa Nees.

142053. Eragrostis sp. Poaceae.

A grass native to south Africa.

142055. Eragrostis superba Peyr.

For previous introduction see 142034.

142056. FINGERHUTHIA AFRICANA Lehm. Poaceae.

Grass.

For previous introduction see 38769.

142057. Pogonarthria squarrosa (Licht.) Pilger. Poaceae.

Crace

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For previous introduction see 142035.

# 142058 to 142061. Sorghum halepense (L.) Pers. Poaceae. Johnson grass.

From the Union of Soviet Socialist Republics. Seeds presented by the Voroshilov Selection Station, through the Soviet Ambassador, Washington, D. C. Received July 3, 1941.

142058. From Erivan.

142059. From Tashkent.

142060. From Ashkaba.

142061. From Budenovska.

For previous introduction see 139640.

142062. Medicago sativa L. Fabaceae.

Alfalfa.

From Argentina. Seeds presented by William E. Cross, Director, Estación Experimental Agrícola, Tucumán. Received July 3, 1941.

Alfalfa Inverniza.

## 142063 to 142067.

From Chile. Seeds presented by the Ministry of Agriculture, Santiago. Received July 9, 1941.

142063 and 142064. Bellota Miersii Remy. Lauraceae.

A large Chilean tree, up to 80 feet high, whose wood is highly appreciated for the manufacture of household utensils because of the great diameter that the trunk attains. It has attractive foliage and fruits, the latter when ripe being useful for feeding hogs.

For previous introduction see 54627.

142065. Maytenus boaria Molina. Selastraceae.

Mayten.

For previous introduction see 117589.

142066 and 142067. Ocotea spp. Lauraceae.

#### 142068 to 142070.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Cienfuegos. Received July 8, 1941.

142068. Anacardium occidentale L. Anacardiaceae.

Cashew.

For previous introduction see 124955.

142069. MELALEUCA GENISTIFOLIA Sm. Myrtaceae.

142070. Posoqueria latifolia (Rudge) Roem. & Schult. Rubiaceae.

A tall Brazilian shrub, up to 25 feet high, with large opposite ovate coriaceous leaves, terminal corymbs of white tubular flowers 4 inches long, and succulent edible fruits used for jellies and marmalades.

For previous introduction see 76891.

142071. Burkillanthus Malaccensis (Ridley) Swingle. Rutaceae.

From the Straits Settlements. Seeds presented by the Director of the Botanic Gardens, Singapore. Received July 7, 1941.

A tree up to 50 feet high, with somewhat leathery 1- or 2-foliolate leaves, large white flowers about 2 inches across in small axillary clusters, and large ovoid fruits about 4 inches long. Native to the Malay Peninsula.

142072 to 142088. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.

Sweetpotato.

From the Union of South Africa. Tubers presented by H. H. Dodds, Director, Experiment Station of the South African Sugar Association, Mount Edge-combe, Natal. Received July 11, 1941.

142072. Nichols No. 4. 142081. No. 6. 142073. Nichols No. 9. 142082, No. 7. 142074. Nichols No. 19. 142083, No. 8. 142075. Nichols No. 3. 142084. No. 9. 142076. No. 1. 142085. No. 10. 142077. No. 2. 142086. No. 11. 142078. No. 3. 142087. No. 12. 142088. No. 13. 142079. No. 4. 142080. No. 5.

#### 142089 to 142102.

From the Belgian Congo. Seeds presented by A. Biernaert, Director, Experimental Station, Yangambi. Received July 14, 1941.

142089 to 142096. Sorghum vulgare Pres. Poaceae.

142089, No. 7. 142093. No. 42. 142090. No. 10. 142094. No. 46. 142091. No. 14. 142095. No. 81. 142092. No. 21. 142096, No. 82.

142097 to 142102. ZEA MAYS L. Poaceae.

Corn.

Sorghum.

142097. No. 2422. 142100. No. 2728. 142098. No. 2428. 142101. No. 2758. 142099. No. 2432. 142102. No. 2761.

#### 142103 to 142130.

From the Union of South Africa. Seeds obtained from the National Botanic Gardens, Kirstenbosch, Capetown, through Mrs. Jerome Coombs, Scarsdale, New York. Received July 17, 1941.

142103. Agapanthus sp. Liliaceae.

No. 3. Introduced under the name "orientalis," for which a place of publication has not been found.

142104. Argeta petrensis N. E. Brown. Aizoaceae.

No. 405. A very dwarf stemless perennial, which forms clumps of buttonlike growths, each one of which consists of two adpressed succulent leaves, surrounded and partly covered by the scarious vestiges of former leaves. Between them push up the solitary rosy asterlike flowers, nearly 1 inch in diameter. Native to South Africa.

For previous introduction see 78220.

142105. Argyroderma blandum L. Bolus. Aizoaceae.

142106. Argyroderma testiculare (Soland.) N. E. Brown.

No. 410.

142107. Argyroderma sp.

No. 409.

142108. Aristea thyrsiflora (Delaroche) N. E. Brown. Iridaceae.

142109. Babiana atrocyanea Eckl. Iridaceae.

No. 8.

142110. Cheiridopsis caroli-schmidth (Dinter & Berger) N. E. Brown. Aizoaceae.

No. 418.

142111. Cyanella capensis L. Amaryllidaceae.

No. 13. This plant, known in South Africa as Raap unitje or raaptol, has lilac flowers with yellow anthers; these flowers appear in summer when the leaves are mostly withered. The corms form an article of food for the natives.

For previous introduction see 64114.

142112. Freesia sp. Iridaceae.

No. 17. Introduced under the name of "lactea," for which a place of publication has not been found.

142113. Geissorhiza splendidissima Diels. Iridaceae.

No. 19.

For previous introduction see 132679.

142114. GIBBAEUM PERVIRIDE (Haw.) N. E. Brown. Aizoaceae.

No. 459.

142115. GIBBAEUM VELUTINUM (L. Bolus) Schwantes.

No. 463.

142116. Gladiolus odoratus L. Bolus. Iridaceae.

No. 22.

For previous introduction see 105292.

142117. GLADIOLUS WATERMEYERI L. Bolus.

No. 25. A species with 3 or 4 leaves about 10 inches long, conspicuously 2-nerved, and very fragrant flowers  $1\frac{1}{2}$  inches long. The upper segments are usually greenish flushed with pinkish buff, with conspicuous purple veins.

For previous introduction see 119286.

142118. GLOTTIPHYLLUM LINGUIFORME (L.) N. E. Brown. Aizoaceae.

No. 464.

142119. Lapeyrousia Jacquinii N. E. Brown. Iridaceae.

No. 49.

142120. LITHOPS TURBINIFORMIS (Haw.) N. E. Brown. Aizoaceae.

No. 473.

142121. Ornithogalum lacteum Jacq. Liliaceae.

Star-of-Bethlehem.

No. 60.

142122. Ornithogalum saundersiae Baker.

Star-of-Bethlehem.

No. 61.

142123. Romulea bulbocodoides (Delar.) Eckl. Iridaceae.

No. 64.

142124. Senecio sp. Asteraceae.

No. 590.

142125. Sparaxis grandiflora (Delaroche) Ker. Iridaceae.

Wandflower.

142126. Sparaxis.

No. 66. Mixed hybrids.

No. 65. Mixed varieties.

142127. STREPTANTHERA CUPREA Sweet. Iridaceae.

No. 68.

142128. Watsonia angusta Ker. Iridaceae.

No. 77.

142129. Watsonia Beatricis Mathews & L. Bolus.

No. 80. Mixed colors.

142130. Watsonia iridifolia var. o'brieni N. E. Brown.

No. 78.

#### 142131 to 142161.

From the Union of South Africa. Seeds presented by the University of the Witwatersrand, Johannesburg, Transvaal. Received July 24, 1941.

142131. Alloteropsis semialata (R. Br.) Hitchc. Poacae. Cockatoo grass.

Plants 2 to 4 feet high, indigenous to Frankenwald and other parts of the Transvaal Highveld. It seems to be increased through burning.

For previous introduction see 57268.

## 142131 to 142161—Continued

142132. Andropogon amplectens Nees. Poaceae.

Grass.

About 3 feet high, indigenous to Frankenwald. It is grazed by cattle, but is not always very palatable.

142133. Brachiaria humidicola (Rendle) Schweick. Poaceae. Grass.

A prostrate plant that grows well at Frankenwald under cultivation; it can be used for grazing as well as for sports grounds.

142134. Danthonia sp. Poaceae.

Grass.

A plant about 2 feet high that grows well at Frankenwald under cultivation; leaves thin and wiry.

142135. DIGITARIA Sp. Poaceae.

Grass.

An erect, soft and very leafy tufted grass, good for hay. Originally from the Zomba Plateau, east Africa.

142136 to 142141. ECHINOCHLOA PYRAMIDALIS (Lam.) Hitchc. Poaceae. Grass.

142136. A rather coarse, tall grass about 6 feet high that spreads rapidly from suckers. Originally from Lake Shirwa, east Africa.

142137. Rust der Winter. A grass about 5 feet high, thriving in moist soil.

142138. A plant 6 feet high, appearing to be the same variety as that from Lake Shirwa. Originally from Machatos Reserve, east Africa.

142139. A semiprostrate grass that reaches a height of about 6 feet; the overlying stems root at the nodes and send up new shoots, forming new plants; thrives very well under moist conditions. Originally from Kavirondo Gulf, east Africa.

142140. Antelope Grass. A rather stalky grass about 6 feet high.

142141. A very leafy, bulky, hay grass, about 4½ feet high, that spreads rapidly and stands up fairly well to frost under local conditions. Received as *Setaria* sp. Originally from Lake Shirwa, east Africa.

142142. Elyonrus argenteus Nees. Poaceae.

Grass.

A grass from 1 to 2 feet high, indigenous to Frankenwald, grazed early in spring but not later in the season, owing to a sour taste.

142143. HYPARRHENIA HIRTA (L.) Stapf. Poaceae.

Grass.

A perennial grass about 3 feet high, native to tropical and northern Africa. 142144. Monocymbium ceresiiforme (Nees.) Stapf. Poaceae. Grass.

False Oats grass. A grass about  $1\frac{1}{2}$  feet high, with very soft leaves much eaten by cattle; it usually occurs in semimoist places and is indigenous to Frankenwald.

For previous introduction see 58725.

142145. Panicum coloratum L. Poaceae.

Grass.

A very good hay grass, very soft and leafy, about  $3\frac{1}{2}$  feet high. Originally from the Kavirondo Gulf, east Africa.

For previous introduction see 135130.

142146 to 142148. Panicum maximum Jacq.

Guinea grass.

142146. Coast strain. A good hay grass about 4 feet high.

142147. A' very leafy, bulky grass about 5 to 6 feet high, with long, broad leaves; could be used for both hay and ensilage. Originally from N'Jakwa, east Africa.

142148. A very good grass for hay and ensilage; quick-growing, soft and leafy, 6 to 7 feet high. Originally from Lilongwe, east Africa.

142149. Panicum natalense Hochst.

Grass.

Plants 2 to 3 feet high, with rather wiry leaves; indigenous to Frankenwald and fairly common on the Highveld of the Transvaal.

## 142131 to 142161—Continued

142150 to 142152. Pennisetum purpureum Schumach.

Napier grass.

142150. A grass about 6 feet high, good for ensilage.

142151. A bulky plant about 7 feet high, good for ensilage.

142152. Originally from Jinga, east Africa.

For previous introduction see 133434.

142153. Setaria sphacelata (Schum.) Stapf & Hubbard. Poaceae. Grass.

A very vigorous grass about 5 feet high; the plants are leafy and will make good hay. Originally from the Zimbabwe Ruins, Southern Rhodesia.

142154. SETARIA Sp.

About 4 feet high; fairly frost-resistant under our conditions. Originally from the Sharangani Hills, east Africa.

142155. SETARIA Sp.

About 4 to 5 feet high, with soft, very broad and bulky leaves.

142156. Setaria sp.

A rather stalky, very tall grass, reaching a height of about 7 feet. Introduced from Meru Reserve, east Africa.

142157. SETARIA Sp.

A very good hay and ensilage grass, reaching a height of 5 to 6 feet, fairly resistant to frost under our conditions. Under more suitable conditions it grows much taller and the plants are very leafy. Originally from Kazungula, Northern Rhodesia.

142158. SETARIA Sp.

A good hay grass about 4 feet high. Originally from Mount Milanje, east Africa.

142159. SETARIA Sp.

A good hay grass, very leafy and about 4 feet high. Originally from the Zomba Plateau, east Africa.

142160. Sporobolus fimbriatus var. latifolius Stent. Poaceae.

A fairly good grazing grass, about 1½ feet high; indigenous to Frankenwald. For previous introduction see 142036.

142161. Trachypogon sp. Poaceae.

Grass.

Grass.

A grass about 3 to 4 feet high, indigenous to Frankenwald, and an important grazing grass on the Highveld of the Transvaal.

#### 142162 to 142166. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by the Instituto Agronómico, Campinas, São Paulo. Received July 30, 1941.

142162. RU 4.

142165. Stoneville.

142163. U 4.

142166. Stoneville, spot-resistant.

142164. U 4 (b).

142167. Litchi chinensis Sonner. (Nephelium litchi Cambess.) Sapindaceae. Lychee.

From Florida. Seeds presented by T. Ralph Robinson, Bayacre, Terra Ceia. Received July 31, 1941.

Shan Chih.

142168. Rubus Macrocarpus Benth. Rosaceae.

Colombian blackberry.

From Colombia. Seeds presented by Harvey Berman, Bogotá. Received July 30, 1941.

For previous introduction see 114066.

## 142169 to 142194. Ulmus Pumila L. Ulmaceae. Chinese elm.

From China. Seeds collected by Peter Liu, Peiping. Received August 5, 1941.

142169. No. 387. From the Hall of Abstinence, Temple of Heaven.

142170. No. 388. From the Temple of Heaven.

142171. No. 389. Obtained in the Bell Tower of the Hall of Abstinence, Temple of Heaven.

142172. No. 390. From the Hall of Abstinence, Temple of Heaven.

Numbers 142173 to 142180 were collected in the Hsueh Chu Yuan Garden, Summer Palace.

142173. No. 391.

142174. No. 392.

142175. No. 393.

142176. No. 394.

142177. No. 395.

142178. No. 396.

142179. No. 397.

142180. No. 398.

142181. No. 399. From the Summer Palace grounds.

142182. No. 400. From the Summer Palace grounds.

142183. No. 401. From the Summer Palace grounds.

142184. No. 402. From Jade Fountain, west of Peiping.

142185. No. 403. From Jade Fountain, west of Peiping.

142186. No. 404. From the Temple of Heavenly King, Winter Palace.

142187. No. 405. From the Temple of Heavenly King, Winter Palace.

142188. No. 406. From near Paradise Temple, Winter Palace.

142189. No. 407. From near the Altar of Agriculture, Peiping.

142190. No. 408. From near the Altar of Agriculture, Peiping.

142191. No. 409. From Confucius Temple, Peiping.

142192. No. 410. From the Hall of Classics, Peiping.

142193. No. 411. From the Hall of Classics, Peiping.

142194. No. 412. From the Paradise Temple, Winter Palace.

## 142195. CINCHONA OFFICINALIS L. Rubiaceae.

From Brazil. Seeds presented by Dr. Theodureto de Camargo, Director of the State Agricultural Institute, Campinas, São Paulo. Received August 6, 1941.

Var. Josephiana.

## 142196 to 142202.

From Argentina. Seeds presented by Antonio E. Marino, Institute of Experimental Investigations, Department of Agronomy, Santa Fé. Received August 2, 1941.

142196 to 142200. Bromus catharticus Vahl. Poaceae.

Grass.

142196. GB-1.

142199. NT-2.

142197. LF-1.

142200. IR-1.

142198. HM-1.

142201. Chloris distichophylla Lag. Poaceae.

Grass.

For previous introduction see 35060.

142202. Leptochloa chloridiformis (Hack.) Parodi. Poaceae.

Grass.

# 142203 and 142204. Prunus subhirtella Miquel. Amygdalaceae. Higan cherry.

From Massachusetts. Scions presented by the Arnold Arboretum, Jamaica Plain. Received August 7, 1941.

142203. Yae-shidare-higan. A. A. No. 233-39 (Pl. Holland, 1939).

142204. A. A. No. 3674 (Pl. Bot. Gard. Tokyo).

#### 142205 to 142208.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered August 9, 1941.

142205. Agave utahensis Engelm. Amaryllidaceae.

I. P. 9539. From Deadman Canyon, Clark County, Nevada. A cespitose trunkless agave, with thick, stiff, erect-spreading, gray leaves 6 to 12 inches long, having a slender terminal spine and toothed margins, an inflorescence 5 to 15 feet long, and small cup-shaped flowers. Native to the Grand Canyon region.

142206. Anemopsis californica (Nutt.) Hook. Saururaceae.

I. P. 9591. From near Moapa, Clark County, Nevada. A stoloniferous, erect, aquatic herb, with long-petioled oblong-obovate cordate basal leaves, broad clasping cauline leaves, and minute crowded flowers forming a conical spadix with a whorl of whitish petialoid bracts below it, giving the appearance of an anemone flower. The pungent, aromatic, astringent rootstalks are believed by the Indians of the Southwest to have medicinal virtues.

142207. Yucca angustissima Engelm. Liliaceae.

I. P. 11548. From Panaca, Lincoln County, Nevada. A stemless yucca with narrow, linear leaves 8 to 16 inches long. The pure-white bell-shaped flowers are in a panicle 3 to 5 feet high. Native to dry mesas and hillsides up to 7,500 feet altitude in western Arizona, southern Utah, and southern Nevada.

142208. Rebutia minuscula Schum. Cactaceae.

Plants presented by Claude Hope.

## 142209. PITCAIRNIA Sp. Bromeliaceae.

From Washington. Seeds presented by Harry Stinson, Seattle. Received September 29, 1939. Numbered August 9, 1941.

#### 142210 and 142211.

From Nicaragua. Seeds presented by John Ashton, Agricultural and Mechanical College, College Station, Texas. Received August 6, 1941.

142210. Attalea sp. Phoenicaceae.

142211. Melinis minutiflora Beauv. Poaceae.

Molasses grass.

For previous introduction see 138982.

# 142212. Cupressus Benthami Endl. Pinaceae. Bentham cypress.

From Guatemala. Seeds presented by J. R. Johnston, Chimaltenango. Received August 11, 1941.

A cypress of elegant habit, often up to 90 feet high, with regularly pinnate flattened branchlets. Native to southern Mexico and Central America at altitudes of 4,000 to 10,000 feet.

For previous introduction see 114036.

## 142213 to 142218.

From South America. Seeds collected by David Fairchild, Coconut Grove, Florida. Received July 26, 1941.

142213. Annona squamosa. Annonaceae.

Sugar-apple.

No. 1025. From the market in Cali, Colombia, July 10, 1941. Fruits firmer and of more uniform shape than those in Florida.

## 142213 to 142218—Continued

142214. CEROXYLON FERRUGINEUM André. Phoenicaceae.

No. 1023. From Quindio River above Salento, Colombia, July 11, 1941.

142215. CYCLANTHERA PEDATA (L.) Schrad. Cucurbitaceae.

No. 1026. From near Boguia, Colombia, July 10, 1941.

142216. LUCUMA sp. Sapotaceae.

No. 1019. From Trapiche Island, Republic of Panama, July 7, 1941.

142217. Martinezia sp. Phoenicaceae.

No. 1024. Chascaral or Palma Oram. From Bugatla Grande city square, Colombia, July 11, 1941. A very slender palm with leaves in a terminal cluster; fruits red, showy.

142218. Scheelea butyracea (Mutis) Wendl. Phoenicaceae.

No. 1028. Palma Real. From Espinal, Colombia, July 12, 1941. A stately pinnate-leaved palm with an immense crown.

142219. Prunus. Amygdalaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered August 19, 1941.

Selection from Prunus insititia, P. I. 85963.

142220. Amygdalus persica L. Amygdalaceae.

Peach.

From New Zealand. Trees presented by A. G. Sainsbury, Otahuhu, near Auckland. Received August 22, 1941.

Victory peach.

142221 and 142222. Triticum Aestivum L. Poaceae.

Common wheat.

From Australia. Seeds presented by the Department of Agriculture, Melbourne, Victoria. Received August 22, 1941.

142221. Pindar.

142222. Quadrat.

142223. Babiana stricta var. sulphurea (Jacq.) Baker. Iridaceae.

From California. Bulbs presented by the H. A. Hyde Co., Watsonville. Received October 30, 1937. Numbered August 25, 1941.

For previous introduction see 132678.

#### 142224 to 142230.

From Brazil. Presented by the Instituto Agronómico, Belém, Pará. Received August 25, 1941.

142224 to 142228. Hevea brasiliensis (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

Budsticks of the following:

142224. F-5475.

142227. F-315.

142225. F-170.

142228. B-14.

142226. F-6395.

For previous introduction see 139563.

142229. HEVEA SPRUCEANA (Benth.) Muell. Arg.

Seeds.

For previous introduction see 47530.

142230. HEVEA Sp.

Seeds.

## 142231 to 142233.

From Chile. Seeds presented by the Jardín Botanico, Concepción, through the New York Botanic Garden, New York, N. Y. Received August 21, 1941.

142231. Abutilon vitifolium Presl. Malvaceae.

Huella. A beautiful shrub with large bell-shaped flowers, lavender blue, or sometimes white. The leaves, cordate in general outline, are usually 3- to 5-lobed. Native to Chile.

142232. Quillaja soponaria Molina. Rosaceae.

Quillay.

A large handsome evergeen tree, the bark of which contains saponin. The shining-green ovate leaves are 1 to 2 inches long, and the small white flowers are solitary or in small clusters. Native to Chile.

142233. Relbunium hypocarpium (L.) Hemsi, Rubiaceae.

Relbun. A creeper with roots that contain alizarine and are used for dyeing red.

142234. Pyrus sp. Malaceae.

Pear.

From Delaware. Scions presented by William S. Mitchell, Wilmington. Received September 9, 1941.

142235 and 142236. Amygdalus persica L. Amygdalaceae. Peach.

From Canada. Scions presented by Dr. W. H. Upshall, Horticultural Experiment Station, Vineland Station, Ontario. Received September 11, 1941.

142235. Vee Freeze.

142236. Vanguard.

# 142237 to 142240.

From Brazil. Budsticks and seeds presented by the Instituto Agronómico do Norte, Belém, Pará. Received September 16, 1941.

142237. Hevea sp. Euphorbiaceae.

F 176. Budsticks.

142238. HEVEA SD.

F 211. Budsticks.

142239. HEVEA Sp.

F 409. Budsticks.

142240. HEVEA BENTHAMIANA Muell. Arg.

No. 4538. Seeds.

#### 142241. Boehmeria Macrophylla D. Don. Urticaceae.

From China. Seeds collected by the Fan Memorial Expedition to Yunnan, and presented by the Arnold Arboretum, Jamaica Plain, Massachusetts. Numbered August 9, 1941.

No. 1423.

For previous introduction see 61597.

142242 to 142247. Hevea Brasilienis (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Costa Rica. Plants presented by the Goodyear Rubber Plantation, San José. Received September 19, 1941.

142242. GF-7. B 32.

142245. GF-45. F 1620.

142243. GF-23. F 409.

142246. GF-48. F 211.

142244, GF-41, F 374.

142247, GF-49, F 1645.

For previous introduction see 142228.

#### 142248 to 142252.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received September 10, 1941.

142248. CLEMATIS BRACHIATA Thunb. Ranunculaceae.

Introduced under the varietal name "Burkei," for which a place of publication has not been found.

142249. Eragrostis brizantha Nees. Poaceae.

Grass.

An annual grass, native to sandy foothills in South Africa, with numerous stems and slender, flat, rigid leaves 1 to 2 inches long.

For previous introduction see 106086.

142250. Eragrostis superba Peyr.

Grass.

For previous introduction see 142055.

142251. Hyparrhenia hirta (L.) Stapf. Poaceae.

Grass.

For previous introduction see 142143.

142252. TRICHOLAENA REPENS (Willd.) Hitchc. Poaceae.

Natal grass.

For previous introduction see 132813.

142253. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by J. B. Hutchinson, Trinidad. Received September 22, 1941.

C.B. 1429. Triumph UA 2-1-G. C. 136  $\times$  Gossypium aridum W 2-1.

142254. Ceroxylon andicola Humb. & Bonpl. Phoenicaceae.

From Colombia. Seeds collected by Dr. David Fairchild, Coconut Grove, Florida. Received September 22, 1941.

For previous introduction see 112100.

142255 to 142259. Paspalum dilatatum Poir.

Poaceae.

Dallis grass.

From Uruguay. Seeds presented by Dr. Bernardo Rosengurtt, Montevideo. Received September 19, 1941.

142255. Monzón-Heber 1.

142258. Monzón-Heber 254.

142256. Monzón-Heber 1.

142259. Monzón-Heber 456.

142257. Monzón-Heber 454.

For previous introduction see 136839.

142260. Quercus acutissima Carruthers (Q. serrata Sieb. & Zucc.). Fagaceae. Bristletooth oak.

From Japan. Seeds purchased from the Yamamoto Seed House, Yamamoto, Hyogoken. Received February 24, 1932. Numbered in 1941.

An oak with attractive bright-green, sharply serrate leaves.

For previous introduction see 120652.

#### 142261 to 142265.

From Alaska. Seeds presented by Rev. M. L. Wanner, Valdez, through J. J. Hamilton, Washington, D. C. Received September 24, 1941.

142261. VACCINIUM sp. Vacciniaceae.

Blueberry.

Medium-sized bush.

142262. VACCINIUM Sp.

Common type.

142263. VACCINIUM Sp.

Fruits dusty blue, large.

## **142261 to 142265**—Continued

142264. VACCINIUM Sp.

Bush medium-sized.

142265. VACCINIUM Sp.

Fruits large.

## 142266. Vaccinium sp. Vacciniaceae.

Blueberry.

From Massachusetts. Seeds presented by W. P. Kaparakis, Osterville, through J. J. Hamilton, Washington, D. C. Received September 24, 1941.

## 142267 and 142268. Prunus. Amygdalaceae.

From California. Tree growing at the United States Plant Introduction Garden, Chico. Numbered September 30, 1941.

142267. Selection (O. R. C. Tree 60) from P. I. 78518.

142268, Selection (J. R. 3. Tree 97) from P. I. 78518.

## 142269 and 142270.

From Nebraska. Seeds presented by G. R. Viehmeyer, Stapleton. Received February 27, 1941. Numbered September 30, 1941.

142269. Penstemon albidus Nutt. Scrophulariaceae.

A drought-resistant perennial bearing white flowers with dark markings in the throat.

142270. PENSTEMON GLABER Pursh.

A herbaceous perennial, 1 to 3 feet high, with showy blue flowers 1 inch long in panicles. Native to the Rocky Mountains.

For previous introduction see 123891.

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Tofieldia, sp., 142046.
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# Plant Inventory No. 149

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. February 1951



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PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EX-PLORATION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, 1 OCTOBER 1 TO DECEMBER 31, 1941 (Nos. 142271 to 143681)

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This inventory, No. 149, lists the plant material (Nos. 142271 to 143681) received by the Division of Plant Exploration and Introduction during the period from October 1 to December 31, 1941. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

PAUL G. RUSSELL,

Botanist.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

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#### INVENTORY

142271 and 142272. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

From Hawaii. Seeds presented by the Hawaiian Sugar Planters' Association, Honolulu. Received October 1, 1941.

142271. No. 309. Small wild tomato.

**142272.** No. 308. Local plum tomato.

#### 142273 to 142276.

From the United States. Seeds collected by Rogers McVaugh, Bureau of Plant Industry, United States Department of Agriculture. Received October 10, 1941.

142273. Amelanchier sp. Malaceae.

No. 5966. From Wilson's Ranch, Clark County, Nevada, July 18, 1941.

142274. Amelanchier sp.

No. 6409. From north of Wells, Elks County, Nevada, August 18, 1941.

142275. AMELANCHIER Sp.

No. 6429. From east of Salt Lake City, Utah, August 19, 1941.

142276. Malus fusca (Raf.) C. Schneid. Malaceae.

Oregon crab.

No. 6353. From east of Long Beach, Washington, August 12, 1941. A shrub or small tree, sometimes 30 to 40 feet tall, with ovate-lanceolate, sharply serrate leaves. The white flowers, 1 inch in diameter, are borne on slender pubescent pedicels and appear when the leaves are nearly or quite full grown. The fruit is oblong, ¾ inch or less long, and yellowish or greenish in color. It is native from northern California to Alaska.

#### 142277 to 142292.

From the Union of South Africa. Seeds presented by General Jan Smuts, Pretoria, Transvaal. Received October 3, 1941.

142277. Cynodon sp. Poaceae.

Grass.

I. Star grass, Kozinga Channel strain. A good hay and pasture grass; does well as a soil binder.

142278. Cynodon sp.

II. Kivu River strain. Good for lawns and grazing.

142279. Cynodon sp.

III. Rietondale strain. Known as "kweek gras" (self-planting by runners).

142280. Cynodon sp.

IV. Star grass, Mount Moroto strain. A good pasture grass.

142281. Cynodon sp.

V. Lake Shirwa strain. In Nyasaland. Good for grazing.

142282. Digitaria sp. Poaceae.

Grass.

XV. Zomba Plateau strain. Nyasaland. Good for pasture and hay.

142283. DIGITARIA Sp.

XVI. Thomson's Falls strain. A fingergrass from east Africa; does well with heavy rainfall, and makes good sheep pasture.

142284. Panicum coloratum L. Poaceae.

Grass.

XIV. Buffalo grass. From the Great Makarikari Lake region. A very good hay grass, very soft and leafy, about 3½ feet high. Originally from the Kavirondo Gulf, eastern Africa.

For previous introduction see 142145.

142285 to 142287. Panicum maximum Jacq. Poaceae.

Guinea grass.

142285. XII. From northern Transvaal. Very good in ranching areas.

142286. XIII. From the South African coast area. Good hay and pasture grass.

142287. X. Collected at Lake Tanganyika by General Smuts in 1929. A giant buffalo grass, good for hay and ensilage.

142288. Urochloa Trichopus (Hochst.) Stapf. Poaceae.

Grass.

VIII. Rietondale strain. White buffalo grass. A good hay and pasture grass; very good in ranching areas.

142289. Panicum sp. Poaceae.

Grass.

XI. Kavirondo Gulf strain. Lake Victoria region. Very fine buffalo grass.

142290. PANICUM sp.

IX.  $Lodwa\ strain$ . From Turkana Desert, East Africa. A good hay and grazing grass.

142291 and 142292. PENNISETUM CILIARE (L.) Link (*P. cenchroides* Rich.). Poaceae. Grass.

A perennial grass, with ascending stems up to 2 feet long. Native to South Africa.

142291. VI. Lysamas strain. Collected by General Smuts in the Turkana Desert in 1937. A good grass for dry areas.

142292. VII. Blue buffalo grass. Collected on the Equator. A good hay and grazing grass; will do well in dry areas.

For previous introduction see 139965.

142293. LEUCOTHOE POPULIFOLIA (Lam.) Dipp. Ericaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 15, 1941.

142294. QUERCUS ACUTISSIMA Carruthers (Q. serrata Sieb. and Zucc.). Fagaceae. Oak.

From Maryland. Trees growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 15, 1941.

142295 and 142296.

From Cuba. Seeds presented by Atkins Institution of the Arnold Arboretum, Cienfuegos. Received October 8, 1941.

142295. Albizzia Palcata (L.) Backer (A. moluccana Miquel). Mimosaceae.

A rapid-growing tropical Asiatic tree, with large feathery leaves and small globular flower heads. It is used for shade in coffee plantations.

For previous introduction see 123146.

142296. PITHECELLOBIUM POLYCEPHALUM Benth. Mimosaceae.

142297. Aleurities fordii Hemsl. Euphorbiaceae. Tung-oil tree.

From Brazil. Scions presented by the Secretaria da Agricultura, Industria e Commercio, Instituto Agronómico de São Paulo, Campinas. Received October 10, 1941.

From tree No. 96, Tatui Experimental Station.

For previous introduction see 105588.

#### 142298 to 142308.

From Costa Rica. Plants collected by M. H. Langford, San José. Received October 21, 1941.

142299. HEVEA Sp.

142305. Hevea sp.

G. F-60.

G. F-71.

142300. Hevea sp. 142306. Hevea sp.

G. F-65. G. F-74.

142301. Hevea sp. 142307. Hevea sp.

G. F-67. G. F-75.

142302. Hevea sp. 142308. Hevea sp.

G. F-68. G. F-76.

**142303.** HEVEA sp. G. F-69.

142298. Hevea sp. Euphorbiaceae. 142304. Hevea sp.

G. F-45.

## 142309 to 142311.

From Australia. Seeds collected by C. T. White, Government Botanist, Botanic Gardens, Brisbane, Queensland. Received October 16, 1941.

142309. Alysicarpus vaginalis (L.) DC. Fabaceae.

From S. E. Stephens, Cairns. An annual legume from 3 to 6 feet high. Under favorable conditions it may be cut 2 or 3 times a season.

For previous introduction see 139972.

142310. Alysicarpus vaginalis var. Nummularifolius (L.) Baker.

From the Animal Health Station, Oonoonba. A low, creeping, annual legume, which forms a mat of stems and foliage not more than half an inch thick. It may prove a good legume to mix with lawn grass.

For previous introduction see 98057.

142311. Alysicarpus sp.

From the Animal Health Station, Oonoonba.

# 142312. Hevea sp. Euphorbiaceae.

From Liberia. Seeds presented by the Firestone Plantation, Monrovia. Received October 23, 1941.

# 142313. MAGNOLIA ACUMINATA L. Magnoliaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered October 27, 1941.

A large shrub or small round-headed tree with leaves 6 to 10 inches long, elliptic to ovate or obovate. The canary-yellow flowers appear in early spring with the leaves, and usually are terminal or axillary on the upper parts of the stems. The red fruits are attractive in late summer.

Seeds originally collected in November 1940 by the Department of Botany, University of Kentucky, Lexington.

# 142314. IPOMOEA LEPTOPHYLLA Torr. Convolvulaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Numbered October 27, 1941.

This is probably the hardiest tuberous-rooted ipomoea. The stems are herbaceous, much branched, reaching a height of 2 feet with an equal spread. The leaves are linear-oblong, about  $2\frac{1}{2}$  inches across, and the large, pinkish-purple flowers remain open until noon. These are usually borne in large quantities. The tubers reach an immense size in age. Good growth and flowering occur under conditions that permit few but desert plants to survive. Native to the western United States.

Seeds originally collected by G. R. Viehmeyer, Stapleton, Nebr.

## 142315 to 142319. SACCHARUM. Poaceae.

Sugarcane

From Colombia. Seeds presented by Estación Agrícola Experimental, Palmira. Received October 27, 1941.

142315. Común × E.P.C. 17-72.

142316.  $Común \times E.P.C.$  47-23.

142317. C.P.  $36-158 \times E.P.C.$  75-61.

142318. E.P.C.  $14-760 \times C.P.$  27-108.

**142319.** P.O.J.  $27-25 \times C.P. 27-108$ .

# 142320 to 142331. Juglans Regia L. Juglandaceae. Persian walnut.

From California. Trees growing at the United States Plant Introduction Garden Chico. Numbered October 31, 1941.

142320. Selection (D-36-24) from P.I. 125196.

142321. Selection (D-36-25) from P.I. 125196.

142322. Selection (D-36-26) from P.I. 125196.

142323. Selection (D-36-27) from P.I. 125196.

142324. Selection (D-36-28) from P.I. 125196.

142325. Selection (D-36-29) from P.I. 125197.

142326. Selection (D-36-30) from P.I. 125197.

142327. Selection (D-36-31) from P.I. 125197.

142328. Selection (D-37-2) from P.I. 125197.

142329. Selection (D-37-3) from P.I. 125198.

142330. Selection (D-37-4) from P.I. 125198.

142331. Selection (D-37-5) from P.I. 125199.

#### 142332 to 142340. Saccharum. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira. Received November 1, 1941.

142332.  $Común \times EPC 16-74$ .

142333.  $Común \times D$  74.

142334. EPC 47-18  $\times$  33-29.

142335.  $Común \times EPC 59-81$ .

142336. EPC 19-09  $\times$  POJ 28-78.

142337.  $CP 36-158 \times EPC 14-745$ .

142338.  $CP 36-158 \times POJ 28-78$ .

142339.  $CP 36-158 \times P 33-29$ .

142340.  $CP 36-158 \times EPC 77-02$ .

# 142341. Urginea Maritima (L.) Baker. Liliaceae.

Sea-onion.

From California. Seeds presented by Loftus H. Thackaberry, South Pasadena Received November 3, 1941.

Red variety.

For previous introduction see 141897.

## 142342 and 142343. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by Dr. Julius Matz, Canal Zone Experimental Gardens, Pedro Miguel (Summit). Received November 3, 1941.

142342 P.O.J. 2878  $\times$  N.H. 1.

142343. N.C.  $30 \times S$ . spontaneum Kloet.

## 142344 to 142349. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by Theodureto de Camargo, Instituto Agronómico do Estado de São Paulo, Campinas. Received November 4, 1941.

142344. 052.

142345. U 4.

142346. Early Maturity U 4.

142347. U 4/4.

142348. T 19. Punjab Golden.

142349. 955 R.

142350. Centella asiatica (L.) Urban (*Hydrocotyle asiatica* L.). Apiaceae.

From Ceylon. Seeds presented by the Department of Agriculture, Peradeniya. Received October 31, 1941.

For previous introduction see 142030.

# 142351. HETEROPTERIS SYRINGAEFOLIA Griseb. Malpighiaceae.

From Louisiana. Seeds presented by E. A. McIlhenny, Avery Island. Received November 4, 1941.

A rather hardy, erect, evergreen shrub, native to southern Brazil, with opposite ovate-obtuse leaves, 1 to 1½ inches long, and clusters of showy, small yellow flowers. It flowers throughout the summer and often through autumn. The plant bears a resemblance to *Thryallis*, to which it is related, but differs strikingly in having fruits much larger and red-winged. It has withstood temperatures down to 10° F. in the Gulf region.

# 142352 to 142355. Saccharum. Poaceae.

Sugarcane.

From Australia. Cuttings presented by the Bureau of Sugar Experiment Stations, Brisbane, Queensland. Received November 4, 1941.

142352. Q 10.

142354. Q 25.

142353. Q 20.

142355. Comus.

# 142356 and 142357. SACCHARUM. Poaceae.

Sugarcane.

From Canal Zone. Seeds obtained from the Experiment Gardens, Summit. Received November 7, 1941.

142356. Casa Blanca  $\times$  N.H. 1.

142357. POJ 2364  $\times$  N.H. 1.

# 142358 to 142360.

From Guatemala. Collected by Dr. David Fairchild, Coconut Grove, Florida. Received November 10, 1941.

142358. Bambusa vulgaris var. vittata A. Riviere. Poaceae. Bamboo.

A handsome yellow-striped form of the well-known *B. vulgaris*, grown throughout central Florida. It is more tender than *B. vulgaris* and should be grown in rather dry soil to develop the highest coloration.

For previous introduction see 70740.

142359. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.

Sweetpotato.

No. 1135. From the market, Antigua, October 22, 1941. This is a variety that has purple-red flesh throughout. When baked, the distinctive flavor is hard to describe. In Antigua it is not preferred to the white-fleshed varieties and is rarely seen on the market.

142360. Persea schiedeana Nees. Lauraceae.

Coyo.

No. 1144. This plant, known as Yas in Costa Rica and Coyo in Guatemala, occurs from southern Mexico to Panama. In Costa Rica it is found abundantly on the slopes of Irazu at altitudes between 4,000 and 6,000 feet. The fruits greatly resemble avocados. The tree is of slow growth and probably does not bear until it is 8 or 10 years old.

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For previous introduction see 93584.

## 142361 to 142370. SACCHARUM. Poaceae.

Sugarcane.

milita :

From Africa. Cuttings presented by the Experiment Station, South African Sugar Association, Mount Edgecombe, Natal. Received November 4, 1941.

142361. CO 312.	142366. CO 407.
<b>142362.</b> CO 313.	142367. CO 408.
142363. CO 331.	142368. CO 413.
142364. CO 355.	<b>142369</b> . CO 419.
142365. CO 385.	142370. M 1900.

# 142371 to 142419. Triticum Aestivum L. Poaceae. Common wheat.

From Australia. Seeds presented by A. H. E. McDonald, Chief, Division of Plant Introduction, Department of Agriculture, Sydney, New South Wales. Received November 5, 1941.

142371. 403-4 G 40. Early Blackhull × Kenya × Florence × Dundee. G3-GO.

142372. 407-8 G 40. Early Blackhull × Kenya × Florence × Dundee. G5-GO.

**142373.** 673–4 G 40. Early Blackhull × Florence. Go-O-O-GO.

142374. 598-9 G 40. Early Blackhull × Kenya × Florence × Dundee. F2-GO.

142375. 618-9 G 40. Early Blackhull × Kenya × Florence × Dundee. Go-4-Go

142376. 764 G 40. Early Blackhull × Kenya × Florence × Dundee. Go-2-Go.

142377. 429–31 G 40. Early Blackhull  $\times$  Thew  $\times$  Kenya  $\times$  Florence  $\times$  Dundee. N4–Go.

142378. 434-5 G 40. Early Blackhull × Thew × Kenya × Florence × Dundee. N6-GO.

142379. 364-5 G 40. Kenya × Florence × Dundee × Early Blackhull. N2-GO.

142380. 366-7 G 40. Kenya × Florence × Dundee × Early Blackhull. N3-GO.

142381. 388-9 G 40. Kenya × Florence × Dundee × Early Blackhull. E1-GO.

142382. 393-4 G 40. Kenya × Florence × Dundee × Early Blackhull. E6-GO.

142383. 395-6 G 40. Kenya × Florence × Dundee × Early Blackhull. E7-GO.

142384. 569-71 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P12-GO.

142385. 5745 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P15-GO.

142386. 576–7 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P20-

GO. 142387. 578-9 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P24-GO.

142388. 585-6 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P70-GO.

142389. 587-8 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P71-GO.

142390. 589–91 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Early Blackhull. GOP121–GO.

- 142391. 592–3 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P122–GO.
- 142392. 594-5 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P126-GO.
- 142393. 748 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P15-GO.
- 142394. 749 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P20-GO.
- 142395. 751 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P24-GO.
- 142396. 754 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P70-GO.
- 142397. 755 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P71-GO.
- 142398. 756-7 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P121-GO.
- 142399. 758 G 40. Kenya × Florence × Dundee × Early Blackhull, GO-P126-GO.
- 142400. 759 G 40. Kenya × Florence × Dundee × Early Blackhull. GO-P129-GO.
- **142401.** 326–7 G 40. Kenya  $\times$  Florence  $\times$  Dundee  $\times$  Wandilla  $\times$  Early Blackhull. GO.
- 142402. 469-71 G 40. Kenya × Pusa 4 × Nabawa × Early Blackhull. NG-GO.
- 142403. 767 G 40. Kenya × Pusa × Nabawa × Ghurka × Early Blackhull. GO–DO–GO.
- **142404.** 142–3–4 G 40. Kenya × Pusa × Nabawa × Ghurka × Early Blackhull. G3–KO.
- 142405. 145–6–7 G 40. Kenya  $\times$  Pusa  $\times$  Nabawa  $\times$  Ghurka  $\times$  Early Blackhull. G1–KO.
- 142406. 454–5 G 40. Kenya  $\times$  Pusa  $\times$  Nabawa  $\times$  Ghurka  $\times$  Early Blackhull. G1–GO.
- 142407. 456–7 G 40. Kenya  $\times$  Pusa  $\times$  Nabawa  $\times$  Ghurka  $\times$  Early Blackhull. G2–G0.
- 142408. 458-9 G 40. Kenya × Pusa 4 × Nabawa × Ghurka × Early Blackhull. N4-GO.
- 142409. 561–2 G 40. Marquillo × Waratah × Ford × Early Blackhull. GO-P 22–GO.
- 142410. 741 G 40. Marquillo × Waratah × Ford × Early Blackhull. GO-P21-GO.
- 142411. 744 G 40. Marquillo × Waratah × Ford × Early Blackhull. GO-P36-GO.
- 142412. 472-3 G 40. Marquillo × Waratah × Ford × Early Blackhull. G1-GO.
- 142413. 478-9 G 40. Marquillo × Waratah × Ford × Early Blackhull. G4-GO.
- 142414. 481-2 G 40. Marquillo × Waratah × Ford × Early Blackhull. E1-GO.
- 142415. 485-6 G 40. Marquillo × Waratah × Ford × Early Blackhull. E4-GO.
- 142416. 494-5 G 40. Marquillo × Waratah × Ford × Early Blackhull. N3-GO.
- 142417. 558-9 G 40. Marquillo × Waratah × Ford × Early Blackhull. GO-P21-GO.
- 142418. 565–6 G 40. Marquillo × Waratah × Ford × Early Blackhull. GO-P36–GO.
- 142419. 657-8 G 40. Tenmarg × Dundee. F6-GO.
- 142420 to 142429. SACCHARUM. Poaceae.

- Sugarcane.
- From Colombia. Seeds obtained from the Estación Agrícola Experimental, Palmira. Received November 5, 1941.

142420. E.P.C. 37 (24)  $\times$  E.P.C. 17-72.

142421. E.P.C. 37 (24)  $\times$  E.P.C. 20-00.

142422. E.P.C. 37 (24) × E.P.C. 75-61.

142423. E.P.C. 37 (24) × P.O.J. 28-78.

142424. Común  $\times$  C.P. 27–108.

142425. Común  $\times$  C.P. 31-517.

142426. Común × U.S. 16-94.

**142427.** P.O.J. 27–14  $\times$  E.P.C. 38 (1).

142428. P.O.J. 27-14 × E.P.C. 38 (9).

**142429.** P.O.J. 27-14 × C.P. 29-103.

## 142430 to 142435. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds obtained from the Experiment Station, Summit. Received November 10, 1941.

142430. Caña Blanca × CP 1165.

142431. Caña Blanca × 28 N.G. 289.

142432. Caña Blanca × S. spontaneum Klaot.

142433.  $Ca\tilde{n}a$   $Blanca \times S$ . spontaneum Tobano.

142434. Molakai 5099  $\times$  N.H. 1.

142435.  $POJ 2883 \times N.H. 1.$ 

## 142436 to 142443.

From Peru. Seeds presented by the Peruvian Legation, Washington, D. C. Received November 3, 1941.

142436 to 142440. Phaseolus vulgaris L. Fabaceae.

Common bean.

142436. No. 1. Caballero (white).

142437. No. 2. Negro.

142438. No. 3. Canario (white).

142439. No. 4. Bauo.

142440. No. 5. "Panamito."

142441 and 142442. PISUM SATIVUM L. Fabaceae.

Pea.

142441. No. 6. Alberja verde.

142442. No. 7. Alberion.

142443. Vigna sinensis (Torner) Savi. Fabaceae.

Cowpea.

No. 8. Frejolito Castilla.

#### 142444 and 142445.

From Egypt. Seeds presented by Alfred Bircher, Middle Egypt Botanic Station, El Saff, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. Received November 4, 1941.

142444. Crotalaria agatiflora Schweinf. Fabaceae.

A tropical African leguminous herb that has large yellow flowers about 2 inches long and 1 inch across, and sword-shaped pods about 3 inches long, containing 15 to 20 seeds.

For previous introduction see 99819.

142445. MILLETTIA DURA Dunn. Fabaceae.

142446. Prunus armeniaca L. Amygdalaceae.

Apricot.

From Maryland. Tree presented by the Bountiful Ridge Nurseries, Princess Anne. Received November 17, 1941.

Mohr's apricot.

# 142447 to 142451.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received November 6, 1941.

142447. Citrullus colocynthis (L.) Schrad. Cucurbitaceae. Colocynth.

Mokate. From J. D. Knohl, Molepolole. A small melon, about the size of the Kgeme, which grows wild in or near native cultivated patches. It is not eaten by human beings, but by cattle. The subglobose fruits are  $3\frac{1}{2}$  inches across; sometimes dried and used as a purgative.

For previous introduction see 141598.

142448. CITRULLUS NAUDINIANUS Hook. Cucurbitaceae.

Marotshe or Makatane. A wild watermelon with a perennial root, trailing, pubescent stems, and leaves like those of Citrullus colocynthis. It is cultivated as a valuable crop, as it supplies much-needed water and is used also as a vegetable cooked with meat.

For previous introduction see 92191.

142449 and 142450. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon.

From J. D. Knohl, Molepolole.

142449. Kafir, white flesh.

142450. Kafir, pink flesh.

142451. Sorghum verticilliflorum (Steud.) Stapf. Poaceae.

From the banks of the Vaal River, in the Kimberley Division.

#### 142452 and 142453, SACCHARUM, Poaceae.

Sugarcane.

From the Canal Zone. Seeds obtained from Julius Matz, Canal Zone Experiment Received November 12, 1941.

142452. Caña Blanca × NH 1.

142453. P.O.J. 2364  $\times$  NH 1.

# 142454. Centaurea Jacea L. Asteraceae.

From Europe. Seeds presented by Martin Bilon, Glenn Dale, Md. Received October 11, 1937. Numbered November 14, 1941.

Violet-Red cornflower.

#### 142455 to 142477.

From Canada. Trees purchased from E. D. Smith & Sons, Winona, Ontario. Received November 14, 1941.

142455 to 142466. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

142455. Bishop's Pippin. 142456. Cranberry Pippin. 142461. Lobo. 142462. Macoun.

142457. Early Red McIntosh.

142463. Scarlet Pippin.

142458. Fameuse. 142459. Hume.

142464. St. Lawrence Fall. 142465. St. Lawrence Winter.

142460. LaSalle.

142466. Secor.

142467 to 142469. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

142467. Horvath.

142468. Rittenhouse.

142469. Shense.

142470. Prunus domestica L.

Plum.

Eickmeie.

142471 and 142472. PRUNUS CERASUS L.

Sour cherry.

142471. Chase.

142472. Orel No. 24.

142473 to 142476. PRUNUS AVIUM L.

Sweet cherry.

142473. Pelham.

142475. Vernon.

142474. Velvet.

142476. Victor.

142477. Pyrus communis L. Malaceae.

Common pear.

Sudduth.

# 142478 to 142486. SACCHARUM. Poaceae.

Sugarcane.

From the Philippine Islands. Cuttings presented by the University of the Philippines, College of Agriculture, Laguna. Received November 18, 1941.

142478. Alunan.

142483. CAC 117.

142479. Luzon White.

142484. PSA 7.

142480. Negros Purple. 142481. Pampanga Red. 142485. *PSA 14.* 142486. *247 B*.

142482. CAC 87.

142487. Ehretia dicksoni Hance. Boraginaceae.

From California. Seeds collected by I. J. Condit, Citrus Experiment Station, Riverside. Received November 7, 1941.

From the Bard Estate, Oxnard, California, October 30, 1941.

# 142488. Diospyros tutcheri Dunn. Diospyraceae.

From China. Seeds presented by the Botanic Gardens, Hong Kong, through F. G. Walsingham, Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba. Received November 13, 1941.

A small tree with rough bark, smooth elliptic acuminate leaves about 4 inches long, and globose fruits about 1 inch in diameter. Native to Hong Kong.

For previous introduction see 101534.

# 142489. Mussaenda sp. Rubiaceae.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered November 19, 1941.

Plants raised from seeds collected by the Yunnan, China, Expedition of the Fan Memorial Institute, and presented by the Atkins Institution of the Arnold Arboretum, Cienfuegos, Cuba.

# 142490. Capsicum frutescens L. Solanaceae.

Redpepper.

From Florida. Seeds presented by W. Paul Phillips, Orlando. Received November 14, 1941.

Squash pepper.

# 142491. GLYCINE MAX (L.) Merrill. Fabaceae.

Soybean.

From Manchuria. Seeds purchased from L. Ptitsin Harbin. Received November 14, 1941.

Kroochul.

142492. Arundinaria simoni (Carr.) A. & C. Riviere. Poaceae.

Bamboo.

From Florida. Plants presented by Mrs. W. G. Peckham, St. Cloud, through Julian Nally, Gotha. Numbered November 21, 1941.

This bamboo, a native of China, grows in this more vigorous form to 25 feet or more high in rich and reasonably moist soils. The leaves are narrower than those of metake (*Pseudosasa japonica*) and sometimes are quite slender. The culms are characterized by nonprominent nodes and moderately thick walls. They are reported to make exceptionally strong and durable fishing poles, besides being well suited to other uses.

## 142493 to 142495. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Canal Zone Experimental Gardens, Summit. Received November 24, 1941.

142493. Caña Blanca × Hinds Special.

142494. Cayana 10 × N.C. 117, Imp. 909,

142495. P.O.J. 2725  $\times D$  74.

## 142496 to 142501. SACCHARUM. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Estación Agrícola Experimental, Palmira. Received November 24, 1941.

142496. Común × CP 29-137.

**142499.** EPC 7131  $\times$  CP 36-134.

142497.  $Común \times CP$  1161.

**142500.** EPC  $4754 \times US 1694$ .

142498. EPC  $4722 \times P$  33-29.

142501. Rayada  $\times$  US 1694.

142502. CITRUS AURANTIFOLIA × FORTUNELLA sp. Rutaceae.

Limequat.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered November 25, 1941.

Var. Eustis. C.P.B. 48798.

#### 142503 to 142534.

From Iran. Seeds collected by Dr. Walter Koelz, agent, Bureau of Plant Industry, United States Department of Agriculture. Received November 26, 1941.

Unless otherwise mentioned these seeds were from the province of Azerbaijan.

142503 to 142523. Triticum aestivum L. Poaceae.

Common wheat.

142503. No. 7379. Gandum. From Tabriz, October 29, 1940. Said to be irrigated.

142504. No. 7388. *Gandumideimi*. From Tabriz, October 29, 1940. Said to be irrigated; fall-sown.

142505. No. 7418. *Gandumi Bahari*. From Namin, November 6, 1940. Said to be irrigated; spring-sown.

142506. No. 7419. Gandum. From Namin, November, 1940. Said to be unirrigated; fall-sown.

142507. No. 7441. Gandum. From Ardebil, November 7, 1940. Said to be unirrigated; fall-sown. In some parts of Iran it is cut in spring and winter and used for fodder. It is thickly sown, and from the new shoots a crop is gathered, which accounts for the runt grains.

142508. No. 7453. Gandum. From Ardebil, November 7, 1940. Said to be fall-sown and irrigated.

142509. No. 7465. *Gandumisufed*. From Sarab, November 8, 1940. Said to be fall-sown and irrigated.

142510. No. 7389. Gandumiale. From Tabriz, October 29, 1940. Said to be irrigated.

- 142511. No. 7505. Gandumi, Bahari. From Livan, November 15, 1940. Said to be spring-sown and unirrigated.
- 142512. No. 7508. Gandum. From Livan, November 17, 1940. Said to be fall-sown and unirrigated.
- 142513. No. 7558. Gandumi Yazloq. From Maragha, November 29, 1940. Said to be fall-sown and unirrigated.
- 142514. No. 7561. Gandum. From Maraghe, November 30, 1940. Said to be fall-sown and unirrigated.
- 142515. No. 7560. Gandum. From Maraghe, November 29, 1940. Said to be fall-sown and unirrigated.
- 142516. No. 7588. Gandum. From Sarybulagh, December 4, 1940. Said to be fall-sown and irrigated.
- 142517. No. 7669. Gandum. From Rezaieh, December 9, 1940. Said to be fall-sown and unirrigated.
- 142518. No. 7673. Gandumi Zard. From Rezaieh, December 9, 1940. Said to be spring-sown and irrigated.
- 142519. No. 7740. Gandumi Bahari. From Khoi, December 12, 1940. Said to be fall-sown and unirrigated.
- 142520. No. 7810. Gandum. From Hamadan, Irak-ajemi, December 22, 1940. Said to be fall-sown and unirrigated.
- 142521. No. 7894. Gandum. From Qasrishirin, Kermanshah, December 28, 1940. Said to be fall-sown and unirrigated.
- 142522. No. 7941. Gandum. From Brujird, Luristan, January 21, 1941. Said to be irrigated and fall-sown.
- 142523. No. 7981. *Gandumi Paizi*. From Imarat, Bakhtiari, February 16, 1941. Said to be fall-sown and unirrigated.

#### 142524 to 142534. Zea mays L. Poaceae.

Corn.

- 142524. No. 7421. Zaurat. From Namin, November 6, 1940.
- 142525. No. 7527. Zaurat. From Saujbulagh, November 26, 1940.
- 142526. No. 7670. Zaurat; andaniasp. From Rezaieh, December 9, 1940.
- 142527. No. 7676. Menzaira Zaurat. From Rezaieh, December 9, 1940.
- 142528. No. 7677. Zaurati Tehrani. From Rezaieh, December 9, 1940.
- 142529. No. 7678. Zaurati Shiri. From Rezaieh, December 9, 1940.
- Tiest it it is it is a second of the is
- 142530. No. 7679. Zauratisterilitch. From Rezaieh, December 9, 1940.
- 142531. No. 7680. Zauratilimenitch. From Rezaieh, December 9, 1940.
- 142532. No. 7681. Zauratibumi. From Rezaieh, December 9, 1940.
- 142533. No. 7682. Zauratibumi. From Rezaieh, December 9, 1940. Said to be early.
- 142534. No. 7753. Zaurat. From Tabriz, December 15, 1940. Commonly popped; large tender kernel without center.

# 142535 to 142545. Mangifera indica L. Anacardiaceae. Mango.

From the Straits Settlements. Seeds purchased from R. E. Holttum, Director of Botanic Gardens, Singapore. Received November 26, 1941.

142535. Acheh.

12555. Acnen.

142536. Ayer.

142537. Cheti.

142538. Mangga Besar.

142539. Mangga Kechil.

142540. Pisang.

142541. Seri Kaya.

142542. Siam.

142543. Sourabaya.

142544. Telor.

142545. Timun.

142546 and 142547. Sechium edule (Jacq.) Sw. (Chayota edulis Jacq.) Cucurbitaceae. Chayote.

From Guatemala. Fruits collected by Dr. David Fairchild, Coconut Grove, Florida. Received November 27, 1941.

142546. Small, smooth, dark-green fruits.

142547. Small, smooth, ivory fruits.

#### 142548 to 142578.

From tropical America and tropical Asia. Collected by Dr. David Fairchild. Numbered in November 1941.

Originally received as seeds unless otherwise specified.

142548 to 142550. Annona cherimola Mill. Annonaceae. Cherimoya.

142548. No. 1031. From the Quindio River above Solento, Colombia, at 6,000 feet altitude, July 10, 1941. Fruit very large, dark green, with firm flesh of delicious flavor.

142549. No. 1050. From market, Villavicencio, Colombia, July 28, 1941. Fruit small, dark green.

142550. No. 1080. From Guayata Villa, Colombia, August 1941. Fruit large, dark green.

142551. ASTROCARYUM STANDLEYANUM Bailey. Phoenicaceae.

No. 1003. From Barro Colorado Island, Canal Zone, June 30, 1941. A spinytrunked pinnate-leaved palm, 50 feet tall, known locally as the "Black Palm." The dull-red fruits, with juicy sweet flesh, are in clusters 2 feet long.

For previous introduction see 104683.

142552. Atalantia citroides Pierre. Rutaceae.

No. 1013. From Summit, Canal Zone, July 1, 1941.

Redpepper.

142553. Capsicum frutescens L. Solanaceae. Received without data, July 1941.

142554. Carica candamarcensis Hook. f. Papayaceae.

No. 1038. From Colombia, July 12, 1941. The mountain papaya of the Andes, with small fruits 4 inches long, filled with a watery pulp.

For previous introduction see 111444.

142555. Cereus variabilis Pfeiffer. Cactaceae.

No. 1030. From the market, Bogotá, Colombia, July 17, 1941. A Brazilian cactus up to 12 feet high, with slender stems and branches creeping over rocks or clambering into trees. The edible yellow fruits contain translucent juicy pulp with a delicious flavor.

142556. Costus sp. Zingiberaceae.

No. 1065. From Villavicencio, Colombia, August 2, 1941. A species with showy white flowers about 3 inches across. The plant grows 6 feet tall in the shady edge of the jungle.

142557. Crinum darienense Woodson. Amaryllidaceae.

No. 1015. From El Valle de Anton, Panama, July 2, 1941. A handsome pinkflowered species. (Offsets.)

142558. Datura sanguinea Ruiz and Pav. Solanaceae. Red floripondio.

No. 1067. From Colombia, August 2, 1941. A tree 20 feet high, with masses of pendent flowers several inches long.

142559. Elaeocarpus serratus L. Elaeocarpaceae.

No. 1002. From Summit, Canal Zone, June 30, 1941.

#### 142560. Flacourtia inermis Roxb. Flacourtiaceae.

No. 1001. From Summit, Canal Zone, June 29, 1941. The Lovi-lovi of Ceylon. The brilliant red fruits, the size of cherries, are produced in immense quantities. They are very sour and are said to make excellent jelly and preserves.

For previous introduction see 104225.

#### 142561. Inga sp. Mimosaceae.

No. 1012. From market, Barranquilla, Colombia, June 27, 1941. Guama. A handsome tree with large pods 2 feet long.

#### 142562. Jessenia Polycarpa Karst. Phoenicaceae.

No. 1056. From Villavicencio, Colombia, August 2, 1941.

#### 142563. Mauritia minor Burret. Phoenicaceae.

No. 1052. From Los Cerritos, Llanos Orientales, Colombia, July 22, 1941. A handsome fan-leaved palm 40 to 50 feet tall, with rather short leaves and dull-red fruits 2 inches long, in large clusters.

#### 142564. Mimusops sp. Sapotaceae.

No. 1008. From Summit, Canal Zone, June 30, 1941. An attractive tree, with thick gray-green leaves and numerous round, yellowish-green edible fruits.

## 142565. Oenocarpus sp. Phoenicaceae.

No. 1057. From near Villavicencio, Colombia, August 2, 1941. Pusuy. A shade-loving palm, with dark-green pinnatisect leaves, 8 to 10 feet long, and round black fruits 1 inch in diameter, in clusters 2½ feet long.

#### 142566. Passiflora ligularis Juss. Passifloraceae.

Sweet granadilla.

No. 1088. From market, Villavicencio, Colombia, September, 1941. *Granadilla*. The reddish-brown fruits, 2 inches in diameter, are of excellent flavor; the smooth shell does not shrivel when fruit ripens.

For previous introduction see 132615.

## 142567. Pelliciera rhizophorae Pl. and Triana. Theaceae.

No. 1018. From near Paitilla Point, Panama, July 5, 1941.

#### 142568. RAVENALA GUYANENSIS Steud. Musaceae.

No. 1059. From Villavicencio, Colombia, August 2, 1941. There are only two species of this genus, one in Madagascar and the other in tropical South America. This species is not so large as the Madagascar one, but it rises to a height of 25 feet, making a fanlike head. Its enormous flower spike is 9 feet long and as much as a man can carry. Unlike the Madagascar species, the seeds of which have a deep-blue aril, the seeds of this have an orange aril.

For previous introduction see 101083.

#### 142569. Renealmia sp. Zingiberaceae.

No. 1046. From Villavicencio, Colombia, July 24, 1941. A species with spiny leaves 2 feet long. The flower stalk has 18 to 20 stiff horizontal branches and several deep dull-red bracts 2 inches long.

### 142570. SERJANIA sp. Sapindaceae.

No. 1090. From Villavicencio, Colombia, August 22, 1941. A shrubby vine with attractive pink fruits.

#### 142571. SWINGLEA GLUTINOSA (Blanco) Merrill. Rutaceae.

No. 1005. From Summit, Canal Zone, June 1941. A small spiny tree, native to the Philippine Islands, with trifoliolate leaves, small clusters of rather large white flowers, and oblong, hard-shelled fruits. It is used as a stock for commercial citrus varieties.

For previous introduction see 131248.

142572. Caesalpinia spinosa (Molina) Kuntze. Caesalpiniaceae.

No. 1118. From road to Tunja, Colombia, September 21, 1941. Tara. A tall upright spiny shrub or small tree, often used as a hedge in Peru. The foliage is deep green, with the leaflets smooth and polished on the upper surface. The greenish-yellow flowers, in cylindrical open spikes, are not very conspicuous, but the pods are produced in large clusters and the exposed surfaces show bright scarlet for a long time before maturing. The pods contain a high percentage of tannin.

For previous introduction see 141810.

142573. TERMINALIA EDULIS Blanco. Combretaceae.

No. 1011. From Summit, Canal Zone, July 1, 1941. A large spreading tree that bears an enormous crop of purple fruits of fair flavor.

For previous introduction see 81053.

142574. (Undetermined.)

No. 3404. From Doembaya, Gorontola, Celebes, Dutch East Indies, March 8, 1940.

142575. (Undetermined.)

No. 367. From Batjan Island, Moluccas, Dutch East Indies, May 24, 1940. A shade-loving tree, 10 feet high, with long leaves.

142576. (Undetermined.)

No. 378. From the Dutch East Indies, May 1940.

142577. LICUALA SPINOSA Thunb. Phoenicaceae.

Palm.

No. 434. Balabasas. From Puerto Princesa, Palawan, Philippine Islands, May 25, 1940. An erect palm with small fan-shaped leaves.

For previous introduction see 93411.

142578. Alloplectus sp. Gesneriaceac.

No. 1049. From Villavicencio, Colombia, July 28, 1941. A succulent shrub, growing in shade, with ovate-serrate leaves, up to 6 inches long, olive green above and purple red beneath. The wine-red flowers, 2 inches long, are in terminal clusters. The soft purple fruits are ½ inch long.

#### 142579 to 142600.

From Alaska. Seeds purchased from Mrs. H. B. Looff, Alitak, Kodiak Island. Received November 14, 1941.

142579. Andromeda polifolia L. Ericaceae.

142580. Antennaria monocephala DC. Asteraceae.

142581. Arnica Chamissonis Less. Asteraceae.

142582. Arnica latifolia Bongard. Asteraceae.

142583. Arnica lessingii Greene. Asteraceae.

142584. Cerastium beeringianum var. grandiflorum (Fenzl) Hultén. Silenaceae.

142585. Cornus suecica L. Cornaceae.

A dwarf dogwood resembling  $Cornus\ canadensis$ . The beautiful white bracts make it very attractive.

For previous introduction see 69355.

142586. Epilobium bongardi Hausskn. Onagraceae.

142587. EPILOBIUM LATIFOLIUM L. Onagraccae.

142588. Fritillaria camschatcensis (L.) Ker. Liliaceae.

142589. GERANIUM OREGANUM Howell. Geraniaceae.

142590. HIERACIUM TRISTE Spreng. Cichoriaceae.

142591. Iris setosa Link. Iridaceae.

142592 and 142593. LUPINUS NOOTKATENSIS Sims. Fabaceae.

142592. Blue.

142593. Pink.

142594. Parnassia sp. Saxifragaceae.

142595. Polemonium sp. Polemoniaceae.

142596. RANUNCULUS HEDERACEUS L. Ranunculaceae.

142597. Rhododendron camtschaticum Pall. Ericaceae.

142598. Spiraea lucida Douglas. Rosaceae.

A low shrub found at low elevations in the mountains of the western United States. It reaches a height of about 24 inches, has small white flowers and coarsely serrate leaves.

For previous introduction see 43920.

142599. Viola langsdorfii Ging. Violaceae.

142600. Viola simulata M. S. Baker. Violaceae.

#### 142601 to 142687.

From Guatemala. Seeds collected by Dr. F. Webster McBryde, University of California. Received November 28, 1941.

142601. Cajanus cajan (L.) Druce. Fabaceae.

Pigeonpea.

No. (41) 9021. From Agua Blanca.

142602. Canavalia ensiformis (L.) DC. Fabaceae.

Jackbean.

No. (39) 8977. From Santiago Atitlan.

142603. CICER ARIETINUM L. Fabaceae.

Chickpea.

No. (54) 8826. From San Lorenzo.

142604 and 142605. Phaseolus calcaratus Roxb. Fabaceae.

Rice bean.

142604. No. (62) 8914. From Santa Lucia Cotz.

142605. No. (43) 8873. From Camotan.

142606. Phaseolus coccineus L. Fabaceae.

Scarlet runner bean.

No. (32) 8906. From San Juan Ostuncalco. A large white variety.

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142607 to 142622. Phaseolus lunatus L. Fabaceae. Lima bean.

142607. No. (59) 8997. *Pintilla*. From San Bernardino. Spotted tan, yellow, and black.

142608. No. (59) 8998. Ixtapacál Bolonille. From San Bernardino. Small, black.

142609. No. (59) 8996. Ixtapacál. From San Bernardino. Flat, black.

142610. No. (61) 8993-4. From San Sebastian. Small, red-spotted.

142611. No. (61) 8989-90. Ixpanque. From San Sebastian. Small, pink.

142612. No. (61) 8995. From San Sebastian. Small, white.

142613. No. (62) 9006-7. Pilen Piloito. From Santa Lucia Cotz. Small, round, red.

142614. No. (62) 9005, 9008. Ixtapacál (Castapacal). From Santa Lucia Cotz. Black, flat.

142615. No. (57) 8986. Pilen. From Chicacao. Red and black.

142616. No. (17) 8985. From Santa Ana. Small, black.

142617. No. (20). Ixtapacál. From Rabinal. Small, black.

142618. No. (62) 9004. Ixtapacál Pinto. From Santa Lucia Cotz. Large, red, flat.

142619. No. (45) 9014. Furuna Negra. From Cruz de Villeda. Small, black.

142620. No. (58) 9000-1. Ixtapacál. From San Antonio. Flat, black.

142621. No. (61) 8992. Ixtapacál Pintilla. From San Sebastian. Large, red, with black spots.

142622. No. (61) 9016-19. *Ixtapacál Grande Colorado*. From San Sebastian. Large, red, and black.

142623 to 142683. Phaseolus vulgaris L. Fabaceae. Common bean.

142623. No. (4) 8967. From Huehuetenango. Black, dry season variety.

142624. No. (4) 8969. From Huehuetenango. Large, black.

142625. No. (5) 8838. From Jacaltenango. Black, milpa bean.

142626. No. (5) 8840. *Pascua*. From Jacaltenango. Black.

142627. No. (5) 8843. From Jacaltenango. Red, milpa bean.

142628. No. (5) 8844. From Jacaltenango. White, milpa bean.

142629. No. (5) 8846. De los Santos. From Jacaltenango. Red.

142630. No. (5) 8847. Pascua, Cuilqueño. From Jacaltenango. Black, milpa bean.

142631. No. (7) 8937. Siete Caldos. From Neuton. Small, black.

142632. No. (8) 8961. Veraho. From Petatan. Black.

142633. No. (1) 8835. From Aquacatan. White.

142634. No. (2) 8947. Aluvia. From Barillas. Tan.

142635. No. (3) 8829. From Chalchitan. Black bush bean.

142636. No. (9) 8953. Pascua de Año. From San Antonio Huista. Black.

142637. No. (12) 8958. From San Juan Ixcoy. Large, black.

142638. No. (16) 8949. From San Sebastian, Huehuetenango. Black bush bean.

142639. No. (17) 8934. *Pinto*. From Santa Ana Huista. Black and red-spotted bush bean.

142640. No. (17) 8919. From Santa Ana Huista. Black.

142641. No. (17) 8935. From Santa Ana Huista. Black pole bean of short-growing variety. Said to mature in one month.

142642. No. (17) 8936. From Santa Ana Huista. Black pole (milpa) bean.

142643. No. (20) 8933. From Rabinal. Black bush bean.

142644. No. (21) 8874. From San Juan Chamelco. Small, dull red.

142645. No. (24) 8945. From Santo Tomas Chichicastenango. Black-and-white.

142646. No. (27) 8869. From Cantel. Black milpa bean.

142647. No. (28). From Momostenango. Brown.

142643. No. (30) 8879. From San Cristobal. Bright red.

142649. No. (32) 8903. From San Juan. Black.

142650. No. (32) 8905. From San Juan. Round, red.

142651. No. (33) 8854. From San Martin Sacatepequez. Large, brown.

142652. No. (33) 8866. From Nahualtá. Black, milpa bean.

142653. No. (35) 8864. From Nahualá. White.

142654. No. (35) 8865. From Nahualá. Large, red.

142655. No. (38) 8895. From Santa Lucia. Large, black.

142656. No. (40) 8886. Bola. From Sololá. Roundish, black.

142657. No. (4) 8964. From Huehuetenango. Black bush bean.

142658. No. (3) 8828. From Chalchitan. Large, black.

142659. No. (3) 8832. From Chalchitan. Black milpa bean.

142660. No. (3) 8833. From Chalchitan. Red pole bean.

142661. No. (40) 8887. From Sololá. White milpa bean.

142662. No. (41) 8981. From Agua Blanca. Black bush bean.

142663. No. (45) 8890. From Cruz de Villeda. White.

142664. No. (45) 8891. From Cruz de Villeda. Small, red.

142665. No. (47) 8983. From Zapotitlán. White.

142666. No. (45) 9015. Furuna blanca. From Cruz de Villeda. Small, white roundish.

142667. No. (48) 8856. From Antigua. Large, spotted.

142668. No. (50) 8827. From Pastores. Tan.

142669. No. (53) 8923. From San Jose; Poaquil. White.

142670. No. (56) 8871. From San Cruz Balanyá. Black bush bean.

142671. No. (57) 8924. From Chicacao. Red.

142672. No. (57) 8925. From Chicacao. White.

142673. No. (57) 8926. From Chicacao. Black bush bean.

142674. No. (57) 8927. From Chicacao. Black.

142675. No. (58) 8907. From San Antonio. Black and mottled.

142676. No. (58) 9002. From San Antonio. Small, round, red.

142677. No. (59) 8909. From San Bernardino.

142678. No. (59) 8911. From San Bernardino. Black pole bean.

142679. No. (59) 8999. Ixcumita. From San Bernardino. Small, round, red and black.

142680. No. (61) 8920. From San Sebastian. Black pole bean.

142681. No. (62) 8913. From Santa Lucia Cotz. Yellow.

142682. No. (40) 8885. From Sololá (market). Long kidney bean.

142633. No. (5) 8839. De los Santos. From Jacaltenango. Black

142684 and 142685. PISUM SATIVUM L. Fabaceae.

Pea.

142684. No. (52) 9093. Arveja. From San Juan.

142685. No. (40). From Sololá.

142686. Vigna sinensis (Torner) Savi. Fabaceae.

Cowpea.

No. (62) 8915. From Santa Lucia Cotz. Brown-spotted.

142687. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae. Asparagus bean.

No. (59) 8910. Frijol de Espana. From San Bernardino. Black cowpea.

## 142688 and 142689. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 1, 1941.

142688. Caña Blanca × 28 NG 218.

142689. Caña Blanca × Black Fiji.

142690. WITHANIA SOMNIFERA (L.) Dunal. Solanaceae.

From Florida. Seeds presented by Miss Lisa von Borowsky, Brooksville. Received December 8, 1941.

An erect much-branched shrub with round stems 3 to 4 feet high, native to tropical Africa and India. The oblong to obovate slightly sinuate leaves are 2 to 3 inches long, and the small flowers, in auxillary clusters, are followed by globose berrylike fruits ¼ inch in diameter, surrounded by the inflated calyx. In India the powdered fruit is used as a vegetable rennet.

For previous introduction see 100952.

## 142691. Oryza sativa L. Poaceae.

Rice.

From India. Seeds presented by J. W. Grant, Rice Research Officer, Rangoon, Burma. Received December 12, 1941.

Paddy rice, D 29-166.

## 142692 to 142779.

From Mexico. Seeds collected by Dr. F. Webster McBryde, Collaborator, Bureau of Plant Industry, United States Department of Agriculture. Received December 1, 1941.

142692. Brassica oleracea var. capitata L. Brassicaceae. Cabbage. Curix or Col. From San Antonio Ocotlán, Oaxaca.

142693. Vigna sinensis (Torner) Savi. Fabaceae. Cowpea.

Frijol. From Ocotlán, Oaxaca. Small tan bean.

142694. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae. Jackbean.

Ayocote. From Ocotlán, Oaxaca.

142695 and 142696. CITRULLUS VULGARIS Schrad. Cucurbitaceae. Watermelon-From Ocotlán, Oaxaca.

142697 to 142700. Lycopersicon esculentum Mill. Solanaceae. Tomato\*

142697. From Ocotlán, Oaxaca. Ripens in about 3½ months from seed.

142698. From Simatlán, Oaxaca.

142699. From Ocotlán, Oaxaca.

142700. From Telixtlahuaca, Oaxaca.

142701 to 142703. Phaseolus coccineus L. Fabaceae. Scarlet runner bean.

142701. From the Valley of Mexico. Large purple bean.

142702. Botil. From Huixtan, Chiapas. Large purple bean.

142703. From Teneipa, Chiapas.

142704. Phaseolus lunatus L. Fabaceae.

Lima bear.

From Tuxtla Gutierrez, Chiapas. Gray lima bean.

142705 to 142772. Phaseolus vulgaris L. Fabaceae. Common bean.

142705. Garbanzillo. From Guadalajara. Small greenish bean.

142706. From Cuilapa, Guerrero. Giant gray bean.

142707. From Mexico City.

142708. Flor de Mayo. From Mexico City. Pink and tan.

142709. From Morelos. Tan bean.

142710. Campuchino. From Valley of Mexico. Tan spotted bean.

142711. Piloy. From Santo Tomas, Chichicastenango. Large red butter bean.

142712. Frijol Bolino. From Ocotlán. Round black milpa bean.

142713 Canario. From Queretaro, Guerrero.

142714. Palacio. From Queretaro. Large, buff.

142715. Paraleña. From Veracruz.

142716. From Agua de León, Chiapas. Large black kidney bean.

142717. Botil. From Chamula, Chiapas. Large purple bean.

142718. From Chiapa, Chiapas. Small, pink kidney bean.

142719. Milpa. From Huixtan, Chiapas. Black bean.

142720. Frijol Bayo. From Huixtan, Chiapas. Tan-spotted bean.

142721. From Huixtan, Chiapas. Round, white kidney bean.

142722. From Huixtan, Chiapas. Yellow kidney bean.

142723. From Huixtan, Chiapas. Black bush bean.

142724. Botil. From Ixtapa, Chiapas.

142725. From Miltontic, Chiapas. Black bush bean; short season; good as green bean.

142726. From Mitontic, Chiapas. Red bush bean; short season; good as green bean.

142727. Botil. From Mitontic, Chiapas. Large tan bean.

142728. Botil. From Miltontic, Chiapas. Large purple bean.

142729. Rosadito. From Morelos. Small, pink kidney bean.

142730. From San Pedro Chenalho, Chiapas. Small, black bush bean; good as green bean.

142731. From San Andrés, Chiapas. Small, red kidney bean.

142732. From San Cristóbal, Chiapas. Cat bean.

142733. Botil. From San Pedro Chenalho, Chiapas. Giant beans, "perennial" 6 to 7 years.

142734. Frijol. Pinto. From San Pedro Chenalho, Chiapas. Pole bean, brown and black-spotted.

142735. Frijol bolito. From Sinacantán, Chiapas.

142736. From Tenejapa, Chiapas. Mixed varieties.

142737. From Tenejapa, Chiapas. Tan beans.

142738. Botil. Giant purple kidney bean.

142739. From Tenejapa, Chiapas. Red bean.

142740. From Tenejapa, Chiapas. Black bean.

142741. From Teopisca, Chiapas. Small, pink kidney bean.

142742. From Tuxtla Gutierrez, Chiapas. Black bush bean.

142743. Aluvia. From Oaxaca. Large white bean.

142744. Frijol Grueso. From Cacolote (Mije), Oaxaca. Large, black and variegated kidney bean.

142745. Cuarenteño. From Capulalpan, Oaxaca. Tan bean especially good as a green bean.

142746. Delgado. From Etla, Oaxaca. Black bean.

142747. Guisumil. From Etla, Oaxaca.

142748. Chato. From Miahuatlan, Oaxaca.

142749. Frijol de Monte. From Mije, Oaxaca. Grows wild.

142750. Delgado. From Mitla, Oaxaca. Black bean.

142751. Delgado. From Ocotlán de Morelos, Oaxaca. Black bean.

142752. From Natividad, Oaxaca. Brown and red beans with red pod.

142753. Frijol Caxumil. From Natividad, Oaxaca. Pole bean in mixed colors.

142754. From Natividad, Oaxaca. Tan-pink beans.

142755. From Nochistlán, Oaxaca. Black pole beans.

142756. Delgado. From Nochistlán, Oaxaca. Black bean.

142757. From Ocotlán de Morelos, Oaxaca. White bean.

142758. Viságou. From Ocotlán de Morelos, Oaxaca. Black bean in milpa, and eaten especially in purple pod.

142759. Tempralero. From Ocotlán de Morelos, Oaxaca. Early black bean.

142760. Frijol Machete. From Ocotlán de Morelos, Oaxaca.

142761. From Simatlán, Oaxaca. Giant gray bean.

142762. Grueso. From Simatlán, Oaxaca. Black bean.

142763. Frijol Negro Delgado. From Simatlán, Oaxaca. Black bean.

142764. From Totolapan, Oaxaca. Red bush bean.

142765. Coyuch. From La Cienaga, Oaxaca. Brown string bean, especially good as green bean.

142766. Frijol Amarillo. From Tlacolula, Oaxaca. Small, yellow kidney bean.

142767. Delgado. From Santa Maria Axumpa, Oaxaca. Black bean.

142768. Frijol Blanco Delgado. From San Miguel Minas. Small white bean.

142769. From Oaxaca. Giant gray bean.

142770. Frijol Chibo. From San Miguel Minas, Oaxaca. Black bean.

142771. From Oaxaca. Red bean with red pod.

142772. Frijol Amarillo Grueso. From San Miguel Minas. Yellow bean.

142773 to 142777. PISUM SATIVUM L. Fabaceae.

Pea.

142773. From Tenejapa, Chiapas. Green pea.

142774. From San Pedro Chenalho, Chiapas.

142775. Alberga. From Ocotlán, Oaxaca. Green pea.

142776. From San Andrés, Chiapas. Green pea.

142777. From Nochistlán, Oaxaca. Green pea.

142778. VICIA FABA L. Fabaceae.

Broadbean.

From Ocotlán, Oaxaca.

142779. VIGNA SINENSIS (Torner) Savi. Fabaceae.

Cowpea.

Cuarentana. From Tuxtla Gutierrez, Chiapas. Brown-spotted cowpea requiring 40 days to mature.

#### 142780 to 142932.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 3, 1941.

142780 to 142787. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

142780. Bamia. No. 7363. From Tabriz, Azerbaijan, October 28, 1940. Long fruits.

142781. Bamia. No. 7609. From Saugbulagh, Azerbaijan, December 4, 1940.

142782. Bamia. No. 7630. From Rezaieh, Azerbaijan, December 8, 1940.

142783. Bamia. No. 7725. From Khai, Azerbaijan, December 12, 1940.

- 142784. Bamia. No. 7794. From Hamadan, December 22, 1940.
- 142785. Bamia. No. 7841. From Kermanshah, December 24, 1940.
- 142786. Bamia. No. 7881. From Qasrishirin, Kermanshah, December 28, 1940. Common in gardens. Stalks are branched to 7 feet, with pods 6 inches long when ripe.
- 142787. Bamia. No. 7942. From Brujird, Luristan, January 21, 1941.
- 142788 to 142796. ALLIUM CEPA L. Liliaceae.

Onion.

Piyaz is the vernacular name for onion in Iran.

- 142788. No. 7444. From Ardebil, Azerbaijan, November 7, 1940. Semiglobose, brown red, crisp, and not too pungent.
- 142789. No. 7544. From Maraghe, Azerbaijan, November 28, 1940. Sub-globose, brownish red and yellow; tender, but rather strong.
- 142790. No. 7619. From Rezaieh, Azerbaijan, December 7, 1940. Semiflat, wine-colored, tender, and rather strong.
- 142791. No. 7729. From Khai, Azerbaijan, December 12, 1940. Semiglobose, wine-colored, tender, and fairly hot.
- 142792. No. 7758. From Zenjan, Khamseh, December 18, 1940. Flat, yellow, pale red, up to 4 inches in diameter, and tender and mild. Said to grow in hot climates.
- 142793. No. 7797. From Hamadan, December 22, 1940. Small, subglobose, white, yellow, and red, and of ordinary quality.
- 142794. No. 7848. From Kermanshah, December 24, 1940. Semiflat, red, white, yellow, and of fair quality.
- 142795. No. 7893. From Qasrishirin, Kermanshah, December 28, 1940. Subglobose, white, up to  $2\frac{1}{2}$  inches in diameter, has 2-leaved seedlings, and rather strong.
- 142796. No. 7951. From Brujird, Luristan, January 21, 1941. Flat, white and red; of ordinary quality.
- 142797 to 142807. ALLIUM PORRUM L. Liliaceae.

Leek.

Nos. 142797 and 142798 were collected in Tabriz, Azerbaijan, October 28, 1940.

- 142797. No. 7354. Gondona.
- 142798. No. 7368. Flat and globose, brown red; tender but strong.
- 142799. No. 7450. Tare. From Ardebil, Azerbaijan, November 7, 1940.
- 142300. No. 7493. *Tare.* From Tabriz, Azerbaijan, November 12, 1940. Leaves cut green for flavoring. Eaten also as green onions.
- 142801. No. 7555. Tare. From Maraghe, Azerbaijan, December 29, 1940. Leaves used as a relish.
- 142302. No. 7616. Tare. From Rezaieh, Azerbaijan, December 7, 1940. Eaten raw as a relish.
- 142803. No. 7723. Tare. From Khai, Azerbaijan, December 12, 1940. Used as green onions.
- 142804. No. 7782. Gondona. From Hamadan, December 21, 1940. Leaves eaten green.
- 142805. No. 7843. Tare. From Kermanshah, December 24, 1940. Leaves eaten green as a relish.
- 142306. No. 7892. Gondona. From Qasrishirin, Kermanshah, December 28, 1940.
- 142807. No. 7955. Tare. From Brujird, Luristan, January 21, 1941.

142808 to 142823. Beta vulgaris L. Chenopodiaceae.

Common beet.

Choghondar is the vernacular name for the beet in Iran.

Nos. 142808 and 142809 were collected in Tabriz, Azerbaijan, October 28, 1940.

142808. No. 7352.

142809. No. 7356.

142810. No. 7416. From Namin, Azerbaijan, November 6, 1940. Globose, yellow, exceptionally sweet, and tender. Grows in warm rainy climate.

142811. No. 7428. From Ardebil, Azerbaijan, November 7, 1940. Flat, globose, yellow or red purple. Inside yellow to white, no fiber, and good sugar content and flavor.

142812. No. 7458. From Sarab, Azerbaijan, November 8, 1940. Flat, orange to carmine, handsome, white inside, sweet, and of good flavor.

142813. No. 7543. From Maraghe, Azerbaijan, November 28, 1940.

142314. No. 7565. From Saujbaulagh, Azerbaijan, November 26, 1940. Said to be garden beets.

142815. No. 7587. From Saujbaulagh, Azerbaijan, December 4, 1940. White, long-pointed sugar beets.

142816. No. 7640. From Rezaieh, Azerbaijan, December 8, 1940. Semiglobose, yellow and red purple, sweet, and no fiber.

142817. No. 7720. From Khai, Azerbaijan, December 12, 1940. White, elongated, sugar type.

142318. No. 7759. From Zenjan, Khamseh, December 18, 1940. Red purple and flat.

Nos. 142819 and 142820 were collected in Hamadan, December 21, 1940.

142819. No. 7785. Carrot-shaped, deep red, and said to be imported.

142820. No. 7787. Semiglobose, yellow to red purple.

142321. No. 7850. From Kermanshah, December 25, 1940. Subglobose, red purple and yellow.

142822. No. 7879. From Qasrishirin, Kermanshah, December 28, 1940.

142823. No. 7965. From Brujird, Luristan, January 21, 1941. One foot wide, flattened, red purple or yellow, inside white and sometimes red purple, tender, with fiber, and sweet.

142824 to 142841. Capsicum frutescens L. Solanaceae. Redpepper.

Filfil is the common vernacular name for the redpepper in Iran.

142824. No. 7331. From Tabriz, Azerbaijan, October 27, 1940. Bullnose, 3 inches long, scarlet, and sweet.

142825. No. 7362. Fili farangi. From Tabriz, Azerbaijan, October 28, 1940. Seeds hot; said to be introduced.

142826. No. 7400. From Tabriz, Azerbaijan, October 31, 1940. Fruit rounded, 2½ inches in diameter, scarlet, seeds sweet.

142827. No. 7401. From Tabriz, Azerbaijan, October 31, 1940. Fruit pointed, 4 by 2 inches at base, scarlet, sweet, and mildly pungent.

142828. No. 7413. From Ardebil, Azerbaijan, November 2, 1940. Fruit pointed, 1 by 3 inches at base, crimson, and hot.

142829. No. 7448. From Ardebil, Azerbaijan, November 7, 1940. Green, pointed, 2 inches long, and hot.

142830. No. 7512. From Tabriz, Azerbaijan, November 20, 1940. Fruit pointed, 2 inches long, scarlet, and hot.

14231. No. 7513. From Tabriz, Azerbaijan, November 20, 1940. Fruit bullnosed, 4 inches long, crimson; sweet with hot seeds.

- 142832. No. 7546. From Maraghe, Azerbaijan, November 28, 1940. Fruit tapered, scarlet to crimson, sweet to mild flesh, and hot seeds.
- 142833. No. 7598. From Rezaieh, Azerbaijan, December 6, 1940. Fruits elongated, bullnosed, 6 by 3 inches at base, scarlet, sweet, tender flesh, and hot seeds.
- 142834. No. 7618. Fililafi Kai. From Rezaieh, Azerbaijan, December 7, 1940. Large and red.
- 142835. No. 7620. From Rezaieh, Azerbaijan, December 7, 1940. Small, but not pungent.
- 142836. No. 7719. From Khai, Azerbaijan, December 11, 1940. Tapered, blunt-tipped, flesh sweet, and seeds pungent.
- 142837. No. 7728. From Khai, Azerbaijan, December 12, 1940.
- 142838. No. 7795. From Hamadan, December 22, 1940.
- 142839. No. 7839. From Kermanshah, December 24, 1940.
- 142840. No. 7847. From Kermanshah, December 24, 1940. Crimson, pungent.
- 142841. No. 7964. From Brujird, Luristan, January 21, 1941. Not pungent.

#### 142842 to 142845. CICER ARIETINUM L. Fabaceae.

Chickpea.

Nakhud is the vernacular name for chickpea in Iran.

- 142842. No. 7326. From Tabriz, Azerbaijan, October 27, 1940. Food crop.
- 142843. No. 7435. From Ardebil, Azerbaijan, November 7, 1940. Unirrigated food crop.
- 142844. No. 7736. From Khai, Azerbaijan, December 12, 1940. Food crop.
- 142845. No. 7932. From Brujird, Luristan, January 20, 1940.

#### 142846 to 142861. DAUCUS CAROTA L. Apiaceae.

Carrot.

- 142846. No. 7355. Zardakifaranja. From Tabriz, Azerbaijan, October 28, 1940. Long, smooth, and yellow, orange, or purple black.
- 142847. No. 7374. Zardakisija. From Tabriz, Azerbaijan, October 29, 1940. Long, smooth, and purple black.
- 142848. No. 7396. Zardakizard. From Tabriz, Azerbaijan, October 30, 1940. Long, smooth, and yellow.
- 142849. No. 7442. Zardak. From Ardebil, Azerbaijan, November 7, 1940. Purple black, red purple, or pale yellow.
- 142850. No. 7461. *Gajar*. From Sarab, Azerbaijan, November 8, 1940. Long, smooth, black purple or pale yellow, of excellent quality.
- 142851. No. 7522. From Maraghe, Azerbaijan, November 26, 1940. Wild, growing in orchard.
- 142852. No. 7556. Zardak. From Maraghe, Azerbaijan, November 29, 1940. Long, smooth, yellow, red purple or purple black, and of good quality.
- 142853. No. 7607. *Havij*. From Saujbaulagh, Azerbaijan, December 4, 1940. Yellow or red purple, tender, and sweet.
- 142854. No. 7622. *Havij.* From Rezaieh, Azerbaijan, December 8, 1940. Long, red purple or yellow, tender, and fairly sweet.
- 142855. No. 7726. Zardak. No. 7726. From Khai, Azerbaijan, December 12, 1940. Very tender, even when 3 inches through at top, pale yellow, without fiber, and fairly sweet.
- 142856. No. 7784. Gajon Farangi. From Hamadan, December 21, 1940. Short and orange.
- 142857. No. 7805. Zardak. From Hamadan, December 22, 1940. Long, tapered, smooth, and yellow; texture hard, low in sugar.

142858. No. 7857. Havij Bumi. From Kermanshah, December 25, 1940. Black, red purple, yellow, tender, and without fiber even when 2½ inches through; tapering and well-formed, with a low sugar content.

142859. No. 7858. Havij Farangi. From Kermanshah, December 25, 1940. Said to be introduced. Orange and tender, but of lower sugar content than native varieties.

142860. No. 7878. Havij. From Qasrishirin, Kermanshah, December 28, 1940.

142861. No. 7948. Zardak. From Brujird, Luristan, January 21, 1941. Yellow, red purple, black purple, tender; but lower than usual in sugar.

142862. DAUCUS Sp.

No. 7318. From Tharibdash, Azerbaijan, October 25, 1940. An annual steppe plant growing on low mountains.

142863 to 142872. Lactuca sativa L. Cichoriaceae. Garden lettuce.

Kahu is the vernacular name for lettuce in Iran.

142863. No. 7333. From Tabriz, Azerbaijan, October 27, 1940.

142864. No. 7371. From Tabriz, Azerbaijan, October 29, 1940. Spring lettuce.

142865. No. 7446. From Ardebil, Azerbaijan, November 7, 1940.

142866. No. 7631. From Rezaieh, Azerbaijan, December 8, 1940.

142867. No. 7737. From Khai, Azerbaijan, December 12, 1940.

142868. No. 7780. From Hamadan, December 21, 1940.

142869. No. 7845. From Kermanshah, December 24, 1940. Loose and long-leaved.

142870. No. 7882. From Qasrishirin, Kennanshah, December 28, 1940.

142871. No. 7933. From Brujird, Luristan, January 20, 1941. Longleaved type.

142872. No. 7943. From Burjird, Luristan, January 21, 1941.

142873 to 142882. Lycopersicon esculentum Mill. Solanaceae. Tomato.

Gojefarangi appears to be the vernacular name for the tomato in Iran.

142873. No. 7348. From Tabriz, Azerbaijan, October 28, 1940. Subglobose, very firm, with small seed pockets.

142874. No. 7358. From Tabriz, Azerbaijan, October 28, 1940. Red and flat, up to 3 inches in diameter.

142875. No. 7426. From Ardebil, Azerbaijan, November 7, 1940. Red, flat, up to 2 inches in diameter.

142876. No. 7550. From Maraghe, Azerbaijan, November 29, 1940. Red, flat, up to 3 inches in diameter.

142877. No. 7629. From Rezaieh, Azerbaijan, December 8, 1940. Flat, red, to 4 inches.

142878. No. 7724. From Khai, Azerbaijan, December 12, 1940. Yellow and red, flat to  $2\frac{1}{2}$  inches.

142879. No. 7789. From Hamadan, December 22, 1940. Mild summer.

142830. No. 7846. From Kermanshah, December 24, 1940.

142881. No. 7883. From Qasrishirin, Kermanshah, December 28, 1940. Flat, red, runty, but of fine flavor.

14282. No. 7962. From Brujird, Luristan, January 21, 1941. Mild summer.

142883 to 142904. Phaseolus vulgaris L. Fabaceae. Common bean.

Loba is the vernacular name for the common bean in Iran.

14283. No. 7377. Lobiaesufed. From Tabriz, Azerbaijan, October 29, 1940.

142884. No. 7382. From Tabriz, Azerbaijan, October 29, 1940.

142885. No. 7383. Lobaesukh. From Tabriz, Azerbaijan, October 29, 1940.

142886. No. 7500. From Tabriz, Azerbaijan, November 13, 1940.

142887. No. 7659. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.

142888. No. 7660. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.

142889. No. 7661. From Rezaieh, Azerbaijan, December 9, 1940. Presented by the local Department of Agriculture.

Nos. 142890 to 142897 were collected in Rezaieh, Azerbaijan, December 9, 1940.

142890, No. 7662.

142894. No. 7683.

142891. No. 7663.

142895. No. 7684.

142892. No. 7665.

142896. No. 7685.

**142893.** No. 7666. **142897.** No. 7712.

Nos. 142898 to 142900 were collected in Hamadan, December 22, 1940.

142898. No. 7812.

142899. No. 7813.

142900. No. 7817.

Nos. 142901 to 142903 were collected in Brujird, Luristan, January 21, 1941.

142901. No. 7931.

142902. No. 7935.

142903. No. 7936.

142904. No. 7439. From Ardebil, Azerbaijan, December 7, 1940.

142905 to 142923. Raphanus sativus L. Brassicaceae.

Radish.

142905. No. 7373. Torbisurkh. From Tabriz, Azerbaijan, October 29, 1940. Long and red.

Nos. 142906 and 142907 were collected in Ardebil, Azerbaijan, November 7, 1940.

142906. No. 7454. Torob. Semiglobose, white, winter sorts, and red purple.

142907. No. 7455. Torob. Red purple, foreign, and winter variety.

142908. No. 7553. Torob. From Maraghe, Azerbaijan, November 29, 1940. Handsome, long, winter variety in white and purple.

Nos. 142909 and 142910 were collected in Rezaich, Azerbaijan, December 7, 1940.

142909. No. 7615. Torobche. Small spring radish.

142910. No. 7616. Torbisufed. White, banded-purple winter variety.

Nos. 142911 and 142912 were collected in Khai, Azerbaijan, December 12, 1940.

142911. No. 7742. Torob. White winter variety.

142912. No. 7743. Torobche. Small, red, spring variety.

Nos. 142913 to 142915 were collected in Hamadan, December 22, 1940.

142913. No. 7806. Torobche. Small, red, spring variety.

142914. No. 7807. Torob. Somewhat flattened, firm-textured, sweet, mild, and said to be black winter variety.

142915. No. 7814. Torobidaraz. Red purple, watery, and said to be 12 by 1½ inches long.

Nos. 142916 to 142918 were collected in Kermanshah, December 25, 1940.

142916. No. 7854. Torobche. Small, red purple, and spring variety.

142917. No. 7859. Kalimfizl. Red purple, watery, 12 by 1½ inches long.

142918. No. 7866. Torob. Subglobose, flattened, mild, black and white winter variety.

Nos. 142919 and 142920 were collected in Qasrishirin, Kermanshah, December 28, 1940.

142919. No. 7880. Torobche. Small, crimson, and globose.

142920. No. 7898. Torob. Globose, white to half crimson, or black.

Nos. 142921 and 142922 were collected in Brujird, Luristan, January 20, 1940.

142921. No. 7960. Torobche. Small, globose, red, watery, and mild.

142922. No. 7961. Torob.

142923. No. 7372. Torob. From Tabriz, Azerbaijan, October 28, 1940. Large, long, white, winter variety.

142924 to 142932. SPINACIA OLERACEA L. Chenopodiaceae. Common spinach. Isfanaj is the vernacular name for spinach in Iran.

142924. No. 7350. From Tabriz, Azerbaijan, October 28, 1940.

142925. No. 7438. From Ardebil, Azerbaijan, November 7, 1940. Good flavor.

142926. No. 7551. From Maraghe, Azerbaijan, November 29, 1940.

142927. No. 7626. From Rezaieh, Azerbaijan, December 8, 1940.

142928. No. 7730. From Khai, Azerbaijan, December 12, 1940.

142929. No. 7783. From Hamadan, December 21, 1940.

142930. No. 7842. From Kermanshah, December 24, 1940.

142931. No. 7887. From Qasrishirin, Kermanshah, December 28, 1940.

142932. No. 7944. From Brujird, Luristan, January 20, 1941.

#### 142933 to 142936.

From Uruguay. Seeds presented by Bernardo Rosengurtt, Monzon Heber, Estación Juan Jackson. Received November 25, 1941.

142933. Axonopus affinis Chase. Poaceae.

Grass.

Grows on sandy soil on the savannas and near river banks; a good soil binder.

For previous introduction see 138974. .

142934. PANICUM BERGII Arechay. Poaceae.

Grass.

A rather densely cespitose grass 1 to 2 feet high, with bulbous rhizomes and very narrow leaves.

For previous introduction see 62045.

142935. Paspalum urvillei Steud. Poaceae.

Vasey grass.

A frost-resistant grass 5 or 6 feet in height, much relished by stock. A good grass for moist land; gives a heavy yearly yield. Native to Brazil.

For previous introduction see 139485.

142936. Phalaris minor Retz. Poaceae.

Grass.

An annual steppe grass about  $3\frac{1}{2}$  feet high.

For previous introduction see 141482.

## 142937 to 142972.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received November 27, 1941.

142937. Allium sp. Liliaceae.

No. 7695. From Rezaieh, Azerbaijan, December 8, 1940. A wild plant growing on dry slopes.

142938. Allium sp.

No. 7302. From Gazvin, October 23, 1940. A field weed 4 feet high, with flowers in dense heads 2 inches long.

142939. Astragalus sp. Fabaceae.

No. 7904. From Hamadan, December 29, 1940. A well-formed bush 2 to  $2\frac{1}{2}$  feet high; growing on edge of field.

142940. Cotoneaster sp. Malaceae.

No. 7510. From Livan, Azerbaijan, November 17, 1940. A low shrub growing among rocks on dry slopes.

142941. Cotoneaster sp.

No. 7979. From Ti, Bakhtiari, February 12, 1941. A bush, growing on dry slopes, with an open attractive habit; new branches erect, older ones drooping.

142942. Crataegus sp. Malaceae.

No. 7311. From Zenjan, Khamseh, October 24, 1940. Fruit 5-angled in cross section, clear crimson,  $\frac{1}{2}$  inch in diameter, and attractive.

142943. Crataegus sp.

No. 7521. From Maraghe, Azerbaijan, October 25, 1940. A thornless attractive bush 10 feet high, with crimson fruits  $\frac{3}{8}$  inch in diameter.

142944. CRATAEGUS SD.

No. 7311. From Zenjan, Khamseh, October 24, 1940. Fruit 5-angled in cross section, clear crimson, and attractive.

142945. Dianthus sp. Silenaceae.

No. 7406. From Bustanabad, Azerbaijan, November 1, 1940. A steppe perennial.

142946. Echinops sp. Asteraceae.

No. 7564. From Maraghe, Azerbaijan, November 30, 1940. An annual 3 feet high, growing on dry slopes, with pale-blue flower heads  $2\frac{1}{2}$  inches in diameter.

142947. Iris sp. Iridaceae.

No. 7468. From Ardebil, Azerbaijan, November 7, 1940. A clump iris 2 feet high, growing wild in meadows.

142948. Iris sp.

No. 7691. From Khai, Azerbaijan, December 10, 1940. A small clump iris 2 feet high, growing in damp meadows.

142949. Iris sp.

No. 7983. From Durud, Luristan, January 23, 1941. A clump species growing on slopes near a spring. The flower stalk is  $3\frac{1}{2}$  feet high, with large yellow flowers.

142950. Lathyrus sativus L. Fabaceae.

Bittervetch.

No. 7420. Larji. From Namin, Azerbaijan, November 6, 1940. Said to grow without irrigation.

142951. Muscari sp. Liliaceae.

No. 7303. From Qazvin, October 23, 1940. A field weed 18 feet high, with a dense spike.

142952. Nigella sativa L. Ranunculaceae.

Black cumin.

No. 7375. Sujadana. From Tabriz, Azerbaijan, October 29, 1940.

For previous introduction see 121370.

142953. Papavera sp. Papaveraceae.

No. 7509. From Livan, Azerbaijan, November 17, 1940. A free-flowering wild plant 18 inches high, growing on dry slopes, with brick-red flowers  $1\frac{1}{2}$  inches across.

142954. Rhus sp. Anacardiaceae.

No. 7304. From Qazvin, October 23, 1940. A leafy bush about 4 feet high, turning handsome red in the fall. It spreads from the roots and is suited for rather dry country. The fruit clusters are small, inconspicuously colored.

142955. RHUS Sp.

No. 7525. Sumak. From Saujbulagh, Azerbaijan, November 26, 1940.

142956. Rosa sp. Rosaceae.

Rose.

No. 7427. From Ardebil, Azerbaijan, November 6, 1940. A low wild bush 18 inches high, spreading from the roots and growing in unirrigated wheatfields.

142957. Rosa sp.

No. 7429. From Ardebil, Azerbaijan, November 6, 1940. A cultivated bush rose 6 feet high, of compact habit.

142958. Rosa sp.

No. 7484. From Sarab, Azerbaijan, November 8, 1940. A well-formed, dense, cultivated bush 8 feet high, with crimson hips  $\frac{1}{2}$  to  $\frac{3}{4}$  inch long.

142959. Rosa sp.

No. 7486. From Sarab, Azerbaijan, November 8, 1940. A low wild plant spreading from the roots, 20 inches to 2 feet high, with red hips  $\frac{1}{2}$  inch long.

142960. Rosa sp.

No. 7504. From Livan, Azerbaijan, November 15, 1940. A common shrub 3 feet high, spreading from the roots, and growing in orchards.

Nos. 142961 and 142962 were collected in Saujbulagh, Azerbaijan, November 26, 1940.

142961. Rosa sp.

No. 7523. An uncultivated bush rose 5 to 6 feet high, with crimson hips  $\frac{3}{4}$  inch long.

142962. Rosa sp.

No. 7524. A handsome bush, growing along the river, 6 feet high, with single vellow flowers.

Nos. 142963 and 142964 were collected in Maraghe, Azerbaijan, November 27, 1940.

142963. Rosa sp.

No. 7528. A bush 6 feet high, with drooping branches and crimson hips  $\frac{3}{4}$  inch long.

142964. Rosa sp.

No. 7529. A wild, free-flowering bush 4 feet high, with crimson hips  $\frac{7}{8}$  inch long. Nos. 142965 and 142966 were collected in Avech, Khamseh, December 1940.

142965. Rosa sp.

No. 7754. A bush 5 feet high, with very small hips.

142966. Rosa sp.

No. 7755. A bush 6 feet high, growing along a watercourse

Nos. 142967 and 142968 were collected in Hamadan, December 22, 1940.

142967. Rosa sp.

No. 7800. A bush 4 feet high, spreading from the roots, with crimson hips.

142968. Rosa sp.

No. 7821. A low-spreading shrub growing on mountain slopes, about 1 foot high; with very bristly fruits.

142969. Rosa sp.

No. 7823. From Kamjavar, Kermanshah, December 23, 1940. A cultivated bush 6 feet high.

142970. Rosa sp.

No. 7911. From Brujird, Luristan, January 20, 1941. A cultivated bush about 7 feet high, of unusual habit. About a dozen sturdy stalks rise from the root with small lateral stems. The flowers are borne at the summit, on rather heavy branches, and in clusters up to 5.

142971. Sesamum indicum L. Pedaliaceae.

No. 7639. Kunjet. From Rezaieh, Azerbaijan, December 8, 1940.

142972. Түрна sp. Турһасеае.

No. 7690. From Khai, Azerbaijan, December 10, 1940. A narrowleaved ( $\frac{1}{2}$  to  $\frac{3}{4}$  inch) plant, up to 5 or 6 feet high, with pale-brown fruiting spikes 10 inches long and 1 inch thick.

### 142973 to 142982.

From the Union of South Africa. Seeds presented by the Prinshof Grass Breeding Station, Pretoria, Transvaal. Received November 22, 1941.

142973. Andropogon gayanus var. squamulatus (Hochst.) Stapf. Poaceae.

No. 885. From Southern Rhodesia.

142974. Brachiaria Brizantha (Hochst.) Stapf. Poaceae.

No. 704. From Zululand. A tall, tropical African perennial grass up to 6 feet high, with a short stout rhizome, erect stems, and very narrow leaves up to 15 inches long. It is one of the most promising indigenous grasses for forage there.

For previous introduction see 77474.

142975. Bromus Leptocladus Nees. Poaceae.

Grass.

No. 958. From Basutoland.

142976. Glycine Javanica L. Fabaceae.

No. 1448. A wide-climbing perennial vine native to Asia and Africa, where it is used as a cover crop. The slender stems are silky pubescent, the trifoliolate leaves have ovate leaflets 2 to 4 inches long, finely pubescent beneath, and the small brighted flowers are in axillary racemes 3 to 6 inches long.

For previous introduction see 133088.

142977. DIGITARIA sp. Poaceae.

Grass.

No. 336. From Mlattele Location.

142978. DIGITARIA Sp.

No. 5. Gomoti River, Ngamiland.

142979. DIGITARIA Sp.

No. 375. From Malmaniesoog, Bechuanaland.

142980. Panicum minus var. Planifolium Stapf. Poaceae.

No. 84. From Cape Province.

For previous introduction see 28653.

142981. Panicum sp. Poaceae.

No. 427. From Olifants River.

142982. Setaria flabellata Stapf. Poaceae.

No. 347. From Umfolosi River, Zululand.

## 142983 to 142992. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 4, 1941.

142983. 21 N.G.  $2 \times C.P.$  1165.

142984. E.K.  $28 \times C.P.$  1165.

142985. La. Purple  $\times$  C.P. 36-155.

142986. La. Striped × 28 N.G. 104.

142987. N.H.  $2 \times 28$  N.G. 253.

142988. P.R.  $807 \times C.P. 1165$ .

142989. P.R.  $900 \times C.P.$  1165.

142990. P.O.J. 2940 × D 74.

142991. P.O.J. 2878  $\times$  C.P. 31-511.

142992. Rayada × 28 N.G. 218.

## 142993 to 142999.

From California. Seeds presented by Dr. T. H. Goodspeed, University of California Botanical Garden, Berkeley. Received December 4, 1941.

142993. Alstroemeria violacea Philippi. Amaryllidaceae.

No. 1615. Produced from seed originally from Chile.

For previous introduction see 139511.

142994. Begonia micranthera Griseb. Begoniaceae.

No. 484.

142995. Begonia Clarkei Hook. f.

No. 488.

142996. Begonia veitchii Hook. f.

No. 481.

142997. Begonia micranthera var. fimbriata Smith and Schub.

No. 480.

142998. Begonia pleiopetala A. DC.

No. 489.

142999. Begonia micranthera var. Hieronymi Smith and Schub.

No. 482.

# 143000 to 143138. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 5, 1941.

Hinduana is the vernacular name for watermelon in Iran.

143000. No. 7294. From Tehran, October 18, 1940. Fruit sea green, 12 inches long and 6 inches in diameter; flesh pink.

Nos. 143001 to 143006 were collected in Sharifabad, Tehran, October 22, 1940.

143001. No. 7295. Fruit globose, grass green, with darker narrow stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.

143002. No. 7296. Fruit globose, 9 inches in diameter, pea green with stripes of black green; flesh pink and good.

- 143003. No. 7298. Fruit globose, 9 inches in diameter; sea green, with stripes of darker green; rind ½ inch thick; flesh pink.
- 143004. No. 7299. Fruit globose, 9 inches in diameter, sea green, with darker stripes; rind  $\frac{1}{4}$  inch thick; flesh pink.
- 143005. No. 7300. Fruit globose, 8 inches in diameter, grass green, with black stripes; rind ½ inch thick; flesh orange pink.
- 143006. No. 7301. Fruit 12 inches long and 6 inches in diameter, grass green with darker stripes; rind ½ inch thick; flesh deep pink. Said to be of high quality. Unirrigated.
- 143007. No. 7308. From Qazvin, October 24, 1940. Fruit globose, 9 inches long, grass green with black-green stripes; rind ½ inch thick; flesh pink and sweet.
  - Nos. 143008 and 143009 were collected in Zenjan, Khamseh, October 24, 1940.
- 143008. No. 7315. Fruit globose, 8 inches long, grass green, with narrow black stripes; rind ¼ inch thick; flesh bright yellow.
- 143009. No. 7316. Fruit globose,  $7\frac{1}{2}$  inches long, and grass green, with white-green leopard spots; rind  $\frac{1}{4}$  inch thick; flesh deep rose.
  - Nos. 143010 to 143016 were collected in Tabriz, Azerbaijan, October 26, 1940.
- 143010. No. 7323. Fruit 7 inches long and 15½ inches in diameter, sea green, with irregular chain stripes of grass green; rind ½ inch thick; flesh handsome, deep green.
- 143011. No. 7332. Fruit 15 inches long and 8 inches in diameter, green white, with chain stripes of grass green; rind ½ inch thick; flesh yellow, sweet.
- 143012. No. 7380.
- 143013. No. 7392. Fruit globose, 9 inches long, grass green with broad stripes of black green; rind ¼ inch thick; flesh deep pink.
- 143014. No. 7394. Fruit globose, 11 inches long, and sea green, with large spots of darker green; rind ½ inch thick; flesh deep pink.
- 143015. No. 7398. Fruit globose, 7 inches long, and sea green, with narrow dark stripes; rind ½ inch thick; flesh rose.
- 143016. No. 7405. Fruit globose, 9 inches long, dark green, with irregular faintly blotched paler stripes; rind ½ inch thick; flesh yellow.
  - Nos. 143017 and 143018 were collected in Sarab, Azerbaijan, October 1, 1940.
- 143017. No. 7407. Fruit, 12 inches long, and 7 inches in diameter, pea green with black-green stripes; rind  $\frac{1}{4}$  inch thick; flesh yellow.
- 143018. No. 7408. Fruit globose, 7 inches long, pea green, with darker stripes; rind 1/3 inch thick; flesh pink.
- 143019. No. 7447. From Ardebil, Azerbaijan, November 7, 1940.
  - Nos. 143020 to 143026 were collected in Sarab, Azerbaijan, November 8, 1940.
- 143020. No. 7466.
- 143021. No. 7472. Fruit 10 inches long and 7 inches in diameter, green white, with irregular blotches of grass green; rind ¼ inch thick; flesh apricot yellow.
- 143022. No. 7474. Fruit small, globose, 5 inches in diameter, grass green, with numerous large and small stripes of green white; rind ¼ inch thick; flesh yellow.
- 143023. No. 7476. Fruit 6 inches long and 4 inches in diameter, grass green with pea-green stripes; rind ¼ inch thick; flesh yellow.
- 143024. No. 7477. Fruit globose, 7 inches in diameter, green white with irregular chain stripes of grass green; rind ½ inch thick; flesh rose.
- 143025. No. 7478. Fruit globose, 8 inches long, pea green, vermiculated darker; rind ½ inch thick; flesh rose.
- 143026. No. 7480. Fruit globose, 7 inches in diameter, pea green, faintly clouded darker; rind \(^3\)\% inch thick; flesh yellow.

Nos. 143027 and 143028 were collected in Tabriz, Azerbaijan, November 12, 1940.

143027. No. 7494.

143028. No. 7516. Fruit 15 inches long and 8 inches in diameter, sea green, with handsome darker chain stripes; rind  $\frac{1}{2}$  inch thick; flesh pink.

Nos. 143029 to 143032 were collected in Maraghe, Azerbaijan, November 28, 1940.

143029. No. 7532. Fruit globose, 8 inches long, sea green; rind ½ thick; flesh pink.

143030. No. 7533. Fruit 11 inches long and 6 inches in diameter, dark green; rind ½ inch thick; flesh yellow; good texture and keeping qualities, but low sugar.

143031. No. 7534. Fruit 10 inches long and 5 inches in diameter, grass green with darker vermiculations; rind  $\frac{3}{8}$  inch thick; flesh yellow.

143032. No. 7547.

143033. No. 7514. From Tabriz, Azerbaijan, November 22, 1940. Fruit globose, 8 inches long, sea green, reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh pink.

Nos. 143034 to 143037 were collected in Maraghe, Azerbaijan, November 30, 1940.

143034. No. 7570. Fruit globose, 8 inches long, grass green, with narrow black stripes; rind ½ inch thick; flesh solid, apricot-tinted.

143035. No. 7571. Fruit globose, 8 inches long, sea green, with chain stripes of grass green; rind ¼ inch thick, flesh solid, yellow; good keeper.

143036. No. 7572. Fruit 10 inches long and 5 inches in diameter, sea green with broad netting of grass green; rind 3% inch thick; flesh pink, very sweet.

143037. No. 7573. Fruit globose, 10 inches long, pea green with narrow grassgreen stripes; rind ¼ inch thick; flesh firm, yellow.

Nos. 143038 to 143040 were collected in Miyandab, Azerbaijan, December 2, 1940.

143038. No. 7574. Fruit 6 inches long, and 12 inches in diameter, grass green, reticulated darker; rind \(^3\)% inch thick; flesh yellow, sweet; good keeper.

143039. No. 7575. Fruit 6 inches long, and 12 inches in diameter, sea green, with broad irregular grass-green stripes; rind  $\frac{1}{2}$  inch thick; flesh pink, low in sugar.

143040. No. 7577. Fruit 12 inches long and 6 inches in diameter, grass green, with narrow dark stripes; rind ½ inch thick; flesh yellow; good keeper.

Nos. 143041 and 143042 were collected in Saujbulagh, Azerbaijan, December 5, 1940.

143041. No. 7592. Fruit globose, 10 inches long, sea green, with grass-green stripes; rind ½ inch thick; flesh bright pink; good keeper.

113042. No. 7593. Fruit 12 inches long, and 7 inches in diameter, black green; rind ¼ inch thick; flesh yellow; good keeper.

Nos. 143043 to 143065 were collected in Rezaieh, Azerbaijan, December 1940.

143043. No. 7599. Fruit 11 inches long and 6 inches in diameter; grass green, vermiculated darker; rind \% inch thick; flesh yellow, firm; good keeper.

143044. No. 7600. Fruit 12 inches long and 6 inches in diameter; sea green; rind ½ inch thick; flesh yellow; good keeper.

143045. No. 7601. Fruit globose, 8 inches long, pea green, vermiculated darker; rind  $\frac{1}{2}$  inch thick; flesh pink; good keeper.

143046. No. 7602. Fruit globose, 8 inches long, pea green, with grass-green stripes; 3/8 inch thick; flesh pink; good keeper.

143047. No. 7604. Fruit globose, 8 inches long, sea green, with grass-green stripes; rind  $\frac{1}{2}$  inch thick; flesh pink.

143048. No. 7605. Fruit 12 inches long and 6 inches in diameter, grass green, reticulated black; rind ½ inch thick; flesh yellow; good keeper.

- 143049. No. 7606. Fruit 10 inches long and 6 inches in diameter, grass green, with broadly and irregularly scalloped stripes of pea green; rind ½ inch thick; flesh yellow.
- 143050. No. 7614. Fruit 12 inches long and 7 inches in diameter, sea green; rind 34 inch thick; flesh pink changing to yellow at rind, firm and sweet.
- 143051. No. 7636. Said to be a winter variety.
- 143052. No. 7637. Said to be a summer variety.
- 143053. No. 7642. Fruit globose, 10 inches long, black green; rind ½ inch thick; flesh pink; good keeper.
- 143054. No. 7648. Fruit 12 inches long and 7 inches in diameter, sea green; rind ½ inch thick; flesh pink; good keeper.
- 143055. No. 7649. Fruit sea green, 11 inches long and 6 inches in diameter; rind ½ inch thick; flesh pink; good keeper.
- 143056. No. 7650. Fruit globose, 8 inches long, black green; rind ½ inch thick; flesh yellow; good keeper.
- 143057. No. 7651. Fruit globose, 9 inches long, black green, with pea-green stripes; rind ¼ inch thick; flesh bright rose.
- 143053. No. 7652. Fruit globose, 7 inches long, grass green with black stripes; rind ½ inch thick; flesh yellow; good keeper.
- 143059. No. 7653. Fruit globose, 9 inches long, grass green, with irregularly spaced and much broken blotches of pea green; rind ½ inch thick; flesh pink; good keeper.
- 143060. No. 7654. Fruit globose, 6 inches long, and sea green; rind 3% inch thick; flesh yellow, fair quality; good keeper.
- 143061. No. 7655. Fruit 13 inches long and 7 inches in diameter, grass green, clouded paler; rind ½ inch thick; flesh bright yellow, fair quality; good keeper.
- 143062. No. 7658. Fruit 8 inches long and 5½ inches in diameter, grass green with stripes darker; rind ¼ inch thick; flesh yellow, fair quality; good keeper.
- 143063. No. 7664. Fruit globose, 7 inches long; black green with pea-green stripes; rind \(^3\)\(^8\) inch thick; flesh pink, good quality; good keeper.
- 143064. No. 7656. Fruit 10 inches long and 6½ inches in diameter, grass green, with narrow darker green stripes; rind ¾ inch thick; flesh bright yellow, good quality; good keeper.
- 143065. No. 7674.
  - Nos. 143066 to 143085 were collected in Khai, Azerbaijan, December 1940.
- 143066. No. 7692. Fruit globose, 8 inches long, grass green, vermiculated and narrowly striped black; rind 3% inch thick; flesh pink.
- 143067. No. 7698. Fruit globose, 8 inches long, grass green, vermiculated, and narrowly striped black; rind ½ inch thick; flesh bright yellow.
- 143068. No. 7699. Fruit 12 inches long and 6 inches in diameter, grass green, rind ½ inch thick; flesh yellow, fair quality.
- 143069. No. 7700. Fruit globose, 9 inches long, pea green, with darker rib lines; rind \(^3\)\(^8\) inch thick; flesh yellow, good quality.
- 143070. No. 7701. Fruit globose, 8 inches long, sea green, with black specks; rind  $\frac{3}{6}$  inch thick; flesh cream, fair quality.
- 143071. No. 7703. Fruit globose, 8 inches long, grass green, with irregular spots of sea green; rind ¼ inch thick; flesh pink, fair quality.
- 143072. No. 7704. Fruit subglobose, 6 inches long, grass green, spotted sea green; rind  $\frac{1}{4}$  inch thick; flesh rose, good quality.
- 143073. No. 7705. Fruit subglobose, 8 inches long, grass green, with pea-green spots; rind  $\frac{3}{8}$  inch thick; flesh deep pink, good quality.
- 143074. No. 7706. Fruit globose, 9 inches long, pea green, vermiculated darker, with irregular chain stripes of grass green; rind \(^3\)\(^8\) inch thick; flesh apricot yellow, good quality.

- 143075. No. 7707. Fruit globose, 10 inches long, pea green, with narrow stripes of darker green; rind ¼ inch thick; flesh pale apricot pink, good quality.
- 143076. No. 7708. Fruit globose, 10 inches long, black-green stripes and vermiculated grass green; rind ½ inch thick; flesh pale apricot, good quality.
- 143077. No. 7709. Fruit 13 inches long and 7 inches in diameter, black green with paler stripes; rind  $\frac{1}{2}$  inch thick; flesh bright yellow, good quality.
- 143078. No. 7710. Fruit globose, 10 inches long, grass green, vermiculated darker; rind \(^3\)\(^8\) inch thick; flesh apricot yellow, good quality.
- 143079. No. 7711. Fruit 11 inches long and 8 inches in diameter, with broad irregular stripes of black green and cloudy pea green; rind ½ inch thick; flesh yellow, tinted apricot, fair quality.
- 143080. No. 7713. Fruit globose, 8 inches long, black green; rind 1/4 inch thick; flesh apricot pink, good quality.
- 143081. No. 7714. Fruit globose, 7 inches long, sea green, vermiculated darker; rind \(^3\)% inch thick; flesh pink, good quality.
- 143082. No. 7715. Fruit globose, grass green, vermiculated darker; rind  $\frac{1}{4}$  inch thick; flesh yellow, fair quality.
- 143083. No. 7716. Fruit globose, 9 inches long, alternating sea-green and grass-green stripes; rind ¼ inch thick; flesh red.
- 143084. No. 7718. Fruit globose, 10 inches long, grass green vermiculated and narrowly striped darker; rind  $\frac{3}{8}$  inch thick; flesh cream, fair quality.
- 143085. No. 7745.
- 143086. No. 7746.
  - Nos. 143087 to 143096 were collected in Hamadan, December 1940.
- 143087. No. 7756. Fruit globose, 11 inches long, sea green, with darker obseure stripes; rind ¼ inch thick; flesh pink.
- 143083. No. 7757. Fruit subglobose, 10 inches long, sea green, with obscure darker stripes; rind \(^3\)% inch thick; flesh pink, good quality.
- 143089. No. 7761. Fruit 12 inches long and 5½ inches in diameter, pea green, vermiculated darker; rind ¾ inch thick; flesh pink. Said to be unirrigated.
- 143090. No. 7762. Fruit 9 inches long and 6 inches in diameter, grass green, clouded darker; rind ½ inch thick; flesh apricot pink, good quality. Said to be unirrigated.
- 143091. No. 7763. Fruit 11 inches long and 6 inches in diameter, pea green obscurely striped and vermiculated darker; rind ½ inch thick; flesh pale pink, good quality. Said to be unirrigated.
- 143092. No. 7764. Fruit globose, 9 inches long, pea green reticulated darker, with rib lines of the same. Rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
- 143093. No. 7765. Fruit globose, 8 inches long, pea green, vermiculated darker, with scattered uneven incomplete darker ribs; rind 3/8 inch thick; flesh pink, good quality.
- 143094. No. 7766. Fruit globose, 9 inches long, sea green, with stripes of darker green; rind ¼ inch thick; flesh pink, good quality.
- 143095. No. 7767. Fruit subglobose, 8 inches long, grass green, mottled paler; rind ¼ inch thick; flesh rose, fair quality.
- 143096. No. 7769. Fruit globose, 10 inches long, pea green, vermiculated and irregularly striped darker. Rind 3% inch thick; flesh red.
- 143097. No. 7279. From Sharifabad, Tehran, October 22, 1940. Fruit globose, 9 inches long, pea green, reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh deep pink, good quality.
  - Nos. 143098 to 143103 were collected in Hamadan, December 1940.

- 143098. No. 7771. Fruit 13 inches long and  $6\frac{1}{2}$  inches in diameter, pea green, clouded darker; rind  $\frac{1}{2}$  inch thick; flesh pink, good quality.
- 143099. No. 7772. Fruit globose, 8 inches long, sea green, broadly, irregularly striped grass green; rind 3% inch thick; flesh pink, good quality.
- 143160. No. 7773. Fruit 12 inches long and 6 inches in diameter; grass green, marked paler; rind ½ inch thick; flesh pink, good quality. Said to be unirrigated.
- 143101. No. 7770. Fruit globose, 8 inches long, pea green, marbled darker, with a few large elongate splotches of grass green; rind \(^3\)/<sub>8</sub> inch thick; flesh pink, good quality.
- 143102. No. 7778.
- 143103. No. 7818.
- 143104. No. 7819. Probably from Azerbaijan.
  - Nos. 143105 to 143117 were collected in Kermanshah, December 24, 1940.
- 143165. No. 7825. Fruit 18 inches long and 10 inches in diameter, grass green, with broken black stripes; rind ¼ inch thick; flesh pink.
- 143166. No. 7826. Fruit 11 inches long and 4½ inches in diameter, pea green reticulated darker; rind ¼ inch thick; flesh pink, good quality.
- 143167. No. 7828. Fruit 12 inches long and 6 inches in diameter, pea green, vermiculated darker; rind ¼ inch thick; flesh pink, very good quality.
- 143168. No. 7829. Fruit 12 inches long and 6 inches in diameter, pea green with darker blotches; rind  $\frac{3}{8}$  inch thick; flesh pink, sweet.
- 143109. No. 7832. Fruit 13 inches long and 7 inches in diameter, sea green, with darker stripes; rind ½ inch thick; flesh pink, good quality.
- 143110. No. 7833. Fruit 13½ inches long and 6½ inches in diameter, pea green, clouded darker; rind 3% inch thick; flesh pink, fair quality.
- 143111. No. 7835. Fruit 12 inches long and 8 inches in diameter, black green; rind  $\frac{3}{8}$  inch thick; flesh red.
- 143112. No. 7836. Fruit globose, 8 inches long, sea green, with narrow darker stripes; rind \(^3\)% inch thick; flesh apricot pink, good quality.
- 143113. No. 7837. Fruit globose, 9 inches long, pea-green and sea-green stripes, reticulated darker; rind ¾ inch thick; flesh pink, good quality.
- 143114. No. 7838. Fruit 15 inches long and 8 inches in diameter, grass green; rind \(^3\)\(^8\) inch thick; flesh rose, good quality.
- 143115. No. 7840. Fruit 13 inches long and  $6\frac{1}{2}$  inches in diameter, grass green, with irregular faint stripes, paler and reticulated darker; rind  $\frac{1}{4}$  inch thick; flesh handsome rose, good quality.
- 143116. No. 7864.
- 143117. No. 7865.
- 143118. No. 7875. Fruit subglobose, about 2¾ inches long, smooth, and yellow; growing wild on the dry hills.
- 143119. No. 7885. From Qasrishirin, Kermanshah, December 28, 1940.
  - Nos. 143120 to 143123 were collected in Davan, Luristan, January 20, 1941.
- 143120. No. 7905. Fruit subglobose, 8 inches long, grass green with narrow stripes of black; rind ¼ inch thick, flesh yellow, fair quality. Good keeper. Said to be irrigated.
- 143121. No. 7906. Fruit globose, 8 inches long, pea green; rind 3/8 inch thick; flesh red.
- 143122. No. 7907. Fruit globose, 8 inches long, grass green, reticulated darker; rind ¼ inch thick; flesh pink, fair quality. Good keeper. Said to be irrigate
- 143123. No. 7908. Fruit globose, pea green, vermiculated darker; rind 3/8 inch thick; flesh red. Said to be irrigated.

Nos. 143124 to 143138 were collected in Brujird, Luristan, January 20, 1941.

143124. No. 7913. Fruit 9 inches long and 5 inches in diameter, black green; rind ¼ inch thick; flesh pink, fair quality. Good keeper.

143125. No. 7914. Fruit grass green, marbled black, 9 inches long, globose; rind ¼ inch thick; flesh pink, fair quality. Good keeper.

143126. No. 7915. Fruit black green, with irregular, paler stripes, globose, 8 inches long; rind ¼ inch thick; flesh yellow, tinted apricot, good quality. Good keeper.

143127. No. 7916. Fruit globose, 7 inches long, grass green, marbled black; rind 3% inch thick; flesh pink, fair quality. Good keeper.

143128. No. 7917. Fruit globose, 8 inches long, pea green, with broad stripes of grass green; rind 3% inch thick; flesh pink, good quality. Good keeper.

143129. No. 7921. Fruit globose, 8 inches long, sea green with cloudy stripes darker; rind 1/4 inch thick; flesh pink, fair quality. Good keeper.

143130. No. 7922. Fruit globose, 8 inches long, sea green; rind 3/8 inch thick; flesh apricot, fair quality. Good keeper.

143131. No. 7923. Fruit globose, 9 inches long, sea green, with narrow black stripes; rind ½ inch thick; flesh red.

143132. No. 7924. Fruit globose, 9 inches long, pea green with narrow grass-green stripes; rind  $\frac{3}{8}$  inch thick; flesh pink, fair quality. Good keeper.

143133. No. 7925. Fruit 11 inches long and 6 inches in diameter, grass green; rind % inch thick; flesh pink, fair quality. Good keeper.

143134. No. 7926. Fruit 10 inches long and 6 inches in diameter, pea green, vermiculated darker; rind 1/4 inch thick; flesh rose, fair quality. Good keeper.

143135. No. 7927. Fruit globose, 8 inches long, alternate stripes of black and pea green; rind 3% inch thick; flesh pink, good quality. Good keeper.

143136. No. 7930. Fruit globose, 9 inches long, sea green, with faint, narrow, irregular darker stripes; rind 3% inch thick; flesh pink, good quality. Good keeper.

143137. No. 7950.
143138. No. 7973. Fruit globose, 8 inches long, sea green, with narrow stripes of grass green; rind ¼ inch thick; flesh pink, good quality. Good keeper.

# **143139 to 143142.** SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 12, 1941.

**143139.** Barbados White Sport × 28 N.G. 253.

**143140.**  $P.R. 900 \times C.P. 36-159.$ 

143141. P.R.  $900 \times C.P.$  1161.

**143142.** Gestraept Preanger × 28 N.G. 104.

# 143143. Solanum tuberosum L. Solanacae.

Potato.

From Peru. Tubers collected by B. Y. Morrison, Bureau of Plant Industry, United States Department of Agriculture. Received December 17, 1941.

Bought in market at Yurimaguas, Peru.

# 143144. Canangium odoratum (Lam.) Baill. Annonaceae. Ylang-ylang.

From the Canal Zone. Seeds presented by the Experiment Gardens, Summit. Received December 12, 1941.

A large quick-growing tree, 60 to 80 feet high, native to the Philippines, Guam, and Java. The large greenish-yellow flowers are strongly scented and yield by distillation the popular perfume, ylang-ylang.

For previous introduction see 94183.

# 143145. Copernicia sp. Phoenicaceae.

Sara palm.

From Colombia. Seeds presented by M. J. Rivero, Agricultural Experiment Station, Palmira. Received December 18, 1941.

The name "sara" has been associated with Copernicia sanctae-marthae, described by Beccari from the Province of Santa Marta. This is apparently distinguished only by differences in flower structure from C. tectorum, of Venezuela, which is a palm growing to at least 25 or 30 feet high.

# 143146 to 143149. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 16, 1941.

143146. Badilla × 28 N.G. 219.

143147. La. Purple × Hinds Special.

143148. La. Purple X Tom Thumb corn.

143149. Simpson × N.G. 253.

# 143150 to 143169. ALEURITES MONTANA (Lour.) Wilson. Euphorbiaceae. Mu-oil tree.

From China. Seeds and fruits presented by H. C. Brownell, Lingnan University, Hong Kong. Received December 5, 1941.

A tree with oil-producing seeds, closely allied to the tung tree; for use in breeding experiments. Native to southern China.

143150. No. 1.	143160. No. 7.
143151. No. 2.	<b>143161.</b> No. 8.
143152. No. 3.	<b>143162.</b> No. 9.
143153. No. 4.	<b>143163.</b> No. 10.
143154. No. 1.	143164. No. 24.
143155. No. 2.	143165. No. 67.
143156. No. 3.	143166. No. 85.
143157. No. 4.	143167. No. 107.
143158. No. 5.	<b>143168.</b> No. 179.
143159. No. 6.	143169. No. 194.

For previous introduction see 136472.

## 143170 to 143195.

From Canada. Trees purchased from Stone & Wellington, Fonthill Nurseries, Toronto, Ontario. Received December 5, 1941.

143180. Lobo. 143192. Titus.

143181. Lowland Raspberry. 143193. Windsor Chief.

143170 to 143193. Malus sylvestris Mill. Malaceae. Apple.

 143170. Atlas.
 143182. Macoun.

 143171. Baxter.
 143183. Macross.

 143172. Cranberry Pippin.
 143184. Milton.

143173. Crimson Beauty. 143185. Ontario.

143174. Crimson Gravenstein. 143186. Peerless. 143175. Donald. 143187. Peter.

143176. Early McIntosh.
143188. Red Gravenstein.
143177. Early Strawberry.
143189. Scarlet Pippin.

143178. Jersey Sweet.

143190. Sweet Bough.

143179. Keetosh.

143191. Tetofsky.

143194. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot

Laithwaite.

143195. PRUNUS Sp. Victor cherry.

# 143196 to 143265.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 6, 1941.

143196 to 143249. Cucumis melo L. Cucurbitaceae.

Muskmelon.

Kharbuza is the vernacular name for the muskmelon in Iran.

Nos. 143196 and 143197 were collected in Qazvin, October 24, 1940.

- 143196. No. 7306. Fruit obovoid, 8 inches long, golden yellow, smooth; flesh cream white,  $1\frac{1}{2}$  inches thick, good quality.
- 143197. No. 7307. Fruit football-shaped, 8 inches long, yellow, coarsely netted; flesh 1½ inches thick, cream white, good quality. Good keeper.
  - Nos. 143198 to 143203 were collected in Zenjan, Khamseh, October 24, 1940.
- 143198. No. 7309. Fruit 12 inches long and 7 inches in diameter, heavily netted, yellow, firm; flesh 2½ inches thick, cream white, good quality.
- 143199. No. 7310. Fruit 14 inches long and 6 inches in diameter, heavily netted, yellow; flesh 2 inches thick, cream white, sweet, watery. Good keeper.
- 143200. No. 7312. Fruit obovoid, 9 inches long, yellow, coarsely netted; flesh  $1\frac{3}{4}$  inches thick, pale salmon, good quality. Good keeper.
- 143201. No. 7313. Fruit ovoid, 11 inches long, yellow, with elongate blotches of dark green, coarsely netted; flesh 1¾ inches thick, greenish white, good quality. Good keeper.
- 143202. No. 7314. Fruit globose, 8 inches long, yellow, netted; flesh  $1\frac{3}{4}$  inches thick, white, rather soft, sweet, good quality. Good keeper.
- 143203. No. 7317. Fruit ovoid, 7 inches long, gold, furrowed, not netted; flesh  $1\frac{1}{4}$  inches thick, white, sweet. Good keeper.
  - Nos. 143204 to 143215 were collected in Tabriz, Azerbaijan, October 1940.
- 143204. No. 7327. Fruit subglobose, 7 inches long, pale yellow, netted; flesh white, good quality, 13/4 inches thick. Good keeper.
- 143205. No. 7328. Fruit subglobose, 7 inches long, deep yellow, netted; flesh white, 1½ inches thick, good quality. Good keeper.
- 143206. No. 7329. Fruit ovoid, 8 inches long, deep yellow, netted; flesh  $1\frac{1}{2}$  inches thick, white, good quality. Good keeper.
- 143207. No. 7335. Fruit ovoid, 7 inches long, heavily netted, green yellow, blotched darker, with broad, pale rib stripes; flesh 1½ inches thick, green, good quality. Good keeper.
- 143208. No. 7336. Fruit ovoid, 7 inches long, heavily netted, yellow, with green dots and dark-green blotches; flesh 1½ inches thick, cream, good quality. Good keeper.
- 143209. No. 7337. Fruit ovoid, 7 inches long, smooth, golden yellow; flesh 1¼ inches thick, white, good quality. Good keeper.
- 143210. No. 7338. Fruit ovoid, 7 inches long, smooth, yellow, spotted green; flesh  $1\frac{1}{2}$  inches thick, white. Good keeper.
- 143211. No. 7339. Fruit subglobose, 6 inches long, golden brown, heavily netted, with broad indented ribs; flesh 1½ inches thick, white, good quality. Good keeper.

143212. No. 7340. Fruit flattened, 6 inches long and 7½ inches in diameter, heavily netted, golden yellow with green splotches; flesh 1¼ inches thick, white. Good keeper.

143213. No. 7341. Fruit subglobose, 7 inches long, smooth, yellow with patches of green; flesh 1½ inches thick, green white, insipid. Good keeper.

143214. No. 7391.

143215. No. 7404. Said to be a large melon kept only for its perfume.

143216. No. 7449. From Ardebil, Azerbaijan, November 7, 1940.

Nos. 143217 and 143218 were collected in Sarab, Azerbaijan, November 8, 1940.

143217. No. 7459.

143218. No. 7479. Fruit ovoid, 8 inches long, golden yellow, spotted green, coarsely netted; flesh green, 2 inches thick, good quality.

Nos. 143219 to 143222 were collected in Tabriz, Azerbaijan, November 12, 1940.

143219. No. 7495. Said to be late.

143220. No. 7496. Said to be early.

143221. No. 7497. Said to be early.

143222. No. 7515. Fruit flattened, 8 inches long and 6 inches in diameter, coarsely netted, gold with broken bands of green; flesh 1½ inches thick. Good keeper.

143223. No. 7519. From Azarshah, Azerbaijan, November 24, 1940. Fruit ovoid, 8 inches long, gold, furrowed; flesh 1 inch long, pale salmon. Good keeper.

Nos. 143224 to 143227 were collected in Maraghe, Azerbaijan, November 28, 1940.

143224. No. 7536. Fruit ovoid, 8 inches long, gold, heavily netted; flesh 2 inches thick, white, fair quality. Good keeper.

143225. No. 7537. Fruit globose, 7 inches long, gold, netted; flesh 2 inches thick, white, good quality. Good keeper.

143226. No. 7538. Fruit obovoid, 10 inches long, green with elongated blotches of yellow; flesh 1½ inches thick, white.

143227. No. 7541.

143228. No. 7580. From Saujbulagh, Azerbaijan, December 3, 1940. Fruit globose, 8 inches long, orange with deeply indented ribs, not netted; flesh pale orange, 1¾ inches thick, good quality. Good keeper.

Nos. 143229 to 143234 weee collected in Rezaieh, Azerbaijan, December 7, 1940.

143229. No. 7611. Fruit globose, 5 inches long, gold, heavily indented ribs, not netted; flesh  $1\frac{1}{2}$  inches thick, green.

143230. No. 7632.

143231. No. 7641. Fruit obovoid, 12 inches long, gold, netted; flesh 1½ inches thick, cream. Good keeper.

143232. No. 7646. Fruit globose, 6 inches long, coarsely netted, yellow with irregularly spaced long blotches grass green; flesh white, 1½ inches thick.

143233. No. 7647. Said to be a summer variety.

143234. No. 7675.

Nos. 143235 to 143238 were collected in Khai, Azerbaijan, December 10, 1940.

143235. No. 7693. Fruit subglobose, 12 inches long, heavily furrowed, irregularly ribbed; flesh salmon yellow, 2 inches thick.

143236. No. 7694. Fruit elongated, 14 inches long, coarsely netted, gold with dark-green blotches; flesh 1¾ inches thick, salmon.

143237. No. 7696. Fruit ovoid, gold, not netted, 8 inches long; flesh 1½ inches thick, salmon.

143238. No. 7732. Said to be a summer variety.

143239. No. 7751. Fruit subglobose, 6 inches long, golden brown, with indented ribs of a paler shade, sparsely netted; flesh 1½ inches thick, good quality. Good keeper.

Nos. 143240 and 143241 were collected in Hamadan, December 22, 1940.

143240. No. 7796.

143241. No. 7801. Fruit 14 inches long and 7 inches in diameter, pale yellow' heavily netted; flesh 3 inches thick, cream, tender, sweet.

143242. No. 7849. From Kermanshah, December 25, 1940.

Nos. 143243 and 143244 were collected in Qasrishirin, Kermanshah, December 28, 1940.

143243. No. 7886.

143244. No. 7899. Said to be a small, sweet, early melon.

Nos. 143245 to 143249 were collected in Brujird, Luristan, January 20, 1941.

143245. No. 7912. Fruit subglobose, 7 inches long, smooth, golden yellow; flesh 1½ inches thick, white.

143246. No. 7919. Fruit elongated, 12 inches long, golden yellow, coarsely and sparsely netted; flesh 1½ inches thick, white, good quality. Good keeper.

143247. No. 7920. Fruit elongated, 11 inches long, smooth, golden yellow; flesh 1½ inches thick, white, good quality.

143248. No. 7945. Said to be round.

143249. No. 7947. Said to be long.

143250 to 143265. Cucumis sativus L. Cucurbitaceae. Cucu

Cucumber

**143250.** No. 7378. From Tabriz, Azerbaijan, October 29, 1940.

143251. No. 7431. From Ardebil, Azerbaijan, November 7, 1940.

Nos. 143252 and 143253 were collected in Tabriz, Azerbaijan, November 12, 1940.

143252. No. 7498.

143253. No. 7499.

143254. No. 7548. From Maraghe, Azerbaijan, November 28, 1940.

143255. No. 7608. From Saujbulagh, Azerbaijan, December 4, 1940.

143256. No. 7628. From Rezaieh, Azerbaijan, December 8, 1940.

143257. No. 7727. From Khai, Azerbaijan, December 12, 1940.

Nos. 143258 and 143259 were collected in Hamadan, December 22, 1940.

143258. No. 7788.

143259. No. 7799.

Nos. 143260 and 143261 were collected in Kermanshah, December 24, 1940.

143260. No. 7844.

143261. No. 7862.

Nos. 143262 and 143263 were collected in Qasrishirin, Kermanshah, December 28, 1940.

143262. No. 7889.

143263. No. 7890.

Nos. 143264 and 143265 were collected in Brufjird, Luristan, January 21, 1941.

143264. No. 7939.

143265. No. 7940.

### 143266 to 143271. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Canal Zone Experiment Gardens, Pedro Miguel, Summit. Received December 9, 1941.

143266. Caña Blanca × C.P. 36-142.

143267. Gestreaft Preanger  $\times$  Sac. Spon. Kloet.

143268. 28 N.G. 97 × Toledo.

143269.  $Imp. 853 \times D 74$ .

143270. La. Purple × 28 N.G. 218.

143271. D 74 selfed.

## 143272 to 143331.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 10, 1941.

143272 to 143285. Cucurbita Maxima Duchesne. Cucurbitaceae. Squash.

Kaduetambal is the vernacular name for squash in Iran.

- 143272. No. 7402. From Tabriz, Azerbaijan, October 31, 1940. Fruit flattened, 11 inches long and 7 inches in diameter, deeply ribbed, orange red; flesh 5 inches thick, greenish yellow, firm, low in sugar.
- 143273. No. 7482. From Sarab, Azerbaijan, October 8, 1940. Fruit 19 inches long and 8 inches in diameter, green, marked gray, with narrow, gray-green irregular stripes; flesh pale orange, good sugar content.
- 143274. No. 7488. From Tabriz, Azerbaijan, October 11, 1940. Fruit 18 inches long and 9 inches in diameter, orange red, with faint irregular ribs; flesh 1¼ inches thick, deep yellow, good quality.

Nos. 143275 and 143276 were collected in Saujbulagh, Azerbaijan, December 3,  $1940.\,$ 

- 143275. No. 7576. Fruit 9 inches long and 4½ inches in diameter, gray green with irregular thin stripes of white; flesh 2 inches thick, pale orange, insipid.
- 143276. No. 7578. Fruit flattened, 10 inches long and 5 inches in diameter, red; flesh  $2\frac{1}{2}$  inches thick, pale orange, insipid.

Nos. 143277 to 143282 were collected in Rezaieh, Azerbaijan, December 6, 1940.

- 143277. No. 7594. Fruit flattened, 12 inches long and 6 inches in diameter, brownish green with narrow rib stripes of green; flesh pale orange, insipid, 2 inches thick.
- 143278. No. 7595. Fruit subelliptical, 11 inches long, red; rind 2 inches thick, orange, insipid.
- 143279. No. 7597. Fruit 22 inches long and 8 inches in diameter, green obscurely striped paler; flesh orange yellow, 2 inches thick, insipid.
- 143280. No. 7643. Fruit globose, 14 inches long, with deep irregular ribs, salmon, mottled paler; flesh 2 to 4 inches thick, pale orange, insipid.
- 143281. No. 7644. Fruit globose, 12 inches long, pale salmon; flesh orange, 1½ to 2½ inches thick, insipid.
- 143282. No. 7645. Fruit 20 inches long and 10 inches in diameter, salmon; flesh  $1\frac{1}{2}$  inches thick, orange, insipid.
  - Nos. 143283 and 143284 were collected in Khai, Azerbaijan, December 10, 1940.
- 143283. No. 7702. Fruit 14 inches long, orange red, speckled paler; flesh 2 inches thick, orange yellow, rather insipid.

143284. No. 7735. Cultivated for the seeds.

143285. No. 7813. From Kermanshah, December 24, 1940. Fruit flattened, 8 inches long and 5 inches in diameter, red; flesh pale orange, insipid.

143286 to 143302. Cucurbita Moschata Duchesne.

Cushaw.

Nos. 143286 to 143288 were collected in Tabriz, Azerbaijan, October 29, 1940.

143286. No. 7384. Long-necked Japanese type.

143287. No. 7385.

143283. No. 7403. Fruit 13 inches long, buff, deeply ribbed; flesh 1½ inches thick, pale orange, rather low in sugar.

143289. No. 7412. From Ardebil, Azerbaijan, November 2, 1940. Fruit pyriform, orange buff, spotted paler; flesh red orange, sweet.

Nos. 143290 and 143291 were collected in Maraghe, Azerbaijan, November 28, 1940.

143290. No. 7535. Fruit 1 foot long, orange yellow; flesh orange yellow, very tender, tasty when prepared as a vegetable.

143291. No. 7552.

143292. No. 7579. From Sawjbulagh, Azerbaijan, December 3, 1940. Fruit 22 inches long, orange yellow with green stripes; flesh orange, low in sugar.

143293. No. 7596. From Rezaieh, Azerbaijan, December 6, 1940. Fruit buff orange, spotted paler; flesh orange, tender, low sugar.

143294. No. 7781.

143295. No. 7804. Fruit 13 inches long and  $6\frac{1}{2}$  inches in diameter, orange, very watery; flesh orange yellow, 1 to 2 inches thick, good quality.

Nos. 143296 to 143298 were collected in Kermanshah, December 23, 1940.

143296. No. 7824. Fruit 19 inches long; flesh pale orange yellow, tender, low in sugar.

143297. No. 7827. Fruit pyriform, heavily and irregularly ribbed, 10 inches long and 10 inches in diameter, buff, spotted paler; flesh bright orange yellow, tender, low in sugar.

143298. No. 7861.

Nos. 143299 and 143300 were collected in Qasrishirin, December 27, 1940.

143299. No. 7871. Fruit 14 inches long, irregularly ribbed buff; flesh orange red, tender, of good taste.

'143300. No. 7873. Fruit 20 inches long, deeply and irregularly ribbed orange buff; flesh orange.

Nos. 143301 and 143302 were collected in Brujird, Luristan, January 20, 1941.

143301. No. 7910. Fruit dipper-shaped, 15 inches long, orange buff with narrow spot-stripes of paler color; flesh orange red, very tender, of good flavor.

143302. No. 7968.

# 143303 to 143331. CUCURBITA PEPO L.

Pumpkin.

143303. No. 7360. From Tabriz, Azerbaijan, October 28, 1940.

Nos. 143304 to 143309 were collected in Ardebil, Azerbaijan, November 1, 1940.

143304. No. 7409. Fruit yellow, 7 inches long and 17 inches in diameter, ridged; flesh yellow, 2 inches thick, insipid.

143305. No. 7410. Fruit globose, 10 inches long, with raised ribs, orange to orange red; flesh pale orange, 1 to 1½ inches thick, low in sugar.

143306. No. 7411. Fruit 10 inches long and 7 inches in diameter, heavily ridged, red netted green and orange; flesh 1½ inches thick, orange, rather sweet.

143307. No. 7414. Fruit 12 inches long and 10 inches in diameter, orange; flesh 2 inches thick, orange yellow, low in sugar.

143308. No. 7425. From the bazar.

143309. No. 7445. A mixture; grown for edible seeds.

Nos. 143310 to 143314 were collected in Sarab, Azerbaijan, November 8, 1940.

143310. No. 7471. Fruit flattened, 9 inches long and 6 inches in diameter, yellow; flesh 1½ inches thick, orange yellow, insipid.

143311. No. 7473. Fruit 4½ inches long and 8 inches in diameter, flattened, grass green dotted paler, with broad stripes of orange yellow; flesh 1½ inches thick, orange, good sugar content.

143312. No. 7475. Fruit subglobose, 8 inches long, pale lemon with heavy warts; flesh pale orange,  $1\frac{1}{2}$  inches thick, low in sugar.

143313. No. 7481. Fruit 10 inches long and 13 inches in diameter, orange yellow, heavily and strongly warted; flesh orange yellow, low in sugar.

143314. No. 7483. Fruit flattened, 5 inches long and 7½ inches in diameter, orange yellow, spotted paler; flesh 1½ inches thick, orange, of fair sugar content.

143315. No. 7487. From Tabriz, Azerbaijan, November 11, 1940. Fruit 19 inches long and 6 inches in diameter, cream-colored.

143316. No. 7734. From Khai, December 12, 1940. Seeds sold for eating like peanuts.

Nos. 143317 to 143319 were collected in Hamadan, December 21, 1940.

143317. No. 7775. Fruits subglobose, 2½ inches long, orange.

143318. No. 7791.

143319. No. 7792. Said to be eaten while green.

Nos. 143320 to 143322 were collected in Kermanshah, December 24, 1940.

143320. No. 7830. Fruit  $4\frac{1}{2}$  inches in diameter, warty, yellow.

143321. No. 7860.

143322. No. 7863. A round variety.

143323. No. 7897. From Qasrishirin, Kermanshah, December 28, 1940.

Nos. 143324 to 143327 were collected in Brujird, Luristan, January 20, 1941.

143324. No. 7909. Fruit 10 inches long and 6 inches in diameter, bright yellow; flesh orange yellow, 1½ inches thick.

143325. No. 7918. Fruit subglobose, 8 inches long, ribs strong at stem, heavily warted, orange yellow; flesh 1½ inches thick, orange yellow, low in sugar.

143326. No. 7928. Fruit somewhat flattened, 14 inches long and 12 inches in diameter, orange, heavily warted, irregularly and heavily ribbed; flesh 2 inches thick.

143327. No. 7967.

Nos. 143328 to 143331 were collected in Durud, Luristan, January 27, 1941.

143328. No. 7974. Fruit somewhat flattened, 15 inches long, and 12 inches in diameter, strongly and irregularly ribbed, especially at stem end. Good keeper.

143329. No. 7975. Fruit flattened 9 inches long and 5 inches in diameter, orange yellow, splotched orange red; flesh 1½ inches thick, orange, firm, low in sugar. Good keeper.

143330. No. 7976. Fruit subglobose, 10 inches long, ridged at stem, orange red; flesh 1½ inches thick, orange, firm, low in sugar. Good keeper.

143331. No. 7977. Fruit 15 inches long and 12 inches in diameter, grass green, striped orange yellow, heavily ridged at stem; flesh 1½ inches thick, orange yellow, low in sugar. Good keeper.

143332. Capsicum frutescens L. Solanaceae.

Redpepper.

From Brazil. Seeds presented through W. R. Schreiber, United States Department of Agriculture, Washington, D. C. Received December 12, 1941.

143333 to 143336. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit. Received December 19, 1941.

143333. Badilla × 28 N.G. 219.

143334. 28 N.G. 109 × Toledo.

143335. La. Purple × 28 N.G. 251.

143336. P.O.J. 2878  $\times$  Zea mays.

### 143337 to 143339.

From the East Indies. Seeds presented by R. E. Holttum, Director, Botanic Gardens, Singapore, Straits Settlements. Received December 19, 1941.

143337. Mangifera caesia Jack. Anacardiaceae.

Binjai. From Perak. A large, stately tree, native to the Malay Archipelago with alternate wedge-shaped or elliptic leathery leaves 6 to 16 inches long; stout much-branched panicles of purplish flowers, and oblong or ovoid fruits, which are eaten by the natives but are said to be of poor quality.

For previous introduction see 44290.

143338. Mangifera foetida Lour.

Machang. A large tree, 60 to 90 feet high, with elliptic-oblong, leathery leaves up to 1 foot long, pink or dark-red flowers ½ inch long in large spreading panicles, and green fruits with rather coarse yellow flesh of inferior flavor. Native to the Malay Peninsula.

For previous introduction see 35403.

143339. Mangifera Quadrifida Jack. Anacardiaceae.

Assam Kumbang.

# 143340 and 143341. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 23, 1941.

143340. Duruku vico × C.P. 27-108.

143341. P.R.  $807 \times C.P. 1161$ .

143342. Urena lobata L. Malvaceae.

From Cuba. Seeds presented by José Garcia Inerarity, Secretaria de la Junta Previncial de Agricultura, Santa Clara. Received December 22, 1941.

An erect undershrub, with cordate entire or lobed leaves 2 to 3 inches long, flowers an inch across, rose red at the base, and small fruits armed with hooked bristles. The stems furnish fiber, used for bags and twine. Native to tropical Asia.

For previous introduction see 114812.

# 143343. Pyrus communis L. Malaceae.

Common pear.

From Manchuria. Scions presented by A. Woeikoff, Harbip. Received March 15, 1940. Numbered December 29, 1941.

Bukazov.

# 143344. Eucalyptus ficifolia F. Muell. Myrtaceae. Scarlet gum.

From California. Seeds presented by William Hertrich, Huntington Botanic Garden, San Marino. Received February 20, 1941.

A handsome small tree up to 30 feet high, with scarlet flowers. For previous introduction see 141745.

### 143345 to 143411.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 2, 1941.

143345. Amygdalus persica L. Amygdalaceae.

Peach.

No. 7888. Shaftalu. From Qasrishirin, Kemanshah, December 28, 1940. Spreading bush about 8 feet high.

143346 and 143347. Brassica oleracea var. Botrytis L. Brassicaceae.

Cauliflower.

- 143346. No. 7390. Kalmigul. From Tabriz, Azerbaijan, October 29, 1940. Head 10 inches in diameter, loose, mild flavor.
- 143347. No. 7815. Kalmigul. From Hamadan, December 22, 1940. Heads up to about 6 inches in diameter, self-bleaching, strong-flavored.
- 143348 to 143358. Brassica oleracea var. capitata L.

Cabbage.

Kalmibarg is the vernacular name for cabbage in Iran.

- 143348. No. 7364. From Tabriz, Azerbaijan, October 28, 1940. Heads flat, up to 15 inches in diameter, tender.
- 143349. No. 7415. From Namin, Azerbaijan, November 6, 1940. Heads flat, 12 inches in diameter, tender, with delicate flavor, loose at the heart.
- 143350. No. 7437. From Ardebil, Azerbaijan, November 7, 1940. Heads flat, 15 inches in diameter, firm, with large spaces between the leaves and heart, mild flavor, tender.
- 143351. No. 7462. From Sarab, Azerbaijan, November 8, 1940. Heads firm, 15 inches in diameter, loose at heart, tender, delicate flavor.
- 143352. No. 7542. From Maraghe, Azerbaijan, November 28, 1940. Heads flat to globose, tender, sweet, leaves loose with wide spaces on the stem.
- 143353. No. 7586. From Sujbulagh, Azerbaijan, December 4, 1940. Heads 18 inches in diameter, flat, tender, sweet, loose at heart.
- 143354. No. 7621. From Rezaieh, Azerbaijan, December 7, 1940. Heads flat, 15 inches in diameter, good quality.
- 143355. No. 7747. From Khai, Azerbaijan, December 12, 1940. Heads subglobose, 10 inches in diameter, firm, tender, sweet.
- 143356. No. 7803. From Hamadan, December 22, 1940. Heads subglobose, 10 inches in diameter, tender, loose.
- 143357. No. 7869. From Kermanshah, December 25, 1940. Heads subglobose, 15 inches in diameter, tender, sweet, firm.
- 143358. No. 7958. From Brujird, Luristan, January 21, 1941. Heads subglobose, 9 inches in diameter, good quality, white and red.
- 143359 to 143366. Brassica oleracea var. gongylodes L. (*B. oleracea caulo-rapa* DC.) Kohlrabi.

Kalmigomri is the vernacular name for kohlrabi in Iran.

- 143359. No. 7623. From Rezaieh, Azerbaijan, December 8, 1940. Fruit subcylindrical, green; weight 11 pounds.
- 143360. No. 7366. From Tabriz, Azerbaijan, October 28, 1940. Fruit eaten green, 6 inches in diameter.
- 143361. No. 7434. From Ardebil, Azerbaijan, November 7, 1940. Fruit flattened, green, 8 inches in diameter, tender, sweet, edible.
- 143362. No. 7554. From Maraghe, Azerbaijan, November 29, 1940. Fruit globose, very leafy, green.

143363. No. 7463. From Sarab, Azerbaijan, November 8, 1940. Fruit green, flattened, 10 inches in diameter.

143364. No. 7802. From Hamadan, December 22, 1940. Fruit green, flattened, 8 inches in diameter, good quality.

143365. No. 7867. From Kermanshah, December 25, 1949. Fruit green, flattened subglobose to 6 inches in diameter, good quality.

143366. No. 7959. From Brujird, Luristan, January 21, 1941.

#### 143367 to 143372. Brassica Rapa L.

Turnip.

Shelgham is the vernacular name for turnip in Iran.

143367. No. 7624. From Rezaieh, Azerbaijan, December 8, 1940.

143368. No. 7744. From Khai, Azerbaijan, December 12, 1940.

143369. No. 7786. From Hamadan, December 21, 1940. Flat, purple, sweet, mild, tender.

143370. No. 7856. From Kermanshah, December 25, 1940. Flat, purple, sweet, good quality.

143371. No. 7891. From Qasrishirin, Kermanshah, December 28, 1940. Globose, flat, red purple, good quality.

143372. No. 7957. From Brujird, Luristan, January 21, 1941. Flattened, purple and white, good quality.

143373. Corylus sp. Betulaceae.

No. 7809. From Hamadan, December 22, 1940. Bushes 10 feet high.

143374. Corylus sp.

No. 7946. From Brujird, Luristan, January 21, 1941. Bushes 8 feet high, common in gardens.

#### 143375. Eruca sativa L. Brassicaceae.

Salad-rocket.

No. 7376. Khardil. From Tabriz, Azerbaijan, October 29, 1940. A low-growing, hardy, somewhat fleshy annual from southern Europe, with leaves resembling those of the radish and turnip, and yellowish to purplish flower, ½ to ¾ inch across, in rather large racemes. Used by the French as a spring and autumn salad and pot-herb. The flavor of the young and tender leaves bears a strong resemblance to that of horseradish.

For previous introduction see 138806.

Anjir is the vernacular name for the fig in Iran.

#### 143376. Figure sp. Moraceae.

Fig.

No. 7280. From Gurgan, September 20, 1940. A wild forest tree 12 inches in diameter, with yellow fruits.

143377. Ficus sp.

No. 7289. From Tehran, October 8, 1940. Fruits flat, 21/4 inches in diameter, yellow green, low in sugar, of good flavor.

Nos. 143378 and 143379 were collected in Tabriz, Azerbaijan, October 28, 1940.

143378. Ficus sp.

No. 7344. Fruit 1% inches in diameter, sticky, sweet, of good flavor.

143379. Ficus sp.

No. 7395. Fruit flattened, about 13/4 inches in diameter, of good quality.

Nos. 143380 and 143381 were collected in Saujbulagh, Azerbaijan, December 4, 1940.

143380. Ficus sp.

No. 7590. A wild bush spreading from the roots, 1 to 2 feet high, found in dry limestone.

143381. Ficus sp.

No. 7591. A wild bush spreading from the roots, 1 to 2 feet high, found in dry limestone.

143382. Juglans regia L. Juglandaceae.

Persian walnut.

No. 7808. From Hamadan, December 22, 1940. A densely branched variety.

143383. Pistacia sp. Anacardiaceae.

No. 7900. Bene. From Qasrishirin, Kermanshah, December 28, 1940.

143384 to 143387. Prunus armeniaca L. Amygdalaceae.

Apricot.

Zandalu is the vernacular name for apricot in Iran.

143384. No. 7324. From Tabriz, Azerbaijan, October 27, 1940. Fruit about 1½ inches in diameter, of sticky consistency, sweet; kernels edible.

143385. No. 7687. From Razaieh, Azerbaijan, December 9, 1940.

143386. No. 7901. From Qasrishirin, Kermanshah, December 28, 1940.

143387. No. 7985. From Rezaieh, Azerbaijan, August 1940, through J. Moose, American Consul at Tehran. Fruit ovoid, 2 inches in diameter, without fiber, golden yellow, of good flavor.

143388 to 143393. PRUNUS CERASIFERA Ehrh.

Myrobalan plum.

Nos. 143388 to 143390 were collected in Tabriz, Azerbaijan, October 26, 1940.

143383. No. 7321. Fruits globose, slightly flattened, 11/4 inches in diameter, yellow, clouded crimson, sweet, of good quality; flesh tough, watery.

143389. No. 7325.

143390. No. 7566. Fruit subglobose, 1½ inches in diameter, crimson, of good flavor.

143391. No. 7689. From Rezaieh, Azerbaijan, December 9, 1940. Fruit black red, 1¼ inches in diameter, sweet.

143392. No. 7750. From Marana, Azerbaijan, December 12, 1940. Fruit globose, scarlet, 1½ inches in diameter, good flavor, sweet.

143393. No. 7760. From Tabriz, Azerbaijan, December 17, 1940. Fruit subglobose, somewhat flattened, 1% inches in diameter, crimson, sweet, well flavored.

143394. Prunus sp.

No. 7342. From Tabriz, Azerbaijan, October 28, 1940. Fruit globose, 1¼ inches in diameter, yellow, tough-skinned, sweet.

143395. Prunus sp.

No. 7393. From Tabriz, Azerbaijan, October 28, 1940. Fruit  $1\frac{1}{2}$  inches long, black, firm flesh.

143396 and 143397. Punica Granatum L. Punicaceae.

Pomegranate.

Anar is the vernacular name for pomegranate in Iran.

143396. No. 7582. From Saujbulagh, Azerbaijan, December 4, 1940. Fruit 4 inches in diameter, crimson; juice deep pink.

143397. No. 7583. From Saujbulagh, December 4, 1940. Fruit 3 inches in diameter, crimson; juice deep pink.

143398. Rubus sp. Rosaceae.

Blackberry.

No. 7613. Tamishk. From Rezaieh, Azerbaijan, December 7, 1940. Bush 6 feet high, growing along watercourses; fruits freely all summer and until frost.

143399. Rubus sp.

No. 7870. Tamishb. From Kermanshah, December 26, 1940. Bush 5 feet high, everbearing type. Temperature said to descend to 12° F.

143400 to 143411. Solanum melongena L. Solanaceae.

Eggplant.

Badenjan is the vernacular name for eggplant in Iran.

143400. No. 7357. From Tabriz, Azerbaijan, October 28, 1940. Long, subglobose, purple black.

143401. No. 7430. From Ardebil, Azerbaijan, November 7, 1940. Black purple, 6 inches long and 2 inches in diameter.

143402. No. 7545. From Maraghe, Azerbaijan, November 28, 1940.

143403. No. 7610. From Saujbulagh, Azerbaijan, December 4, 1940.

143404. No. 7635. From Rezaieh, Azerbaijan, December 8, 1940.

143405. No. 7722. From Khai, Azerbaijan, December 12, 1940.

143406. No. 7752. From Tabriz, Azerbaijan, December 14, 1940. Fruit subglobose, 2 inches in diameter, white.

143407. No. 7779. From Hamadan, December 21, 1940.

143408. No. 7855. From Kermanshah, December 25, 1940.

Nos. 143409 and 143410 were collected in Qasrishirin, Kermanshah, December 28, 1940.

143409. No. 7884. Fruit ovoid, red purple, of good quality.

143410. No. 7903. Fruit pyriform, 8 inches in diameter, yellow, tender, well formed.

143411. No. 7956. From Brujird, Luristan, January 21, 1941.

# **143412 to 143423.** Saccharum. Poaceae.

Sugarcane.

From Colombia. Seeds presented by the Experimental Station, Palmira. Received December 20, 1941.

143412.  $Común \times C.P. 36-156$ .

143413. E.P.C. 62-19  $\times$  C.P. 36-156.

. 143414. E.P.C.  $62-59 \times C.P. 36-137$ .

**143415.** P.O.J.  $27-25 \times C.P. 36-156$ .

**143416.** P.O.J.  $27-25 \times C.P. 36-134$ .

143417. P.O.J. 23-64  $\times$  E.K. 28.

**143418.** P.O.J.  $27-25 \times C.P. 36-145$ .

143419. Rayada  $\times$  C.P. 36-156.

143420.  $Rayada \times C.P. 29-137$ .

143421. Rayada × P. 33-29.

143422.  $Rayada \times C.P. 29-103$ .

143423.  $Rayada \times C.P. 11-61$ .

## 143424 to 143436.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 17, 1941.

143424 to 143428. Amygdalus persica L. Amygdalaceae.

Peach.

From Tabriz, Azerbaijan, October 26, 1940.

143424. No. 7319. *Hulu*. Fruit globose, 3 inches in diameter, pale yellow; flesh yellow white.

143425. No. 7347. Shaflalu. Fruit subglobose, 2 inches in diameter, green yellow, freestone; flesh white, good.

143426. No. 7320. Hulu. Fruit subglobose, faintly beaked,  $2\frac{3}{4}$  inches in diameter, faint slit, yellow, freestone; flesh white, juicy; kernel edible.

143427. No. 7322. Fruits subglobose,  $2\frac{1}{2}$  inches in diameter, cheek slit, beaked, gold, crimson-cheeked, clingstone; flesh gold, juicy, high in sugar.

143428. No. 7489. Fruit subglobose, 3 inches in diameter, deep yellow with red cheek, clingstone; flesh gold, firm, good flavor.

143429. Corylus sp. Betulaceae. No. 7346. Fandokh. From Tabriz, Azerbaijan, October 28, 1940.

143430. Prunus armeniaca L.

Apricot.

No. 8056. From Durud, Luristan.

143431 and 143432. PRUNUS DOMESTICA L.

Common plum.

143431. No. 7292. Alu. From Tehran, October 12, 1940. Fruit elliptical, 2 inches in diameter, gold, good flavor, small.

143432. No. 7768. From Hamadan, December 20, 1940. Fruits apparently globose, dark blue with bloom, 1¼ inches in diameter, sweet, good flavor.

Nos. 143433 to 143435 were collected in Durud, Luristan, June 25, 1941.

143433. Prunus sp.

No. 7987. A dense shrub about 3 feet high, growing on rocky slopes; flowers rose; fruit yellow.

143434. Prunus sp.

No. 8016. Dense bush, 3 feet high, growing on rocky slopes; flowers rose; fruit red black, edible.

143435. Prunus sp.

No. 8095-A.

143436. Prunus sp.

No. 7697. From Qasrishirin, Kermanshah, December 28, 1940. Tree 8 feet high.

# 143437. CARICA PAPAYA L. Papayaceae.

Papaya.

From Haitia. Seeds purchased from Francois Moens, Haitian Pineapple Co., Cape Haitian. Received December 17, 1941.

#### 143438 to 143515.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 1, 1941.

143438 to 143440. Anethum graveolens L. Apiaceae.

Dill.

143438. No. 7361. From Tabriz, Azerbaijan, October 28, 1940.

143439. No. 7733. From Khai, Azerbaijan, December 12, 1940.

143440. No. 7953. From Brujird, Luristan, January 21, 1941.

For previous introduction see 141561.

143441. Carthamus tinctorius L. Asteraceae.

Safflower.

No. 7972. From Brujird, Luristan, January 21, 1941.

For previous introduction see 138450.

143442 and 143443. Coriandrum sativum L. Apiaceae.

Coriander.

Garshniz is the vernacular name for coriander in Iran.

143442. No. 7738. From Khai, Azerbaijan, December 12, 1940.

143443. No. 7952. From Brujird, Luristan, January 21, 1941.

For previous introduction see 141615.

143444. Daucus sp. Apiaceae.

No. 7562. From Maraghe, Azerbaijan, November 30, 1940. Plant 3 feet high, growing on dry slopes.

143445. Dracocephalum moldavica L. Menthaceae.

No. 7397. Badranj. From Tabriz, Azerbaijan, October 30, 1940. Plant used for flavoring.

For previous introduction see 141402.

143446. Dracocephalum sp.

No. 7748. Marze. From Khai, Azerbaijan, December 12, 1940. Plant used for flavoring.

Nos. 143447 to 143449 were collected in Tabriz, Azerbaijan, October 28, 1940.

Jao is the vernacular name for barley in Iran.

143447. Hordeum distichon L. Poaceae.

Barley.

No. 7345.

143448. Hordeum distichon L.

No. 7353.

143449. HORDEUM DICTICHON L.

No. 7387.

143450. HORDEUM VULGARE L.

No. 7417. From Namin, Azerbaijan, November 6, 1940. Said to be unirrigated.

Nos. 143451 and 143452 were collected in Ardebil, Azerbaijan, November 7, 1940.

143451. HORDEUM VULGARE L.

No. 7451. Barley said to be unirrigated.

143452. HORDEUM VULGARE L.

No. 7452. Said to be fall-sown, irrigated.

143453. Hordeum distiction L.

No. 7506. From Livan, Azerbaijan, November 16, 1940. Said to be wintersown, not irrigated.

143454. HORDEUM VULGARE L.

No. 7526. From Saujbulagh, Azerbaijan, November 26, 1940. Said to be late-sown, not irrigated.

Nos. 143455 and 143456 were collected in Maraghe, Azerbaijan, November 29, 1940.

143455. HORDEUM VULGARE L.

No. 7557. Said to be winter-sown, not irrigated.

143456. Hordeum distiction L.

No. 7559. Said to be fall-sown, irrigated.

143457. HORDEUM VULGARE L.

No. 7589. From Saujbulagh, Azerbaijan, November 4, 1940. Said to be irrigated, spring-sown.

Nos. 143458 to 143460 were collected in Rezaich, Azerbaijan, December 9, 1940.

143458. HORDEUM VULGARE L.

No. 7667. Said to be spring-sown, irrigated.

143459. Hordeum distichon L.

No. 7672. Said to be spring-sown, irrigated.

143460. HORDEUM VULGARE L.

No. 7668. Said to be fall-sown, irrigated.

143461. Hordeum distichon L.

No. 7741. From Khai, Azerbaijan, December 12, 1940. Said to be springsown, irrigated.

143462. HORDEUM VULGARE L.

No. 7816. From Hamadan, December 22, 1940. Said to be fall-sown, irrigated. 143463. Hordeum distiction L.

No. 7852. From Kermanshah, December 25, 1940. Said to be fall-sown, irrigated.

143464. Hordeum distichon L.

No. 7895. From Qasrishirin, Kermanshah, December 28, 1940. Said to be fall-sown, not irrigated.

143465. Hordeum distichon L.

No. 7937. From Brujird, Luristan, January 21, 1941. Said to be irrigated, spring-sown.

143466. Hordeum distichon L.

No. 7460. From Sarab, Azerbaijan, November 8, 1940. Said to be irrigated, fall-sown.

143467. Lens culinaris Medik. Fabaceae.

Lentil.

No. 7721. Adas. From Khai, Azerbaijan, December 12, 1940.

143468 and 143469. LEPIDIUM SATIVUM L. Brassicaceae. Garden cress.

143468. No. 7370. From Tabriz, Azerbaijan, October 29, 1940. Salad plant.

143469. No. 7971. From Brujird, Luristan, January 21, 1941.

143470 to 143475. Medicago sativa L. Fabaceae.

Alfalfa.

143470. No. 7367. From Tabriz, Azerbaijan, October 28, 1940.

143471. No. 7456. From Ardebil, Azerbaijan, November 7, 1940.

143472. No. 7464. From Sarab, Azerbaijan, November 8, 1940. Weak, scandent or semiscandent form, growing wild in orchard.

143473. No. 7549. From Maraghe, Azerbaijan, November 29, 1940.

143474. No. 7777. From Hamadan, December 21, 1940.

143475. No. 7851. From Kermanshah, December 25, 1940.

143476. Onobrychis sp. Fabaceae.

No. 7422. Khasha (Turk). From Namin, Azerbaijan, November 6, 1940.

143477 to 143482. Petroselinum crispum (Mill.) Nym. (*P. hortense* Hoffman). Apiaceae.

Jafri is the vernacular name for parsley in Iran.

143477. No. 7369. From Tabriz, Azerbaijan, October 29, 1940.

143473. No. 7443. From Ardebil, Azerbaijan, November 7, 1940.

143479. No. 7633. From Rezaieh, Azerbaijan, December 8, 1940.

143480. No. 7739. From Khai, Azerbaijan, December 12, 1940.

143481. No. 7798. From Hamadan, December 22, 1940.

143482. No. 7954. From Brujird, Luristan, January 21, 1941.

143483 to 143486. PISUM SATIVUM L. Fabaceae.

Pea.

Nakhud Farangi is the vernacular name for the pea in Iran.

143483. No. 7351. From Tabriz, Azerbaijan, October 28, 1940.

143484. No. 7440. From Ardebil, Azerbaijan, November 7, 1940.

143485. No. 7503. From Livan, Azerbaijan, November 15, 1940.

143486. No. 7790. From Hamadan, December 22, 1940.

143487 to 143489. Satureja hortensis L. Menthaceae. Summer savory.

143487. No. 7381. From Tabriz, Azerbaijan, October 29, 1940.

143488. No. 7749. From Khai, Azerbaijan, December 12, 1940. Said to be used as flavoring.

143489. No. 7970. From Brujird, Luristan, January 21, 1941. Used as flavoring.

143490 and 143491. SECALE CEREALE L. Poaceae.

Rye.

143490. No. 7419-A.

143491. No. 7507. From Livan, Azerbaijan, November 16, 1940. Said to be fall-sown, not irrigated.

143492. Trifolium sp. Fabaceae.

No. 7469. From Sarab, Azerbaijan, November 8, 1940. Flowers rose pink.

143493 and 143494. TRIFOLIUM PRATENSE L.

Red clover.

143493. No. 7485. From Sarab, Azerbaijan, November 8, 1940. Wild, used as fodder.

143494. No. 7501. From Livan, Azerbaijan, November 14, 1940. Wild, growing in orchards, 2 feet high.

143495. Trifolium repens L.

White clover.

No. 7502. From Livan, Azerbaijan, November 14, 1940. Semidecumbent plant, growing in orchards.

143496 to 143500. Trifolium resupinatum L.

Persian clover.

Shabdar is the vernacular name for Persian clover in Iran. 143496. No. 7349. From Tabriz, Azerbaijan, October 28, 1940.

143497. No. 7634. From Rezaieh, Azerbaijan, December 8, 1940.

143498. No. 7793. From Hamadan, December 22, 1940.

143499. No. 7853. From Kermanshah, December 25, 1940.

143500. No. 7949. From Brujird, Luristan, January 21, 1941.

143501 to 143505. Trigonella foenum-graecum L. Fabaceae. Fenugreek.

143501. No. 7365. From Tabriz, Azerbaijan, October 28, 1940.

143502. No. 7436. From Ardebil, Azerbaijan, November 7, 1940. Used as flavoring.

143503. No. 7625. From Rezaieh, Azerbaijan, December 8, 1940.

143504. No. 7776. From Hamadan, December 21, 1940. Used as flavoring.

143505. No. 7963. From Brujird, Luristan, January 21, 1941. Used as flavoring.

143506. Vicia ervilia (L.) Willd. Fabaceae.

Vetch.

No. 7457-A. From Ardebil, Azerbaijan.

For previous introduction see 134282.

143507 to 143510. VICIA FABA L.

Broadbean.

Bagla is the vernacular name for the broadbean in Iran.

143507. No. 7432. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

143508. No. 7490. From Tabriz, Azerbaijan, November 12, 1940. Food crop.

143509. No. 7896. From Qasrishirin, Kermanshah, December 28, 1940.

143510. No. 7934. From Brujird, Luristan, January 21, 1941. Food crop.

143511. VICIA SATIVA L. Common vetch.

No. 7457. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

143512 to 143515. Vigna sinensis (Torner) Savi. Fabaceae. Cowpea.

Lobia is the vernacular name for the cowpea in Iran.

143512. No. 7686. From Rezaieh, Azerbaijan, December 9, 1940. Food crop.

143513. No. 7386. From Tabriz, Azerbaijan, October 29, 1940. Food crop.

143514. No. 7433. From Ardebil, Azerbaijan, November 7, 1940. Food crop.

143515. No. 7938. From Brujird, Luristan.

# 143516. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by Julius Matz, Experimental Gardens, Summit.

Badilla × 28 N.G. 251.

#### 143517 to 143528.

From Peru. Seeds collected by B. Y. Morrison, Bureau of Plant Industry, United States Department of Agriculture. Received December 26, 1941.

143517. Cajanus cajan (L.) Druce. Fabaceae.

Pigeonpea.

Frejol de Palo.

143518. Carica Papaya L. Papayaceae.

Papaya.

From Arequipa.

143519. Carica sp.

No. 1.

143520. Carica sp.

No. 2.

143521. Dolichos lablab L. Fabaceae.

Hyacinth-bean.

Bocón or Zarandaja.

143522 and 143523. Lycopersicon esculentum Mill. Solanaceae. Tomato-From Huanta, November 27, 1941. Bought in market.

143524 to 143527. Lycopersicon pimpinellifolium (Jusl.) Mill.

Currant tomato.

143524. From Trujillo, October 8, 1941.

143525. From Catacaos, Piura, October 14, 1941.

143528. Momordica Balsamina L. Cucurbitaceae.

143526. From Piura.

143527. From Sullano, October 13, 1941.

Balsam-apple.

143529 to 143539. RICINUS COMMUNIS L. Euphoribaceae.

Castor-bean.

From Brazil. Seeds presented by A. B. Fagundes, Director, Instituto de Experimentação Agrícola, Ministerio da Agricultura, Rio de Janeiro. Received December 27, 1941.

Seeds from selfed plants.

Nos. 143529 to 143535 are from tall plants.

143530. V. 3.

143534. V. 33.

**143531.** V. 13. 143535. V. 35.

143532. V. 16.

143529. V. 2. 143533. V. 22.

Nos. 143536 to 143539 are from dwarf plants.

**143536.** V. 14. **143538.** V. 38.

143537. V. 15. 143539. V. 45.

# 143540 and 143541.

From Szechwan Province, China. Plants presented by John Tee-Van, New York Zoological Society. Received December 27, 1941.

#### 143540. Phyllostachys sp. Poaceae.

Bamboo.

A species brought from a distant place and grown at Chengtu for ornamental purposes. This bamboo, as well as the following, was readily eaten by the giant panda in captivity.

### 143541. SINARUNDINARIA Sp. Poaceae.

Bamboo.

Collected by Den Wei-han, Chengtu, Szechwan. This is the smaller of the two bamboos known to be eaten by the giant panda; it is said to grow about 10 feet high. The plant occurs at altitudes between 6,500 and 9,000 feet in western Szechwan.

# 143542 to 143549. LAGENARIA LEUCANTHA (Duchesne) Rusby. Cucurbitaceae. Calabash gourd.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 1, 1941.

143542. No. 7492. From Tabriz, Azerbaijan, November 12, 1940.

143543. No. 7540. From Maraghe, Azerbaijan, November 28, 1940.

143544. No. 7627. From Rezaieh, Azerbaijan, December 8, 1940.

143545. No. 7731. From Khai, Azerbajian, December 12, 1940. Dipper-gourd.

143546. No. 7820. From Hamadan, December 22, 1940.

143547. No. 7834. From Kermanshah, December 24, 1940. Fruit 11 inches high, used as a storage utensil.

143548. No. 7874. From Qasrishirin, Kermanshah, December 27, 1940. Fruit 12 inches high, with unusual thick neck; used as storage utensil.

143549. No. 7966. From Brujird, Luristan, January 21, 1941.

#### 143550. Saccharum. Poaceae.

Sugarcane.

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received December 30, 1941.

P.O.J. 2878  $\times$  Zea mays.

# 143551 to 143647.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 16, 1941.

Nos. 143551 to 143567 were collected in Durud, Luristan, June 1941.

143551. ALTHAEA SD. Malvaceae.

No. 8035. A perennial hollyhock 4 feet high, branching from root, with single white or rose-purple yellow-throated flowers 4 inches in diameter.

143552. ALTHAEA Sp.

No. 8077. A xerophytic hollyhock up to 10 feet high, with single, white, yellow-centered, fragrant flowers 3 inches across and palmately cut leaves.

143553. Anemone sp. Ranunculaceae.

No. 7996. A handsome blood-red flower, single, about 2 inches in diameter; dry slopes.

143554. Aristolochia sp. Aristolochia ceae.

No. 8025.

143555. Aristolochia sp.

No. 8093. A low perennial, 1 foot high.

143556. ARUM sp. Araceae.

No. 8084. A plant handsome with madder-purple spathe, 18 inches high, borne with the leaf.

143557. Astragalus sp. Fabaceae.

No. 8086. A bush 3 feet high, in habit like *Juniperus communis*, small-leaved, with small very fragrant rose flowers. Grows on dry mountain tops where ground water is probably available. A source of gum tragacanth.

143558. ASTRAGALUS Sp.

No. 8092. Similar to No. 8086, but growing at lower elevations and said to yield no gum.

143559. Astragalus sp.

No. 8086. A perennial growing in clumps up to 2 feet high, with two dense whorls of clear yellow flowers, 1 to  $\frac{1}{2}$  inch across.

143560. Astragalus sp.

No. 8069. A species similar to No. 144559, 18 inches high, with loose, more numerous whorls.

143561. Astragalus sp.

No. 8079.

143562. Avena fatua L. Poaceae.

Wild oats.

No. 8000. Wild species 4 feet high, smut-free.

For previous introduction see 126259.

143563. Colchicum sp. Melanthiaceae.

No. 7993. A broadleaved colchicum 18 inches high, growing on dry slopes.

143564. Colchicum sp.

No. 7994. A strap-leaved plant, 6 inches high, found on dry slopes.

143565. Colchicum sp.

No. 8005. A narrowleaved species.

143566. Colchicum sp.

No. 8039. A species of the plain up to 2 feet high, with large, broad leaves.

143567. Colchicum sp.

No. 8046. A broadleaved species, 1 foot high.

143568. Cotoneaster sp. Malaceae.

No. 7657. From Rezaieh, Azerbaijan, December 8, 1940. A low bush 3 feet high, of attractive open habit, with very small elliptical leaves ¼ inch long, and crimson fruits. Found in a dry gulch.

Nos. 143569 to 143599 were collected in Durud, Luristan, June 1941.

143569. Crocus sp. Iridaceae.

No. 8013. A species with fragrant rose flowers, growing in marshes that dry uplater.

143570. Delphinium sp. Ranunculaceae.

No. 8075. A much-branched annual xerophyte, 2 feet high. The small flowers, blooming in August, are violet with a yellow claw.

143571. Delphinium sp.

No. 8090. Perennial 3 feet high, with large deep cobalt-blue flowers.

143572. Dianthus sp. Silenaceae.

No. 8052. A plant 2 inches high, with small heads of pink flowers.

143573. Eremurus sp. Liliaceae.

No. 8081. Plant 2 feet high; flowers whitish, ribbed green.

143574. Fritillaria sp. Liliaceae.

No. 8019. Plant 2 feet high; flowers green brown.

143575. Fritillaria sp.

No. 8024. Plant 8 inches high; flowers yellow.

143576. Fritillaria sp.

No. 8054. Plant 4 feet high; flowers showy, brick red.

143577. FRITILLARIA Sp.

No. 8071. Plant 2 feet high; flowers green brown, small.

143578. FRITILLARIA Sp.

No. 8088. Plant 6 inches high, single flower, much like Fritillaria meleagris.

143579. GENTIANA sp. Gentianaceae.

No. 8085. An annual 18 inches high, with large, blue, white-throated, fragrant showy flowers. It resembles *Gentiana moorcroftiana*, but grows on alkaline soil.

143580. Gladiolus sp. Iridaceae.

No. 8003. Flowers pale purple in a spike 2 feet high.

143581. GLADIOLUS Sp.

No. 8009. A variety of the purple-flowered species, with a white throat.

143582. Gladiolus sp.

No. 8018. Probably purple-flowered.

143583. GLADIOLUS Sp.

No. 8026. A marsh species that later withstands complete dessication; flowers wine-colored.

143584. GLADIOLUS Sp.

No. 8031. A late-flowering species found in cultivated fields; flowers in a dense spike.

143585. Gladiolus sp.

No. 8034. A species, about 2 feet high, with purple flowers.

143586. Gladiolus sp.

No. 8036. A species growing on rocky slopes to 7,000 feet altitude; flowers cerise.

143587. Gladiolus sp.

No. 8041. Grows on dry slopes; flowers wine-colored.

143588. Gladiolus sp.

No. 8042. Early-flowering species of the wheatfields; flowers handsome, wine-colored.

143589. GLADIOLUS Sp.

No. 8066. Flowers probably purple, white-throated.

143590. Glaucium sp. Papaveraceae.

No. 8083. Bushy perennial, 18 feet high, bearing an abundance of large poppy-like flowers.

143591. Gundelia tournefortii L. Asteraceae.

No. 8012. Kangar. A thistly perennial plant of dry slopes; the leaf bases, eaten in early spring, make a delicious vegetable.

For previous introduction see 81000.

143592. Hedysarum sp. Fabaceae.

No. 8072. A plant forming clumps  $2\frac{1}{2}$  feet across. The large yellow flowers are in spikes 18 inches high.

143593. HORDEUM SPONTANEUM L. Poaceae.

Barley.

No. 7986. Narrow-headed, 2-rowed, wild barley.

143594. Hyacinthus sp. Liliaceae.

No. 8006. Plant with large open spike of pale-blue flowers, growing in marshes that later dry up.

143595. Iris sp. Iridaceae.

No. 7992. Bulbous, early-flowering, much like Iris persica, but with large flowers.

143596. IRIS Sp.

 $\rm No.~8048.~$  Clump form, 3 feet high, with handsome yellow flowers 3 inches in diameter. Grows on damp ground.

143597. IRIS Sp.

No. 8070. Plant 1 foot high; flowers 6 inches in diameter, heavily reticulated with madder purple, with dark spot in falls; very choice species.

143598. IRIS Sp.

No. 8082. Plant forming clumps; flowers 1½ inches across, violet, chocolate-scented, borne over a long period.

143599. Iris sp.

No. 8095. A clump species 4 feet high, growing along springs that dry up in summer; flowers 3 inches in diameter, yellow.

Nos. 143600 to 143602 were collected in Kebara, Luristan, June 17, 1941.

143600 to 143602. LATHYRUS ANNUUS Hoejer. Fabaceae.

Pea.

143600. No. 8007. Growing on edge of marsh; standard lemon, veined red brown; wings yellow; lip greenish yellow.

143601. No. 8022. Growing in fields; flowers small, few, rose purple.

143602. No. 8023. Growing in fields; flowers few, small, rose purple, pale on reverse, deeply veined; wings lavender; lip yellow.

Nos. 143603 to 143621 were collected in Durud, Luristan, June 1941.

## 143603. Lathyrus sp.

No. 8080. Scandent, 6 feet high; growing along springs; flowers 1¼ inches in diameter, lemon, standard with a spot veined red brown.

#### 143604. Lathyrus sp.

No. 8083. Erect perennial, growing in clumps 3 feet high; flowers 1½ inches across, rose purple.

143605. LATHYRUS APHACA L.

Pea.

No. 8021. A semiprostrate or ascending yellow-flowered herb, native to Asia Minor.

For previous introduction see 123446.

143606. Lonicera arborea var. Persica (Jaub. and Spach) Rehder. Caprifoliaceae.

No. 8076. A dense bush 6 feet high; flowers white, washed with rose purple; fruit milky white, translucent, eaten by birds; grows on dry slopes with groundwater probably available.

143607. MERENDERA Sp. Melanthiaceae.

No. 7999. Plant semirhizomatous, crocus-flowered; flowers rose, strap-leaved, blooming very early in wet places that later dry.

143608. Muscari sp. Liliaceae.

No. 7988. Plant 6 inches high; found at 8,000 feet altitude; flowers few, green, blue.

143609. Muscari sp.

No. 8004. Rare species; spike 2 feet high; buds purplish, opening greenish brown. 143610. Muscari sp.

No. 8008. Field species; spike 2 feet high; flowers greenish; bud purplish.

143611. Muscari sp.

No. 8014. Tall species 2 feet high; spike full, flowers purple buds opening greenish.

143612. Muscari sp.

No. 8027. Broadleaved species, similar to garden species cultivated in the United States, but with larger and fragrant flowers; requires much water.

143613. Muscari sp.

No. 8037. Early-flowering species; spike open; buds purple, opening greenish.

143614. Ornithogalum sp. Liliaceae.

No. 7997. Large open corymb, 8 inches high, of white, green-ribbed flowers.

143615. ORNITHOGALUM Sp.

No. 8020. Spike 3 feet high; flowers green-ribbed.

143616. ORNITHOGALUM Sp.

No. 8091. Plant 4 feet high, with dense spike of cream flowers.

143617. Papaver sp. Papaveraceae.

No. 7998. An annual about 2 feet high, bearing large poppy-red black-centered flowers.

143618. PAPAVER sp.

No. 8032. An annual about 18 inches high, with attractive cerise flowers.

143619. PAPAVER Sp.

No. 8040. A poppylike annual; flowers cerise.

143620. Peltaria angustifolia DC. Brassicaceae.

No. 8033. A perennial crucifer, with showy dense corymbs of small, white flowers.

143621. Phlomis sp. Menthaceae.

No. 8059. Clumps; 2 feet high; flowers large, beautiful pink, very attractive; perennial.

Nos. 143622 to 143624 were collected in Maraghe, Azerbaijan, November 28, 1940.

143622. Rhus sp. Anacardiaceae.

No. 7531. Bushes 8 feet high, spreading from the root; growing in cultivated fields; foliage red in fall; fruit inconspicuous, used for acid flavoring in cooking.

143623. Rosa sp. Rosaceae.

No. 7520. Plants 3 to 5 feet high, with red hips; spread from root.

143624. Rosa sp.

No. 7530. Bush 4 feet high, spreading freely from root, growing uncared for along watercourse; hips crimson, ½ inch in diameter.

143625. Rosa sp.

No. 7612. From Rezaieh, Azerbaijan, December 7, 1940. Bushes from 4 to 6 feet high, not spreading from root, growing along irrigation ditches.

143626. Rosa sp.

No. 7877. From Qasinshirin, Kermanshah, December 28, 1940. Well-formed bush 5 feet high, growing in an orchard, probably cultivated.

143627. Rosa sp.

No. 7929. From Brujird, Luristan, January 21, 1941. Bush 4 feet high, growing along river.

143628. Rosa sp.

No. 7978. From Ti, Bakhtiari, February 1, 1941. Bush 6 feet high, growing on edge of fields, not spreading from root; branches crimson in winter; hips orange red, small, bristly.

143629. Rosa sp.

No. 7980. From Imarat, Bakhtiari, February 15, 1941. Bush 4 feet high, growing along water; hips crimson, not hispid, ¾ inch long.

143630. Rosa sp.

No. 7982. From Chamched, Luristan, February 22, 1941. Sturdy bush 6 feet high, laden with crimson hips, growing along stream.

143631. Rosa sp.

No. 7984. From Saujbulagh, Azerbaijan, December 4, 1940. Seeds collected from bushes 3 to 6 feet high, growing on field borders.

Nos. 143632 to 143635 were collected in Durud, Luristan, June 8, 1941.

143632. Rosa sp.

No. 7989. Well-formed bush 6 feet high, growing along streams, with large single pink flowers.

143633. Rosa sp.

No. 8063. A creeping plant with hirsute leaves, forming a dense bush about 2 feet high, growing on limestone cliffs; flowers single, 2 inches in diameter, pale pink.

143634. Rosa sp.

No. 8073. A spreading bush 4 feet high, small-leaved, heavily armed, growing on dry slopes; flowers single, pink,  $2\frac{1}{2}$  inches across.

143635. Rosa sp.

No. 8074. Bush 6 feet high, growing along streams; flowers single, 3 inches across, pale pink.

143636. Rosa sp.

No. 7822. From Kangavar, Kermanshah, December 23, 1940. Semirambler 8 feet high, growing in orchard.

143637. Salvia sp. Menthaceae.

No. 9011. [No locality data.]

Nos. 143638 to 143647 were collected in Durud, Luristan, June 1941.

143638. Scilla sp. Liliaceae.

No. 8001. Porcelain-blue flowers.

143639. SCILLA Sp.

No. 8045. Plant with large violet flowers in a few-flowered raceme.

143640. Secale sp. Poaceae.

No. 8030. Plant about 3 feet high.

143641. Triticum monococcum L. Poaceae.

No. 8028. Wild wheat 31/3 feet high, often represented by black-husked form.

For previous introduction see 94747.

143642. Tulipa sp. Liliaceae.

No. 7990. Rose-colored with yellow center, fragrant.

143643. Tulipa sp.

No. 8015. Attractive red flower, segments with black base and edges of yellow.

143644. TULIPA Sp.

No. 8017. Red-flowered species of low altitudes; flowers black-centered, open, 4 inches long; bulb goes to a depth of from 12 to 31 inches.

143645. Tulipa sp.

No. 8051. Plant 6 inches high; flowers small, white, yellow-throated, outside washed rose purple, fragrant.

143646. VIOLA sp. Violaceae.

No. 7991. Small-flowered annual pansy, much like Viola tricolor in habit, but often white-flowered; yellow-eyed.

143647. PISUM SATIVUM L. Fabaceae.

Pea.

No. 7995-A.

## 143648 and 143649.

From the Dutch East Indies. Seeds collected by David Fairchild, Archbold-Fairchild Expedition. Numbered in December 1941.

143648. Callicarpa sp. Verbenaceae.

No. 3425. From Koelawi, Celebes, March 30, 1940. An attractive small tree with oblong acuminate dark-green leaves, silvery gray beneath, about 7 inches long, and small, round lacquer-red fruits, ½ inch in diameter, borne in flat clusters.

143649. Allophylus sp. Sapindaceae.

No. 3452. From Tana Mea, Donggala, Celebes, May 6, 1940. An attractive scandent vine with trifoliolate leaves up to 12 inches long, with elliptical, acuminate, almost entire to crenate, glossy dark-green leaflets up to 6 by  $3\frac{1}{2}$  inches, and 20-inch racemes of brillant-red globose fruits  $\frac{3}{8}$  inch in diameter.

#### 143650 to 143677.

From Iran. Seeds collected by Dr. Walter Koelz, Tehran. Received December 19, 1941.

Nos. 143650 to 143659 were collected in Durud, Luristan, June 1941.

143650. Allium sp. Liliaceae.

No. 8029. Plant about 18 inches high; flower head rose purple, 2 inches in diameter.

143651. ALLIUM Sp.

No. 8044. Damp-ground species about 4 feet high, with few-flowered heads of large handsome flowers, white, faintly marked with rose.

143652. Allium sp.

No. 8053. Flower heads dense, 3 inches in diameter, rose purple; plant 4 feet high, growing on damp ground that dries in summer.

143653. Allium sp.

No. 8055. Similar to 143652, but growing among dry rocks, plant 18 inches high.

143654. Allium sp.

No. 8057. Plant 2 feet high; leaves linear; flower heads greenish white, 1 inch across.

143655. Allium sp.

No. 8058. Leaves sublinear; flowers large, handsome, pink,  $2\frac{1}{2}$  inches in diameter.

143656. ALLIUM sp.

No. 8060. Plant 4 feet high; flowers white, green-ribbed, in heads  $1\frac{1}{4}$  inches in diameter.

143657. Allium sp.

No. 8061. Plant 18 inches high; flowers green brown in loose heads.

143658. Allium sp.

No. 8078. Plant 3 feet high; flowers maroon, in dense heads 2 inches in diameter.

143659. ALLIUM sp.

No. 8087. Similar to 8062, but with broad lanceolate leaves.

143660. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

No. 7470. From Sarab, Azerbaijan, November 8, 1940. Fruit 12 inches long and 6 inches in diameter, pea green with strong dark vermiculations; rind 1/4 inch thick; flesh yellow. Fair quality.

143661 to 143665. Cucumis melo L. Cucurbitaceae.

Muskmelon.

Nos. 143661 to 143663 were collected in Tehran, October 12, 1940.

143661. No. 7290. Fruit flattened, 7 inches long and 5 inches in diameter, yellow, striped brown, smooth; flesh 1½ inches thick, white, good quality, fragrant.

143662. No. 7291. Fruit 6 inches long and 4 inches in diameter, netted, green, turning yellow; flesh 1¼ inches thick, green white, good quality.

143663. No. 7292. Fruit ovoid, heavily and finely netted, green, 10 inches long; flesh 1½ inches in diameter, green, good quality. Good keeper.

143664 and 143665 were collected in Tabriz, Azerbaijan, October 27, 1940.

143664. No. 7330. Fruit obovoid, 7 inches long, deep yellow, with deeply indented ribs marked by heavy net, rest of surface sparsely netted; flesh 1½ inches in diameter, white, good quality. Good keeper.

143665. No. 7334. Fruit ovoid, 6 inches long, gold, not netted, furrowed; flesh 1½ inches in diameter, tinted salmon, good quality. Good keeper.

143666. Cucurbita Moschata Duchesne. Cucurbitaceae.

Cushaw

No. 7774. From Hamadan, December 21, 1940. Fruit 15 inches long, 7 inches in diameter; neck heavily ribbed; flesh orange yellow, tender, sweet.

143667. Daucus sp. Apiaceae.

 $_{
m No.~8089.}$  From Durud, Luristan, June 1941. Handsome plant 3 feet high, with showy white flowers.

143668. Ficus sp. Moraceae.

Fig.

No. 7343. From Tabriz, Azerbaijan, October 28, 1940. Dry fruits top-shaped, 1 inch in diameter, firm, sweet, of good flavor.

Nos. 143669 to 143670 were collected in Durud, Luristan, June 1941.

143669. Ficus sp.

No. 8064. Mixture.

143670. Ficus sp.

No. 8065. Mixture.

143671. Helianthus tuberosus L. Asteraceae. Jerusalem-artichoke.

No. 7568. From Maraghe, Azerbaijan, November 29, 1940. Plant 5 feet tall; tubers about 4 inches long.

For previous introduction see 107601.

Nos. 143672 and 143673 were collected in Durud, Luristan, June 1941.

143672. LACTUCA Sp. Cichoriaceae.

No. 8050. Xerophytic species up to 6 feet high, in fruit resembling Lactuca sativa. Plant strongly bristly; leaves entire, subspatulate.

143673. PISUM ELATIUS Bieb. Fabaceae.

No. 7995. Growing on open slopes, also in marshy places; possibly mildew-resistant.

For previous introduction see 141891.

143674. Solanum dulcamara L. Solanaceae.

Bitter nightshade.

No. 7671. From Rezaieh, Azerbaijan, December 9, 1940.

For previous introduction see 116886.

143675. Solanum melongena L.

Eggplant.

No. 7293. From Tehran, October 13, 1940. Fruit 5 inches long and 2 inches in diameter, white. A rare variety.

143676. Tragopogon porrifolius L. Cichoriaceae.

Vegetable-oyster.

No. 8047. From Durud, Luristan, June 1941.

143677. VICIA NARBONENSIS L. Fabaceae.

No. 8043. Cultivated.

143678. GARDENIA PHILASTREI Pitard. Rubiaceae.

Plants growing at Coconut Grove, Florida. Received from Hawaii through Col. R. H. Montgomery, 1941. Numbered December 31, 1941.

An Indo-Chinese tree 15 to 20 feet high, with large, light-yellow, very fragrant flowers  $2\frac{1}{2}$  inches across and 4 inches long.

For previous introduction see 139499.

143679 to 143681. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

From Ecuador. Seeds collected by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received December 31, 1941.

Wild tomatoes from the Province of Manabi.

143679. No. 1. Cranberry size.

143680. No. 2. Cherry size.

143681. No. 3. Strawberry size.

Abelmoschus esculentus, 142780-142787. Albizzia falcata, 142295. Aleurites fordii, 142297. montana, 143150-143169. Alfalfa. See Medicago sativa. Allium spp., 142937, 142938, 143650-143659.cepa, 142788-142796. porrum, 142797-142807. Allophylus sp., 143649. Alloplectus sp., 142578. Alstroemeria violacea, 142993. Althaea spp., 143551, 143552. Alysicarpus sp., 142311. vaginalis, 142309. vaginalis var. nummularifolius, 142310. Amelanchier spp., 142273-142275. Amygdalus persica, 143345, 143424-143428. Andromeda polifolia, 142579. Andropogon gayanus var. squamulatus, 142973. Anemone sp., 143553. Anethum graveolens, 143438-143440. Annona cherimola, 142548-142550. Antennaria monocephala, 142580. Apple. See Malus sylvestris. Apricot. See Prunus armeniaca. Aristolochia spp., 143554, 143555. Arnica chamissonis, 142581. latifolia, 142582. lessingii, 142583. Arum sp., 143556. Arundinaria simoni, 142492. Astragalus spp., 142939, 143557-143561. Astrocaryum standleyanum, 142551. Atalantia citroides, 142552. Avena fatua, 143562. Axonopus affinis, 142933. Balsam-apple. See Momordica balsamina. Bamboo. See Arundinaria simoni, Bambusa vulgaris var. vittata, Phyllostachys sp., Sinarundinaria sp. Bambusa vulgaris var. vittata, 142358. Barley. See Hordeum spp. Bean, asparagus. See Vigna sesquipedalis. common. See Phaseolus vulgaris. Jack. See Canavalia ensiformis. lima. See Phaseolus lunatus. See Phaseolus calcaratus. scarlet runner. See Phaseolus coccineus.

Beet, common. See Beta vulgaris. Begonia clarkei, 142995. micranthera, 142994. micranthera var. fimbriata, 142997. micranthera var. hieronymi, 142999. pleiopetala, 142998. veitchii, 142996. Beta vulgaris, 142808-142823. Blackberry. See Rubus spp. Brachiaria brizantha, 142974.

Brassica oleracea var. botrytis, 143346, 143347. oleracea var. capitata, 142692, 143348-143358. oleracea var. gongylodes, 143359-143366. rapa, 143367-143372. Broadbean. See Vicia faba. Bromus leptocladus, 142975. Cabbage. See Brassica oleracea var. capitata. Caesalpinia spinosa, 142572. Cajanus cajan, 142601, 143517. Callicarpa sp., 143648. Canangium odoratum, 143144. Canavalia ensiformis, 142602, 142694. Capsicum frutescens, 142490, 142553, 142824-142841, 143332. Carica spp., 143519, 143520. candamarcensis, 142554. papaya, 143437, 143518. Carrot. See Daucus carota. Carthamus tinctorius, 143441. Castor-bean. See Ricinus communis. Cauliflower. See Brassica oleracea var. botrytis. Centaurea jacea, 142454. Centella asiatica, 142350. Cerastium beeringianum var. grandiflorum, 142584. Cereus variabilis, 142555. Chayote. See Sechium edule. Cherimoya. See Annona cherimola. Cherry, sour. See Prunus cerasus. See Prunus avium. Chickpea. See Cicer arietinum. Cicer arietinum, 142603, 142842–142845. Citrullus colocynthis, 142447. naudinianus, 142448. vulgaris, 142449, 142450, 142695, 142696, 143000-143138, 143660. Citrus aurantifolia  $\times$  Fortunella sp., 142502. Clover, Persian. See Trifolium resupinatum. red. See Trifolium pratense. white. See Trifolium repens. Colchicum spp., 143563-143567. Colocynth. See Citrullus colocynthis. Copernicia sp., 143145. Coriander. See Coriandrum sativum. Coriandrum sativum, 143442, 143443. Corn. See Zea mays. Cornus suecica, 142585. Corylus spp., 143373, 143374, 143429. Costus sp., 142556. Cotoneaster spp., 142940, 142941, 143568. Cotton. See Gossypium. Cowpea. See Vigna sinensis. Coyo. See Persea schiedeana. Crataegus spp., 142942–142944. Cress, garden. See Lepidium sativum. Crinum darienense, 142557. Crocus sp., 143569. Crotalaria agatiflora, 142444.

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## Plant Inventory No. 150

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C. July 1951.



PLANT MATERIAL INTRODUCED BY THE DIVISION OF PLANT EXPLORA-TION AND INTRODUCTION, BUREAU OF PLANT INDUSTRY, JANUARY 1 TO DECEMBER 31, 1942 (NOS. 143682 TO 145638)

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This inventory, No. 150, lists the plant material (Nos. 143682 to 145638) received by the Division of Plant Exploration and Introduction during the period from January 1 to December 31, 1942. It is a historical record of plant material introduced for Department and other specialists, and is not to be considered as a list of plant material for distribution.

Paul G. Russell,

Botanist.

Plant Industry Station, Beltsville, Md.

<sup>&</sup>lt;sup>1</sup>Now Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture.

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#### INVENTORY

143682. LITCHI CHINENSIS Sonner (Nephelium litchi Cambess.). Sapindaceae. Lychee.

From Florida. Plants presented by Dr. G. W. Groff, De Soto City. Received January 19, 1942.

Grown from seeds obtained from a tree of the "Brewster" variety. For previous introduction see 142167.

#### 143683 and 143684. Solanum Tuberosum L. Solanaceae. Potato.

From Scotland. Tubers purchased from the Scottish Plant Breeding Station, Scottish Society for Research in Plant Breeding, Craigs House, Corstorphine, Edinburgh. Received January 14, 1942.

143683. Shamrock. Red tubers.

143684. Southesk. White, spotted blue-purple tubers.

#### 143685. EUCALYPTUS sp. Myrtaceae.

From Tasmania. Seeds presented by Miss C. M. Young, Fetteresso, East Devenport. Received December 12, 1942.

#### 143686 and 143687.

From California. Seeds presented by W. T. Swingle, Bureau of Plant Industry, United States Department of Agriculture. Received January 14, 1942.

143686. CITRUS AURANTIUM var. MYRTIFOLIA Ker. Rutaceae.

Chinotto. From the Stock Test Plot, Citrus Experiment Station, Riverside.

143687. Eremocitrus × Citrus. Rutaceae.

## 143688 to 143693. SINOCALAMUS BEECHEYANUS (Munro) McClure. Poaceae.

From Florida. Presented by S. G. Capman, Miami, through T. B. McClelland, Plant Introduction Garden, Coconut Grove. Numbered January 15, 1943.

A series of seedlings collected under a clump of this bamboo grown from a plant under P.I. 64054, furnished originally by this Division to Dr. J. Petersen, near Homestead, Fla.

 143688.
 143691.

 143689.
 143692.

 143690.
 143693.

## 143694. Solanum Quitoense Lam. Solanaceae. Naranjilla.

From Ecuador. Seeds presented by R. B. Harvey, Professor of Plant Physiology, University of Minnesota, St. Paul. Received January 12, 1942.

Collected near Baños.

For previous introduction see 141547.

## 143695. CENTELLA ASIATICA (L.) Urban. Apiaceae.

From India. Seeds purchased from the Royal Botanic Gardens, Sibpur, Calcutta, through J. G. Ramchandani, Agricultural Research Station, Sakrand, Sind. Received January 14, 1942.

For previous introduction see 142350.

## 143696. PRIONOPHYLLUM MARITIMUM (Baker) Mez. Bromeliaceae.

From Brazil. Seeds presented by J. Eugenio, S. J., Rio Grande do Sul, through R. G. Atkinson, Leucadia, California. Received January 22, 1942. From Monte Zimmer, near Estação Capela, April 1941.

#### 143697. ZEA MAYS L. Poaceae.

Corn.

From Straits Settlements. Seeds presented by the Botanic Gardens, Singapore. Received January 29, 1942.

Collected in central-southern Thailand by F. Kingdon Ward in 1941.

#### 143698. LUFFA ASTORI Svenson. Cucurbitaceae.

From Peru. Seeds collected by B. Y. Morrison, Bureau of Plant Industry, United States Department of Agriculture. Received February 3, 1942.

### 143699. CITRUS RETICULATA Blanco. Rutaceae.

From California. Seeds presented by W. T. Horne, Pathologist, Citrus Experiment Station, Riverside. Received February 5, 1942.

Mandarin orange from Mr. Horne's home garden.

#### 143700 to 143702.

From Peru. Bulbs collected by Cesar Vargas C., Cuzco. Received January 5, 1942.

From Quebrada Matara, Abancai, Apurimac, at altitudes of 2,400 to 2,800 m.

143700. AMARYLLIS sp. Amaryllidaceae.

143701. STENOMESSON sp. Amaryllidaceae.

143702. ZEPHYRANTHES TUBIFLORA (L'Her.) Schinz.

#### 143703 and 143704.

From Colombia. Seeds presented by Dr. David Fairchild, Coconut Grove, Fla. Received October 31, 1941.

143703. Passiflora ligularis Juss. Passifloraceae. Sweet granadilla. No. 1088. Said to have large fruits of excellent quality.

143704. SALVIA sp. Menthaceae.

No. 1095. Road to Choconta, 80 km. from Bogotá, September 22, 1941. Plant 6 feet or more high, with purple-brown stems and deep-red flowers.

## 143705 and 143706. SACCHARUM. Poaceae. Sugarcane.

From the British West Indies. Cuttings presented by Dr. A. E. McIntosh, Department of Agriculture, Barbados. Received January 6, 1942.

143705. B. 3439.

143706. B. 35187.

## 143707 to 143709. PISTACIA VERA L. Anacardiaceae. Pistachio.

Plants growing at United States Plant Introduction Garden, Chico, Calif. Numbered January 7, 1942.

143707. Selection (OR13 T19) from P.I. 80454.

143708. Selection (OR10 T21) from P.I. 86372.

143709. Selection (OR10 T27) from P.I. 86372.

For previous introduction see 137710.

143710. EUCALYPTUS ROBUSTA J. E. Smith. Myrtaceae.

From Australia. Seeds presented by Prof. Cyril T. White, Botanic Gardens, Brisbane. Received December 30, 1941.

Brown Gum. A handsome, symmetrically branched tree of moderate height, with bark of trunk persistent, rough, dark brown, and that of the branches reddish. The wood is said to be somewhat brittle.

For previous introduction see 141857.

#### 143711. EUPHORBIA LANCIFOLIA Schlecht. Euphorbiaceae.

From Guatemala. Plants presented by Dr. Luis Gaitán, Assistant Surgeon General of Public Health, Guatemala. Received January 8, 1942.

Ixbut. A fleshy plant with broadly lanceolate, dark-green leaves about 3 inches long and inconspicuous small flowers in terminal and axillary cymes. Native to southern Mexico.

For previous introduction see 100368.

#### 143712. CRUSEA VIOLACEA Neuman. Rubiaceae.

From Florida. Seeds presented by Dr. L. M. Simonson, Lake Alfred. Received January 9, 1942.

A sprawling herbaceous perennial with stems rooting easily where they touch the ground, velvety ovate or lanceolate leaves, and numerous light-purple flowers in October and early November. The plant is reported to make an attractive ground cover at Lake Alfred. Native to Mexico.

#### 143713 to 143732.

From England. Seeds purchased from Major F. C. Stern, Highdown, Goringby-Sea, Sussex. Received January 14, 1945.

143713. ACER GRISEUM (Franch.) Pax. Aceraceae.

Maple

A handsome maple up to 30 feet high, native to western China. The coarsely toothed, trifoliolate leaves are 1 to 2 inches long. The striking feature of this maple is the cinnamon-brown, papery bark that flakes off like that of the river birch.

For previous introduction see 135655.

143714. Berberis Jamesiana Forr. & W. W. Smith. Berberidaceae.

Barberry.

143715. CARPINUS TURCZANINOVII Hance. Betulaceae.

A hardy shrubby tree with oval, sharp-pointed leaves 1 to 2 inches long. It is said to resemble *Carpinus polyneura*. Native to Hopei Province, China.

For previous introduction see 116120.

143716. CLEMATIS MACROPETALA Ledeb. Ranunculaceae.

143717. COTONEASTER CONSPICUA Comber. Malaceae.

143718. COTONEASTER WARDII W. W. Smith.

A deciduous shrub 5 to 8 feet high, with ovate, acute-mucronate leaves more than an inch long, densely, silvery tomentose beneath. The white flowers, in small corymbs, are followed by fruits of a bright sealing-wax red.

For previous introduction see 102213.

143719. EUONYMUS GRANDIFLORUS f. SALICIFOLIUS Stapf. Celastraceae.

143720. Magnolia sinensis × wilsonii. Magnoliaceae.

143721 to 143730. PAEONIA spp. Ranunculaceae.

Peony.

143721. PAEONIA CORALLINA Retz.

Received as P. cambessedesii, now referred to as above.

#### 143713 to 143732—Continued.

143722. PAEONIA DELAVAYI Franch.

A very attractive, vigorous shrub 4 feet high, with deep-crimson flowers 3 inches in diameter.

For previous introduction see 105671.

143723. PAEONIA EMODI Wall.

A peony up to 2 feet high, with ternatisect leaves 6 to 12 inches long and white flowers. Native to the temperate Himalayas.

For previous introduction see 122904.

143724. PAEONIA EMODI Wall.

Introduced under the varietal name "glabrata," for which a place of publication has not been found.

143725. PAEONIA MLOKOSEWITSCHI Lomakin.

A herbaceous peony with dark bluish-green biternate leaves with red nerves and margins of yellow flowers 4 to 5 inches in diameter, which have numerous stamens and purple stigmas. This peony, considered the handsomest of the yellow-flowered forms, is native to the central Caucasus.

For previous introduction see 90639.

143726. PAEONIA WILLMOTTIAE Stapf.

143727. PAEONIA VEITCHII Lynch.

A herbaceous peony, native to western China, about 2 feet high, with shining light-green leaves and purple-crimson flowers about 4 inches across.

For previous introduction see 103391.

143728. PAEONIA VEITCHII Lynch.

Introduced under the varietal name "woodwardii," for which a place of publication has not been found.

143729. PAEONIA WITTMANNIANA VAR. TOMENTOSA Lomak.

143730. PAEONIA WITTMANNIANA Lindl.

Introduced under the varietal name "nudicarpa," for which a place of valid publication has not been found.

143731. Rosa. Rosaceae.

Introduced under the name "highdownensis," for which a proper place of valid publication has not been found. Said to be a hybrid of Rosa moyesii.

143732. STAPHYLEA HOLOCARPA var. ROSEA Rehd. & Wils. Staphyleaceae.

A Chinese shrub or small tree up to 30 feet high, with trifoliolate leaves, slender panicles of pink flowers, and pear-shaped, bladdery fruits about 2 inches long.

For previous introduction see 76058.

#### 143733 to 143738.

From Asia. Seeds collected by Dr. Jill Cossley-Batt, New York. Received January 22, 1942.

Collected in Kampa Dzong, Tibet, unless otherwise specified.

143733. CANAVALIA sp. Fabaceae.

143734. CROTON sp. Euphorbiaceae.

143735. JATROPHA CURCAS L. Euphorbiaceae.

For previous introduction see 107473.

#### 143733 to 143738-Continued.

143736. Solanum sp. Solanaceae.

143737. TERMINALIA sp. Combretaceae.

143738. (Undetermined.)

From Nepal.

### 143739 to 143743. AMYGDALUS PERSICA L. Amygdalaceae.

Peach

From Maryland. Scions presented by the Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, United States Department of Agriculture. Received September 10, 1940. Numbered January 1942.

143739. Dixie Gold.

143742. Roberta.

143740. Fairs Beauty.

143743, Sun Glow.

143741. Hiley.

#### 143744 to 143753. ORYZA SATIVA L. Poaceae.

Rice.

From Liberia. Seeds obtained through the Firestone Plantations Co., Monrovia. Received February 5, 1942.

143744. Bonggah.143745. Bujuh.143746. Djau.143747. Djauh.

143748. Djoweh.

143749. Djubuh. 143750. Djubukly.

143751. Mauntok.

143752. Saufe.

143753. Yupul.

## 143754 to 143761. SOLANUM ANDIGENUM Juzepczuk & Bukasov. Solanaceae.

From Peru. Tubers presented by the Estación Experimental Agrícola de La Molina, Lima. Received February 6, 1942.

143754. Chata Blanca No. 2.

143758. Chata Blanca de Tarma.

143755. Chata Blanca No. 3.

143759. Colorado. 143760. Maco.

143756. Chata Blanca No. 4. 143757. Chata Blanca No. 6.

143761. Redonda Y.

#### 143762. SACCHARUM. Poaceae.

Sugarcane.

From Puerto Rico. Seeds presented by the Estación Experimental Agrícola, Rio Piedras. Received February 6, 1942.

 $P.O.J.\ 2725 \times 31-962.$ 

## 143763. TRACHYCARPUS EXCELSUS (Thunb.) Wendl. Phoenicaceae. Windmill palm.

From Georgia. Seeds presented by Mrs. E. D. Richardson, Hawkinsville. Received February 9, 1942.

## 143764. CITRUS PARADISI $\times$ PONCIRUS TRIFOLIATA. Rutaceae. Citrumelo.

From Arizona. Seeds presented by the United States Field Station, Sacaton. Received February 9, 1942.

C.P.B. 4554-A (Row G, tree 39).

#### 143765 to 143778. EUCALYPTUS spp. Myrtaceae.

From Australia. Seeds presented by the Sub-Department of Forestry, Department of Agriculture, Brisbane, Queensland. Received February 12, 1942.

143765. EUCALYPTUS CAMALDULENSIS Dehnh. (E. longirostris F. Muell.)

A tall Australian tree up to 200 feet high, with smooth, dark-gray bark, narrowly lanceolate leaves 6 inches or more long, stalked umbels of small flowers attractive to bees, and globular fruits with conical tops. The heavy, red wood is durable both above and below the ground and is used for railroad ties, piles, and fence posts.

For previous introduction see 141838.

143766. EUCALYPTUS CITRIODORA Hook.

For previous introduction see 141826.

143767. EUCALYPTUS CLOEZIANA F. Muell.

143768. EUCALYPTUS GUMMIFERA (Gaertn.) Hochr. (E. corymbosa J. E. Smith)

A medium-sized evergreen tree native to Australia, with leathery, lanceolate leaves and large corymbs of fragrant yellowish-white flowers.

For previous introduction see 141827.

143769. EUCALYPTUS MACULATA Hook.

Spotted gum.

143770. EUCALYPTUS MICROCORYS F. Muell.

A tall tree with persistent, wrinkled bark; thin, broadly lanceolate leaves; and small white flowers. The yellowish timber is especially useful for ballroom floors because of its greasy nature. Native to Australia.

For previous introduction see 141842.

143771. EUCALYPTUS PANICULATA J. E. Smith.

For previous introduction see 141847.

143772. EUCALYPTUS PILULARIS J. E. Smith.

Blackbutt.

A slender tree 100 to 150 feet high, with a trunk diameter of 3 to 5 feet. It is considered excellent for timber, especially for fence posts and telegraph poles. The honey from the flowers is reported to be of especially good quality. In California the tree grows well near the coast but does not thrive in the dry, hot interior valleys.

For previous introduction see 141850.

143773. Eucalyptus racemosus Cav.

143774. EUCALYPTUS RESINIFERA J. E. Smith.

Mahogany gum.

A large tree with rough, reddish, fibrous bark persistent to the small branches. The heavy timber is a rich red and is said to be strong and durable. Because of the color the tree is also called "red mahogany."

For previous introduction see 141856.

143775. EUCALYPTUS SALIGNA J. E. Smith.

A tall tree with silvery-gray bark, native to New South Wales. The narrowly lanceolate leaves are 5 to 6 inches long, and the clusters of four to eight white flowers are on short peduncles.

For previous introduction see 141859.

143776. EUCALYPTUS STAIGERIANA F. Muell.

A tree of medium size with oval or narrow, blue-green leaves covered with numerous oil dots. The foliage of this tree yields a large quantity of oil, equal in fragrance to that of lemons, for which it is an agreeable substitute. The proportion of oil obtained from dry leaves is 2% percent; the

#### 143765 to 143778—Continued.

specific gravity of the oil is 0.901.

For previous introduction see 56147.

143777. EUCALYPTUS TRACHYPHLOIA F. Muell.

A medium-sized tree, native to Queensland, with dark-gray, rugged bark, falcate-lanceolate leaves 4 to 6 inches long, and terminal panicles of small flowers.

For previous introduction see 75654.

143778. EUCALYPTUS TRIANTHA Link (E. acmenioides Schau.).

For previous introduction see 141821.

#### 143779 to 143784. TRITICUM spp. Poaceae.

Wheat.

From India. Seeds presented by the Cereal Breeding Station, Niphad, Nasik District, Bombay Province. Received January 29, 1942.

143779. TRITICUM sp.

Bansi 224.

143780. TRITICUM sp.

Bansi 168.

143781. TRITICUM sp.

Bansi Palli 808.

143782. TRITICUM sp.

Niphad 31.

143783. TRITICUM sp.

Niphad 81.

143784. TRITICUM sp.

Niphad 567.

## 143785. CARICA PAPAYA L. Papayaceae.

Papaya.

From Brazil. Seeds presented by Alfredo de Araujo Santos Neto, Recife, Pernambuco. Received February 10, 1942.

#### 143786. GARDENIA TUBIFERA Wall. Rubiaceae.

From Straits Settlements. Seeds presented by the Botanic Gardens, Singapore. Received February 24, 1942.

## 143787. SALACIA sp. Hippocrateaceae.

From Celebes. Seeds collected by Dr. David Fairchild, Coconut Grove, Fla. Received March 19, 1940.

From Peore, Posso. An attractive vine with oblong, acuminate, glossy, dark-green leaves about 5 inches long; inconspicuous greenish flowers; and globular, lacquer-red fruits 1 inch in diameter in small axillary clusters.

#### 143788 to 143790.

From Peru. Seeds presented by Cesar Vargas C., Cuzco. Received February 20, 1942.

143788. CROCOPSIS FULGENS Pax. Amaryllidaceae.

143789. STENOMESSON PEARCEI Baker. Amaryllidaceae.

143790. STENOMESSON VARIEGATUM (Ruiz & Pav.) Macbr.

#### 143791. CITRUS sp. Rutaceae.

From Cuba. Budsticks presented by Thomas R. Towns, Holguin. Received February 24, 1942.

A seedless, thornless lime, originally obtained from Dr. P. H. Rolfs in Viçosa, Minas Gerais, Brazil.

#### 143792 to 143794.

From India. Seeds presented by the Royal Botanic Garden, Sibpur, near Calcutta, through the Instituto Agronómico, Campinas, Brazil. Received March 5, 1942.

143792. CINCHONA OFFICINALIS L. Rubiaceae.

No. 63 - I. 5229.

For previous introduction see 142195.

143793 and 143794. CINCHONA PUBESCENS Vahl (C. succirubra Pav.).

143793. No. 64 - I. 5230.

143794. No. 62 - I. 5228.

## 143795. ILEX CORNUTA Lindl. and Paxt. Aquifoliaceae.

Chinese holly.

From Louisiana. Cuttings presented by E. A. McIlhenny, Avery Island. Received February 6, 1942.

Rotunda. A variety that develops a compact, rounded habit.

## 143796 to 143799. CARICA PAPAYA L. Papayaceae. Papaya.

From Peru. Seeds purchased from Teodoro Boza Barducci, Departamento de Investigaciones de Algodón y Cereales, Estación Experimental Agrícola de la Molina, Lima. Received March 5, 1942.

143796. No. 4. Fruit round.

Nos. 143797 to 143799 were grown at sea level.

143797. No. 1.

143798. No. 2.

143799. No. 3.

## 143800. AMARYLLIS sp. Amaryllidaceae.

From Peru. Bulbs presented by Cesar Vargas C., Cuzco. Received March 9, 1942.

Bulbs collected at Huallpa Huaicco, District of Huanoquite, Province of Paruro, Department of Cuzco, January 16, 1942. Flowering begins in November and ends during December.

#### 143801 and 143802.

From Java. Seeds presented through W. A. Davidson, Agricultural Marketing Service, United States Department of Agriculture. Received March 16, 1942.

143801. CALOPOGONIUM MUCUNOIDES Desv. Fabaceae.

A small tropical-American vine with pale-blue flowers. It forms a mat of foliage 1 to 2 feet thick and is used as a cover crop.

For previous introduction see 136165.

143802. PUERARIA PHASEOLOIDES (Roxb.) Benth. Fabaceae.

For previous introduction see 137643.

#### 143803 and 143804.

From North Carolina. Scions and plants purchased from F. J. LeClair, Soil Conservation Service, Chapel Hill. Received March 17, 1942.

143803. LIQUIDAMBAR STYRACIFLUA f. ROTUNDILOBA Rehd. Hamamelidaceae. Scions.

143804. PHOTINIA VILLOSA f. MAXIMOWICZIANA (Lévl.) Rehd. Malaceae. Plants.

#### 143805 to 143808, ZEA MAYS L. Poaceae.

Corn.

From Brazil. Ears collected by Dr. Albert O. Rhoad, Iberia Livestock Farm, Jeanerette, Louisiana. Received March 18, 1942.

143805. No. 2. White Dent. Collected near Estrela.

143806. No. 3. Yellow Dent (small ears). Collected near Estrela.

143807. No. 4. Yellow Dent (large ears). Collected near Taugary.

143808. No. 1. Yellow Flint. Collected near Marata.

#### 143809 to 143826.

From Venezuela. Seeds presented by D. C. Langham, Ministry of Agriculture, Caracas. Received March 20, 1942.

143809. Gossypium sp. Malvaceae.

"Wild cotton from Venezuela."

143810 to 143826. ZEA MAYS L. Poaceae.

Corn.

143810. 41-78. S. 3 Acarigua.

143811. 41-165. S. 2 Acarigua.

143812. 41-174. S. 2 Avaria.

143813. 41-53. S. 2 Cuba.

143814. 41-63. S. 3 Cuba.

143815. 41-74. S. 3 Cuba.

143816. 41-84. S. 3 Cuba.

143817. 41-114. S. 4 Cuba.

143818. 41-682. S. 4 Cuba.

143819. 41-702. S. 4 Cuba.

143820. 41-705. S. 4 Cuba.

143821. 41-736. S. 4 Cuba.

143822. 41-804. S. 4 Cuba.

143823. 41-308. F<sub>4</sub> (Cuban × Huevito).

143824. 41-37. Mayorbella (from Puerto Rico, inbred 3 generations in Venezuela).

143825, 41-210, S. 2 Ministerio,

143826. 41-232. S. 2 San Carlos.

### 143827 and 143828. Amygdalus Persica L. Amygdalaceae.

Peach.

From New Jersey. Trees presented by M. A. Blake, Agricultural Experiment Station, New Brunswick. Received March 20, 1942.

143827. Midway.

143828, N. J. 109,

#### 143829 to 143837.

From Australia. Seeds presented by F. H. Baker, Richmond, Victoria. Received March 20, 1942.

143829 to 143834. ACACIA spp. Mimosaceae.

143829. ACACIA DECORA Reichenb.

A shrub with spatulate phyllodes 2 inches long and numerous racemes made up of globular heads of small yellow flowers. Native to Queensland, Australia.

For previous introduction see 90839.

143830. ACACIA FALCATA Willd.

An evergreen tree 20 to 30 feet high, with few slender branches and small yellow flowers in dainty spherical clusters on racemes borne in the axils of the dark-green, glossy, falcate leaves. The timber is hard, heavy, and tough.

For previous introduction see 106678.

143831. ACACIA HOWITTI F. Muell.

A shrub, often 15 feet high, with flexible branchlets, bearing curved, lanceolate, dark-green phyllodes and axillary clusters of small yellow flower heads.

For previous introduction see 130691.

143832. ACACIA MYRTIFOLIA Willd.

A tall shrub with angular branchlets and ovate phyllodes edged with pink, and heads of rather large yellow flowers in racemes. Native to Australia.

For previous introduction see 130692.

143833. Acacia oxycedrus DC.

143834. ACACIA SUAVEOLENS (J. E. Smith) Willd.

An Australian shrub up to 6 feet high, with linear to lanceolate phyllodes and small heads of yellow flowers in axillary racemes.

For previous introduction see 106692.

143835. Angophora subvelutina F. Muell. Myrtaceae.

143836. CALLITRIS ROBUSTA (A. Cunn.) R. Br. (Frenela robusta A. Cunn.) Pinaceae. Cypress-pine.

For previous introduction see 140012.

143837. Syzygium smithii (Poir) Niedenzu (*Eugenia smithii* Poir.) Myrtaceae.

An evergreen tree, sometimes 80 to 120 feet in height, with ovate or lanceolate leaves 2 to 3 inches long. The small, white, purplish-tinted fruits are produced in profusion, are acidulous and wholesome, and are eaten by the natives. Native to eastern Australia.

For previous introduction see 34312.

## 143838. PENSTEMON HAYDENI S. Wats. Scrophulariaceae.

From Nebraska. Seeds presented by Glenn R. Viehmeyer, Superintendent, Niobrara State Park, Niobrara. Received March 31, 1942.

A plant 10 to 15 inches tall, with dense spikes of showy bright-blue flowers, and bluish-green, lanceolate leaves.

#### 143839. Gossypium. Malvaceae.

Cotton.

From Algeria. Seeds presented by Robert D. Murphy, Counselor of the American Embassy, Algiers. Received March 24, 1942.

143840 to 143845. ALEURITES spp. Euphorbiaceae.

From Florida. Seeds presented by Walter T. Swingle, Washington, D. C. Received March 24, 1942.

143840. ALEURITES FORDII Hemsl.

Tung tree.

For previous introduction see 142297.

143841. ALEURITES MOLUCCANA (L.) Willd. (A. triloba Forst.) Candlenut

A tropical spreading tree native to the East Indies; closely related to the tung-oil tree.

For previous introduction see 74226.

143842 to 143844. Aleurites montana (Lour.) Wilson. Mu-oil tree.

143842. 1-A. Abrasin. From a very large tree.

143843. SM-8-1. From a single tree (h).

143844. SM-7-1, SM-8-1. Mixed seeds from two trees growing near each other (g and h).

143845. ALEURITES TRISPERMA Blanco.

Soft lumbang.

A Philippine tree 30 to 50 feet high, with heart-shaped leaves and rounded, 3-angled fruits about 2 inches in diameter. The oil obtained from the seeds resembles tung oil, but is somewhat slower in drying.

For previous introduction see 124511.

## 143846. LIQUIDAMBAR STYRACIFLUA f. ROTUNDILOBA Rehd. Hamamelidaceae.

From North Carolina. Plants presented by F. J. LeClair, Soil Conservation Service, Chapel Hill. Received March 17, 1942.

## 143847 to 143858. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

From Australia. Seeds presented by the Department of Agriculture, Sydney, New South Wales. Received March 26, 1942.

143847. F. Ovali (Italy).

143848. No. 12. Ovali (Italy).

143849. Pomodori No. 6 (Italy).

143850. Potentate.

143851. Potentate Improved.

143852. Potentate × Kondine.

143853. No. 2. Rotundi piccoli (Italy).

143854. Rouge de Marmande.

143855. San Marzano (Italy).

143856. Sans Pareil.

143857. Vetomold.

143858. Victor Emanuel (Italy).

## 143859. EUPHORBIA sp. Euphorbiaceae.

From Mexico. Cuttings presented by F. Treppiedi, Jr., Chilpancingo, Guerrero. Received March 27, 1942.

#### 143860. EUCALYPTUS WATSONIANA F. Muell. Myrtaceae.

From Australia. Seeds presented by C. T. White, Government Botanist, Department of Agriculture and Stock, Brisbane, Queensland. Received March 25, 1942.

Collected by H. G. Simmons, Exhibition Range, November 1941.

143861 to 143870. MEDICAGO spp. Fabaceae.

From Australia. Seeds presented by J. R. A. McMillan, Council for Scientific and Industrial Research, Canberra City. Received March 20, 1942.

143861 and 143862. MEDICAGO CILIARIS (L.) All.

Medic.

An annual that grows on the coast and up to 800 m. above sea level in various parts of Asia. It has squarish leaflets and yellow flowers about one-third of an inch long, in few-flowered clusters or solitary, and hairy, coiled pods.

143861. MC1-1. Originally from Palestine.

143862. MC1-5. Originally from Portugal.

For previous introduction see 44558.

143863 and 143864. MEDICAGO INTERTEXTA (L.) Mill.

143863. MIn-5. Originally from Leningrad.

143864. MIn-9. Originally from Sweden.

143865 and 143866. MEDICAGO PRAECOX DC.

143865. MPr-2. Originally from Temora, New South Wales.

143866. MPr-5. Originally from Kalgoorlie, West Australia.

For previous introduction see 120034.

143867 and 143868. MEDICAGO RUGOSA Desr.

143867. MRu-5. Originally from Portugal.

143868. MRu-4. Originally from Portugal.

For previous introduction see 34148.

143869 and 143870. MEDICAGO SCUTELLATA (L.) Mill.

143869. MSc-25. Originally from Lawes, Queensland.

143870. MSc-30. Originally from Leyden, Netherlands.

For previous introduction see 126485.

#### 143871 to 143875.

From Colombia. Seeds presented by William A. Kyburz, Cali. Received March 24, 1942.

143871. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae.

Jackbean.

No. 1. Large, round, white bean.

143872. CANAVALIA GLADIATA (Jacq.) DC.

Swordbean.

No. 2. Very large, light-purple bean known as "frijol matahormiga" (ant-killing bean).

143873 and 143874. DOLICHOS LABLAB L. Fabaceae.

Hyacinth-bean.

143873. No. 4. Flowers white, in upright racemes; pods rather flat, containing 2 to 4 beans. Vine prolific and long-lived, beans edible.

143874. No. 5. Similar to 143873, but with pods somewhat larger and broader, and larger beans, also edible.

143875. Phaseolus lunatus L. Fabaceae.

Lima bean.

No. 3. Frijol cacho. Vine prolific and long-lived; pods short, fat, hard, containing 2 to 4 beans; flower very small.

143876. Capsicum frutescens L. Solanaceae. Redpepper.

From Ecuador. Seeds collected by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received March 31, 1942.

From Manabi Province.

143877. EUCALYPTUS WANDOO Blakely (E. redunca var. elata Benth.) Myrtaceae.

From Western Australia. Seeds presented by C. A. Gardner, Government Botanist, Perth. Received March 8, 1942.

143878. Luffa aegyptiaca Mill. Cucurbitaceae.

Suakwa towelgourd.

From Puerto Rico. Seeds presented by J. A. B. Nolla, Director, Agricultural Experiment Station, University of Puerto Rico, Rio Piedras. Received April 14, 1942.

Collected by Luis A. Alvarez. The plant grows as a volunteer near houses and along fences.

143879. Gossypium raimondii Ulbrich. Malvaceae. Cotton.

From Peru. Seeds presented by Bruce Griffing, Estación Experimental Agrícola de la Molina, Lima. Received April 16, 1942.

For previous introduction see 137774.

143880. Albizzia Chinensis (Osbeck) Merr. Mimosaceae.

From Florida. Seeds presented by Dr. L. M. Simonson, Lake Alfred. Received April 21, 1942.

A large, rapid-growing tree, native to the subtropical regions of India. For previous introduction see 134173.

143881. Trifolium pratense L. Fabaceae. Red clover.

From Canada. Seeds purchased from Leslie Keen, Jarvis, Ontario. Received April 21, 1942.

143882 and 143883.

From Canada. Scions presented by G. H. Corsan, Echo Valley, Islington, Ontario. Received April 23, 1942.

143882. CARYA OVATA (Mill.) K. Koch. Juglandaceae. Shagbark hickory.

Neilson hickory. A true shagbark; the nuts are very large and have a thin shell that cracks easily. The tree is 70 feet tall with a spread of 35 feet and withstands a temperature of  $-40^{\circ}$  F.

For previous introduction see 128163.

143883. JUGLANS NIGRA L. Juglandaceae.

Black walnut.

Troup black walnut.

For previous introduction see 141742.

143884 and 143885. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Canada. Scions presented by the Agricultural Experiment Station, Summerland, British Colombia. Received April 23, 1942.

143884. Jubilee.

143885. Spartan.

143886. CAPSICUM FRUTESCENS L. Solanaceae. Redpepper.

From Puerto Rico. Seeds presented by Arturo Roque, Agricultural Experiment Station, University of Puerto Rico, Rio Piedras, through Bonney Youngblood, Office of Experiment Stations, United States Department of Agriculture. Received April 13, 1942.

Thick-fleshed, hot pepper; originally from Mexico.

143887. PISUM SATIVUM L. Fabaceae.

Pea.

From Mexico. Seeds presented by F. W. Smith, Guasave, Sinaloa. Received April 18, 1942.

143888 to 143894. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Canada. Scions and trees received from Dr. M. B. Davis, Central Experiment Station, Ottawa. Received April 24, 1942.

143888. Angus.

143892. Elmer.

143889. Atlas.

143893. Gretna.

143890. Bancroft.

143894. Red Melba.

143891. Bingo.

#### 143895 to 143898.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received April 13, 1942.

143895. ACACIA DETINENS Burchell. Mimosaceae.

A thorny shrub or small tree, with small bifoliolate leaves and showy globular heads of small yellow flowers. Native to South Africa.

For previous introduction see 111228.

143896. ARISTIDA OBTUSA Delile. Poaceae.

Grass.

143897. CHLORIS GAYANA Kunth. Poaceae.

Rhodes grass.

Grown at Langholm Estates, West Grahamstown, Cape Province. For previous introduction see 134402.

143898. TARCHONANTHUS MINOR Less. Asteraceae.

A resin-scented shrub up to 7 feet high, with attractive woolly flower heads. It is drought-resistant, and is excellent stock feed.

For previous introduction see 134745.

#### 143899 and 143900.

From Puerto Rico. Seeds presented by H. T. Cowles, Professor of Horticulture, University of Puerto Rico, Rio Piedras. Received April 16, 1942.

143899. Cassia multijuga L. Rich. Caesalpiniaceae.

A small ornamental tree, with compound leaves made up of linear leaves about  $\frac{1}{2}$  inch long, and large yellow flowers followed by flat glabrous pods 6 inches long and less than an inch wide. It is native to tropical America.

For previous introduction see 108568.

143900. LIBIDIBIA PUNCTATA (Willd.) Britton. Caesalpiniaceae.

143901. PALANDRA AEQUATORIALIS (Spruce) O. F. Cook (*Phytele-phas aequatorialis* Spruce). Phoenicaceae. Ivory palm.

From Ecuador. Fruits presented by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received April 28, 1942.

143902. TABEBUIA SERRATIFOLIA (Vahl) Nicholson. Bignoniaceae.

From Cuba. Seeds presented by the Atkins Institution of the Arnold Arboretum, Cienfuegos. Received April 28, 1942.

An evergreen tree, native to the West Indies, with digitately compound leaves made up of 4 or 5 oblong-ovate leaflets, 3 to 5 inches long, and terminal panicles of yellow, funnel-formed flowers.

For previous introduction see 132451.

#### 143903. CITRUS sp. Rutaceae.

From Cuba. Budsticks presented by Thomas R. Towns, Holguin. Received April 29, 1942.

#### 143903—Continued.

"Budsticks cut from behind a fruit that was entirely seedless, and while not over 1 inch in diameter, it was very much like the West Indian Cuban lime in flavor." (Towns.)

143904. AMYGDALUS PERSICA L. Amygdalaceae.

From Maryland. Trees presented by the Bountiful Ridge Nurseries, Princess Anne. Received April 30, 1942.

Colora.

143905. Amygdalus persica L. Amygdalaceae. Peach.

From Michigan. Trees presented by the Ackerman Nursery, Bridgman. Received April 30, 1942.

Fertile Hale.

143906 and 143907. AMYGDALUS PERSICA L. Amygdalaceae.

From Missouri. Trees presented by Stark Bros. Nursery, Louisiana. Received April 30, 1942.

143906. Golden Elberta.

143907, Halate.

143908 and 143909. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From Delaware. Trees presented by the Bunting Nurseries, Selbyville. Received April 30, 1942.

143908. O'Boy.

143909. Redelberta.

143910. Amygdalus persica L. Amygdalaceae.

From Michigan. Trees presented by the Ackerman Nursery, Bridgman. Received April 30, 1942.

Redhaven.

#### 143911 and 143912.

From Missouri. Trees presented by the Stark Bros. Nursery, Louisiana. Received April 30, 1942.

143911. AMYGDALUS PERSICA L.

World's Earliest.

Flaming Gold.

143912. AMYGDALUS PERSICA Var. NECTARINA Ait.

Nectarine.

#### 143913. AMYGDALUS PERSICA var. NECTARINA Ait.

From Maryland. Trees presented by the Bountiful Ridge Nurseries, Princess Anne. Received April 30, 1942.

Rubired.

143914. LUFFA AEGYPTIACA Mill. (L. cylindrica (L.) Roemer). Cucurbitaceae. Suakwa towelgourd.

From the British West Indies. Seeds presented by F. B. Pidduck, Agricultural Department, Dominica. Received April 22, 1942.

143915. LUFFA AEGYPTIACA Mill. Cucurbitaceae.

Suakwa towelgourd.

From Cuba. Seeds presented by D. Fortún, Estación Experimental Agronómica, Santiago de las Vegas. Received April 29, 1942.

Japonesa.

143916. Gossypium tomentosum Nutt. Malvaceae. Cotton.

From Trinidad. Seeds presented by Dr. J. B. Hutchinson, Genetics Department, Cotton Research Station. Received May 2, 1942.

C.B. 1440.

143917 to 143920. MALUS SYLVESTRIS Mill. Malaceae. Apple.

From Canada. Trees purchased from the Wallace Nurseries, Island Park, Portage La Prairie, Manitoba. Received May 4, 1942.

143917. Charlamoff.

143919. Spangelo.

143918. Gertrude.

143920. Wallace Hybrid.

143921. Durio zibethinus Murr. Bombacaceae.

From Florida. Plant presented by S. J. Lynch, Subtropical Experimental Station, Homestead, Received March 28, 1942.

#### 143922 to 143950.

From Australia. Seeds collected by A. Murphy, Botanical Seed Collector, Woy-Woy, New South Wales. Received May 4, 1942.

A collection of native Australian species made at the request of C. T. White, Government Botanist, Brisbane, Queensland.

143922. CASUARINA CUNNINGHAMIANA. Miquel. Casuarinaceae.

Cunningham beefwood.

A slender-branched, leafless ornamental tree, which has branchlets suggesting horsetails.

For previous introduction see 99405.

143923. CASUARINA GLAUCA Sieber.

Beefwood.

Durian.

A small bushy tree.

For previous introduction see 136848.

143924. CASUARINA STRICTA Ait.

For previous introduction see 90682.

143925. CASUARINA SUBEROSA Otto & Dietr. (C. leptoclada Mig.)

A species with very large fruits, 1½ inches long, and with long, coarse, pendent branchlets, very distinct from Casuarina equisetifolia.

For previous introduction see 112083.

143926. CASUARINA TORULOSA Ait.

An evergreen tree 50 to 75 feet high, with erect, mostly terete, branches. The close-grained, prettily marked wood is used as veneer for cabinet work; also for shingles.

For previous introduction see 125036.

143927. EUCALYPTUS BAILEYANA F. Muell. Myrtaceae.

A tall tree, native to Queensland, with narrowly lanceolate-falcate, dull green leaves. The flowers are in small axillary umbels and the fruits are semiovate. The wood is light gray, very tough, and suitable for tool handles.

For previous introduction see 75615.

143928. EUCALYPTUS BOTRYOIDES J. E. Smith.

Bangalay.

A tall tree, native to Queensland, with narrowly lanceolate-falcate, dull-umbels of small, sessile, white flowers; and obovate fruits. In Australia, it is used as a windbreak and as a shade tree. The wood is hard, tough, and durable.

For previous introduction see 141824.

#### 143922 to 143950—Continued.

143929. EUCALYPTUS CITRIODORA Hook.

For previous introduction see 143766.

143930. EUCALYPTUS EUGENOIDES Sieber.

A tall tree, native to New South Wales, with fibrous bark, thick oblique leaves 2 to 6 inches long, small white flowers in axillary clusters of 6 to 12, and ovoid fruits ¼ inch in diameter.

For previous introduction see 141829.

143931. EUCALYPTUS EXSERTA F. Muell.

A medium-sized tree with rough, fissured, ash-brown bark; sword-shaped leaves 3 to 6 inches long; axillary clusters of 3 to 8 white flowers on long pedicels; and nearly globular fruits  $\frac{1}{3}$  inch in diameter.

For previous introduction see 141831.

143932. EUCALYPTUS GUMMIFERA (Gaertn.) Hochr. (E. corymbosa J. E. Smith).

A medium-sized evergreen tree, with leathery, lanceolate leaves and large corymbs of fragrant, yellowish-white flowers.

For previous introduction see 143768.

143933. EUCALYPTUS HEMIPHLOIA F. Muell.

An evergreen tree 50 to 60 feet high with hard wood.

143934. X EUCALYPTUS KIRTONIANA F. Muell.

For previous introduction see 141835.

143935. EUCALYPTUS MACULATA Hook.

Spotted gum.

For previous introduction see 143769.

143936. Eucalyptus melliodora A. Cunn.

Honey gum.

A spreading tree up to 150 feet high, with drooping branches, narrow lanceolate leaves 3 to 5 inches long, and small white flowers particularly rich in nectar. The timber is used in Australia by wheelwrights and shipbuilders.

For previous introduction see 141841.

143937. Eucalyptus micrantha DC.

A large tree with smooth bark that flakes off, leaving the trunk spotted or variegated. The thick, leathery, sword-shaped leaves are 6 to 8 inches long, and the axillary clusters of 4 to 8 flowers are followed by pear-shaped fruits less than a quarter of an inch in diameter.

For previous introduction see 90697.

143938. EUCALYPTUS MICROCARPA Maiden.

A large tree with gray or white bark; lanceolate, leathery leaves 4 inches long; and panicles made up of clusters of 3 to 7 small flowers followed by very small, subcylindrical fruits.

For previous introduction see 138855.

143939. Eucalyptus microcorys F. Muell.

A tall tree with persistent, wrinkled bark; thin, broadly lanceolate leaves; and small white flowers. The yellowish timber is especially useful for ballroom floors because of its greasy nature.

For previous introduction see 143770.

143940. EUCALYPTUS PANICULATA J. E. Smith.

For previous introduction see 143771.

#### 143922 to 143950—Continued.

143941. EUCALYPTUS PILULARIS J. E. Smith.

Blackbutt.

A slender tree 100 to 150 feet high, considered excellent for timber, especially for fence posts and telegraph poles. The honey from the flowers is reported to be of especially good quality. In California the tree grows well near the coast but does not thrive in the dry, hot interior valleys.

For previous introduction see 143772.

143942. EUCALYPTUS POPULIFOLIA Desf.

A compact, straight-growing tree up to 50 feet high, with lustrous, intensely green, 4-inch-long ovate leaves, and with panicles of small white flowers followed by very small fruits.

For previous introduction see 75646.

143943. EUCALYPTUS PROPINQUA Deane & Maiden.

A large tree, 120 feet high and 4 feet in diameter, native to New South Wales. The lanceolate leaves are 5 inches long, and the timber is durable either in or out of the ground.

For previous introduction see 141852.

143944. EUCALYPTUS RESINIFERA J. E. Smith.

Mahogany gum.

A large tree with rough, reddish, fibrous, persistent bark. The heavy timber is rich red and is said to be strong and durable; because of the color the tree is also called red mahogany.

For previous introduction see 143774.

143945. EUCALYPTUS ROBUSTA J. E. Smith.

Brown gum.

A handsome, symmetrically branched tree of moderate height, with bark of trunk persistent, rough, dark brown, and that of the branches reddish. The wood is said to be somewhat brittle.

For previous introduction see 143710.

143946. EUCALYPTUS SALIGNA J. E. Smith.

A tall tree with silvery-gray bark, native to New South Wales. The narrowly lanceolate leaves are 5 to 6 inches long, and the clusters of 4 to 8 white flowers are on short peduncles.

For previous introduction see 143775.

143947. EUCALYPTUS TERETICORNIS J. E. Smith.

Slaty gum.

For previous introduction see 141861.

143948. EUCALYPTUS TRIANTHA Link. (E. acmenioides Schauer).

For previous introduction see 143778.

143949. EUCALYPTUS UMBRA R. T. Baker.

A small to moderately large tree with thick, coarse, fibrous, persistent bark and alternate, thick, shining, lanceolate to falcate-lanceolate, mature leaves. The timber is inferior. In Australia this is a tree of poor saline flats and ridges in proximity to salt water.

For previous introduction see 141863.

143950. Eucalyptus sp.

## 143951. Passiflora purpusii Killip. Passifloraceae.

From Florida. Plants growing at the United States Plant Introduction Garden, Coconut Grove. Numbered May 5, 1942.

A passiflora with ovate, cordate leaves about 6 inches long and flowers about 2 inches wide. Native to Veracruz, Mexico.

For previous introduction see 124615.

143952. Fragaria sp. Rosaceae.

Strawberry.

From Canada. Plants presented by W. J. Strong, Ontario Department of Agriculture, Vineland Experiment Station, Ontario. Received May 6, 1942.

Valentine strawberry.

143953. CINCHONA OFFICINALIS L. Rubiaceae.

From Guatemala. Seeds obtained from a planting near San Sebastian. Received May 6, 1942.

Originally received from Java as Cinchona ledgeriana, now considered a synonym of the above.

For previous introduction see 143792.

#### 143954 to 143959. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From South Dakota. Trees presented by the Carl A. Hansen Nursery, Brookings. Received May 8, 1942.

143954. Hulan.

143957. Sing.

143955. Lalin.

143958. Sino.

143956. Mandarin.

143959. Zun.

143960 and 143961. TARAXACUM KOK-SAGHYZ Rodin. Cichoriaceae.

From the Union of Soviet Socialist Republics. Seeds obtained through the State Department, Washington, D. C. Received May 8, 1942.

143960. No. 10706.

143961. No. 10707.

#### 143962 to 143972.

From Algeria. Seeds collected by J. G. Hamilton, Soil Conservation Service, United States Department of Agriculture. Received May 11, 1942.

143962. Bauhinia sp. Caesalpiniaceae.

No. 10.

143963. HIBISCUS SABDARIFFA L. Malvaceae.

Roselle.

A stout annual, 5 to 9 feet high. The fruiting calyxes are for jellies. For previous introduction see 133035.

143964. ORYZA SATIVA L. Poaceae.

Rica

No. 8.

143965 and 143966. Sesamum indicum L. (S. orientale L.) Pedaliaceae. Sesame.

143965. No. 4a.

143966. No. 7.

143967 and 143968. SORGHUM VULGARE Pers. Poaceae.

Sorghum.

143967. No. 4.

143968. No. 6.

143969. Tetrapleura sp. Mimosaceae.

No. 9.

143970. VIGNA SINENSIS (Torner) Savi. Fabaceae.

Cowpea.

No. 3.

#### 143962 to 143972—Continued.

143971. VOANDZEIA SUBTERRANEA (L.) Thouars. Fabaceae.

No. 1.

For previous introduction see 115500.

143972. ZEA MAYS L. Poaceae.

Corn.

No. 5.

#### 143973 to 143980.

From Canada. Trees purchased from the Manitoba Hardy Plant Nursery, Dropmore, Manitoba. Received May 11, 1942.

143973. MALUS sp. Malaceae.

Apple.

Red Apple

143974. MALUS sp.

Sugar Crab.

143975. PRUNUS sp. Amygdalaceae.

Dropmore Blue.

143976. PRUNUS sp.

McRobert.

143977. Pyrus sp. Malaceae.

Pear.

Forostovsky.

143978. Pyrus sp.

Manchurian.

143979. Pyrus sp.

Olia.

143980. PYRUS Sp.

Tioma

#### 143981. CINCHONA OFFICINALIS L. Rubiaceae.

From the Philippine Islands. Seeds presented by Col. Arthur Fischer, Director of Forestry, Manila. Received May 12, 1942.

Collected at Kaatoan-Bukidnon.

For previous introduction see 143792.

#### 143982 to 143985.

From Australia. Seeds presented by Dr. A. McTaggart, Division of Plant Introduction, Council for Scientific and Industrial Research, Canberra. Received May 4, 1942.

#### 143982. AVENA MONTANA Vill. Poaceae.

Grass.

No. 7704. A perennial, cespitose grass, native to alpine and subalpine sections of southern Europe, with laxly ascending stems and loosely folded leaves. The loose panicle is about 6 inches long.

For previous introduction see 59363.

#### 143983. AVENA PUBESCENS HUDS.

No. 7706. A perennial Siberian grass which thrives in dry, open places, forming a thick turf. The numerous branches are about 4 inches long, and the coarse leaves are up to an inch in width.

For previous introduction see 59693.

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#### 143982 to 143985—Continued.

143984. Avena pratensis L.

No. 7705.

For previous introduction see 136313.

143985. AVENA PUBESCENS Huds.

No. 7703.

For previous introduction see 136314.

#### 143986. CASTILLA ELASTICA Cerv. Moraceae. Mexican rubbertree.

From Puerto Rico. Seeds presented by Kenneth A. Bartlett, Acting Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received May 15, 1942.

For previous introduction see 124758. 143987 and 143988.

From Mexico. Seeds collected by S. B. Detwiler, Soil Conservation Service, United States Department of Agriculture. Received May 18, 1942.

143987. ASCLEPIAS SUBULATA Decaisne. Asclepiadaceae.

No. 2100. From northwestern Mexico.

No. 2100. From northwestern

For previous introduction see 59766.

142988. CRYPTOSTEGIA sp. Asclepiadaceae.

142988. Mexico.

## 143989. TARAXACUM KOK-SAGHYZ Rodin. Cichoriaceae.

From the Union of Soviet Socialist Republics. Received May 20, 1942. For previous introduction see 143961.

#### 143990 to 144003.

From Australia. Seeds presented by the Queensland Forest Service, Brisbane. Received May 1, 1942. bane. Received May 1, 1942.

143990. EUCALYPTUS CITRIODORA Hook. Myrtaceae.

For previous introduction see 143929.

For previous introduction 221
143991. EUCALYPTUS CLOEZIANA F. Muell.

Narrowleaf ironbark.

For previous introduction see 141828.

143993. EUCALYPTUS GUMMIFERA (Gaertn.) Hochr. (E. corymbosa J. E. Smith).

For previous introduction see 143932.

143994. EUCALYPTUS MACULATA Hook.

Spotted gum.

For previous introduction see 143935.

143995. EUCALYPTUS MICROCORYS F. Muell.

For previous introduction see 143939.

143996. Eucalyptus paniculata J. E. Smith.

For previous introduction see 143940.

143997. EUCALYPTUS PILULARIS J. E. Smith.

For previous introduction see 143941.

143998. Eucalyptus resinifera J. E. Smith.

For previous introduction see 143944.

Mahogany gum.

#### 143990 to 144003—Continued.

143999. EUCALYPTUS SALIGNA J. E. Smith.

For previous introduction see 143946.

144000. EUCALYPTUS STAIGERIANA F. Muell.

For previous introduction see 143776.

144001. EUCALYPTUS TERETICORNIS J. E. Smitl.

For previous introduction see 143947.

144002. EUCALYPTUS TRACHYPHLOIA F. Muell.

For previous introduction see 143777.

144003. EUCALYPTUS TRIANTHA Link.

For previous introduction see 143948.

## 144004. IPOMOEA MURUCOIDES Roem. & Schult. Convolvulaceae.

From Mexico. Seeds presented by the Dirección General Forestal y de Caza, Mexico City, through Edwin A. Menninger, Stuart, Fla. Numbered May 21, 1942.

Cazahuate or palo bobo.

#### 144005. CALLIANDRA HAEMATOCEPHALA Hassler. Mimosaceae.

From Florida. Seeds presented by L. M. Simonson, Lake Alfred. Received May 22, 1942.

A handsome shrub or small tree, with terete, green branches, and bipinnate leaves with only 1 pair of pinnae, each about 5 inches long. The small crimson flowers are in globose heads.

For previous introduction see 36023.

### 144006. KALANCHOE sp. Crassulaceae.

From New York. Cuttings presented by the New York Botanical Garden, Bronx Park, New York City. Received April 17, 1940.

Introduced under the name "figueredoi," for which a place of publication has not been found.

#### 144007 and 144008.

From Brazil. Seeds presented by the Botanic Garden, Rio de Janeiro. Received October 31, 1940.

144007. BEGONIA LUXURIANS Scheidw. Begoniaceae.

Native to the Serra dos Orgãos.

144008. BEGONIA Sp.

Native to the Serra dos Orgãos.

#### 144009 to 144036.

From Canada. Trees purchased from the Boughen Nurseries, Valley River, Manitoba. Received May 22, 1942.

144009 to 144016. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

144009. Arabskoe. 1440

144013. Boskill No. 4.

144010. Battleford No. 2.

144014. Boskill No. 5.

144011. Boskill No. 1.

144015. Boskill No. 7.

144012. Boskill No. 3.

144016. Boskill No. 8.

144017. MALUS Sp.

Dauphin.

#### 144009 to 144036—Continued.

144018. MALUS Sp.

Kutanka.

144019. MALUS SYLVESTRIS Mill.

M-343.

144020. MALUS ASTRACANICA Dum.-Cours.

Magnus.

144021. MALUS Sp.

Minnesota 447.

144022. MALUS sp.

Pattie.

144023 and 144024. MALUS SYLVESTRIS Mill.

Apple.

144023. Piotet.

144024. Renet Bergatney.

144025. X MALUS ADSTRINGENS Zabel.

Robin.

144026. MALUS Sp.

Rosthern No. 5.

144027. MALUS Sp.

Rosthern No. 18.

144028. MALUS sp.

Rosthern No. 21.

144029. MALUS Sp. Rosthern No. 22.

144030. MALUS sp.

Severn.

144031. MALUS sp.

Yephory's Chernogous.

144032. MALUS sp.

(No label).

144033. PRUNUS. Amygdalaceae.

Opata plum.

144034. Pyrus sp. Malaceae.

Liaoyang No. 10.

144035. PYRUS sp.

Liaoyang No. 50.

144036. PYRUS sp.

Pioneer No. 3.

#### 144037 to 144040.

From California. Plants presented by Dr. I. J. Condit, Citrus Experiment Station, Riverside. Received May 23, 1942.

144037. Figure sp. Moraceae.

Introduced under the name "canariensis," for which a place of publication has not been found.

Pear.

#### 144037 to 144040—Continued.

144038. FICUS MALLATOCARPA Warb.

144039. FICUS MINDOROENSIS Merr.

144040. FICUS SATTERTHWAITEI Elmer.

#### 144041 to 144053.

From Uruguay. Seeds presented by Dr. Bernardo Rosengurtt, Monzon-Heber, Estación Juan Jackson. Received May 15, 1942.

144041. Amphibromus scabrivalvis (Trin.) Swallen. Poaceae. Grass.

No. 68. A bulbiferous plant, with cleistogamous flowers, growing in humid places. Native to Chile.

For previous introduction see 76878.

144042. ASTREBLA LAPPACEA (Lindl.) Domin. Poaceae.

Grass.

No. 612.

For previous introduction see 134839.

144043. Briza Rufa (Presl) Steud. Poaceae.

Grass.

No. 682.

144044. CALAMAGROSTIS VIRIDI-FLAVESCENS (Poir.) Steud. Poaceae. Grass. For previous introduction see 138788.

144045. ELEUSINE TRISTACHYA Lam. Poaceae. PE 846.

Grass.

For previous introduction see 27290.

144046. Festuca sp. Poaceae.

Grass.

No. 345.

144047. Hordeum Bulbosum L. Poaceae.

Grass.

Perennial grass about 4 feet high.

For previous introduction see 141413.

Grass.

144048. No. 674.

144049. No. 673.

144050. Manisuris selloana (Hack.) Kuntze. Poaceae.

144048 and 144049. HORDEUM COMPRESSUM Griseb.

Grass.

No. 424. A cespitose suberect grass, common in Uruguay. The slender stems are about 12 inches high.

For previous introduction see 128170.

144051. Poa lanigera Nees. Poaceae. No. 824.

Grass.

For previous introduction see 92339. 144052, STIPA HYALINA Nees, Poaceae.

Feathergrass.

The somewhat bulbous rhizomes of this South American perennial grass send up rather woody culms about 2 feet high, with very narrow leaves. For previous introduction see 62056.

144053. Tridens brasiliensis Nees.

Grass.

No. 357. A tufted perennial grass, native to Brazil, with flat leaves. For previous introduction see 62059.

144054 to 144056. EREMOCITRUS GLAUCA (Lindl.) Swingle. (Atalantia glauca Benth.).

Australian desert kumquat.

From Australia. Fruits presented by C. T. White, Government Botanist, Brisbane, Queensland. Received May 25, 1942.

144054. Collected by S. L. Everist, Blackall, Queensland, at Ward River, north of Charleville.

144055. Collected by L. G. Walker, Wellshot, Ilfracombe, Queensland at Wellshot, Ilfracombe.

144056. Collected by G. Mara, at Tiree, Torrens Creek, Queensland.

144057 to 144067. HEVEA BRASILIENSIS (A. Juss.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Costa Rica. Plants presented by Theodore J. Grant, Special Rubber Investigations, United States Department of Agriculture.

From the Ford Collection, shipped to Costa Rica from Brazil in 1941.

144057. B-14

144063. B-3387.

144058. B-3112.

144064. F-409.

144059. B-3363.

144065. F-1444.

144060. B-337.

144066. F-1620.

144061. B-3381.

144067. F-5475.

144062. B-3384.

For previous introduction see 142247.

144068. MATELEA LANATA (Zucc.) Woodson. Asclepiadaceae.

From Texas. Seeds presented by Peter Heinz, Brownsville. Received March 12, 1941.

144069. LUFFA AEGYPTIACA Mill. Cucurbitaceae.

Suakwa towelgourd.

From Puerto Rico. Seeds presented by Dr. J. A. B. Nolla, Director, Agricultural Experiment Station, University of Puerto Rico, Rio Piedras. Received May 22, 1942.

144070. CARLUDOVICA PALMATA Ruiz & Pav. Cyclanthaceae. Panama-hat plant.

From the Canal Zone. Seeds presented by Walter R. Lindsay, Director, Canal Zone Experiment Gardens, Summit. Received May 29, 1942.

A stemless plant, native to northwestern South America, with palmately divided, palmlike leaves about 2 feet across on petioles 4 to 6 feet high. The leaves are used for making panama hats.

For previous introduction see 133016.

#### 144071 to 144087.

From the Philippine Islands. Seeds presented by Col. Arthur Fischer, Director of Forestry, Manila. Received June 6, 1942.

144071 to 144077. CINCHONA OFFICINALIS L. Rubiaceae.

144071. General collection, December 1941 to March 1942.

144072. No. 43. Collected from March 30, 1942, to April 1, 1942.

**144073.** No. 45. March 30, 1942.

144074. No. 72. March 1942.

144075. No. 2. April 1, 1942.

#### 144071 to 144087—Continued.

144076. No. 2. March 2, 1942.

144077. No. 4. April 1, 1942.

144078 to 144080. CINCHONA PUBESCENS Vahl (C. succirubra Pav.)

144078. No. 8. January 26, 1942.

144079. No. 22. February 2, 1942.

144080. No. 22, April 1, 1942.

For previous introduction see 143794.

144081. CINCHONA sp.

C.S. x-1. April 1, 1942. Originally from southern Brazil.

144082. CINCHONA Sp.

C.S. x-2. April 1, 1942.

144083. CINCHONA Sp.

C.S. x-2. April 1, 1942.

144084. CINCHONA Sp.

No. 9. April 1, 1942.

144085 to 144087. CINCHONA.

144085. Hybrid No. 11. April 1, 1942.

144086. Hybrid No. 147. April 1, 1942. Originally from southern Brazil.

144087. Hybrid No. 168. March 31, 1942. Originally from Brazil.

#### 144088 and 144089.

From Canada. Trees purchased from the McFayden Seed Co., Winnipeg, Manitoba. Received June 4, 1942.

144088. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

Printosh.

144089. PRUNUS sp. Amygdalaceae.

Assiniboine plum.

#### 144090 to 144092.

From South Africa. Seeds presented by the McGregor Museum, Kimberley. Received May 26, 1942.

144090 and 144091. Eragrostis Lehmanniana Nees. Poaceae. Grass. For previous introduction see 129589.

144092. POGONARTHRIA SQUARROSA (Licht.) Pilger. Poaceae. Grass. For previous introduction see 142057.

#### 144093 to 144114.

From the Philippine Islands. Seeds presented by Col. Arthur Fischer, Bureau of Forestry, Manila. Received June 3, 1942.

144093 to 144102. CINCHONA OFFICINALIS L. Rubiaceae.

144093. (General collection, Kaatoan.) Collected December 1941 to February 1942.

144094. (General collection, Kaatoan.) Collected December 1941 to January 1942.

144095. (Impalatao stock). Collected December 1941 to February 1942.

144096. No. 3. (Impalatao stock). Collected December 1941 to February 1942.

#### 144093 to 144114—Continued.

144097. No. 4. (Impalatao stock.) Collected January to February 1942.

144098. No. 5. (Impalatao stock.) Collected December 1941 to February 1942.

144099. No. 9. (Impalatao stock.) Collected January to February 1942.

144100. No. 10. (Impalatao stock.) Collected December 1941 to January 1942.

144101. No. 46. Collected April 8, 1942.

144102. No. 47. Collected April 8, 1942.

For previous introduction see 144077.

144103 to 144105. CINCHONA PUBESCENS Vahl (C. succirubra Pav.).

144103. X-1. Collected April 1 and 2, 1942.

144104. X-2. Collected April 1, 1942.

144105. X-3. Collected April 1, 1942.

For previous introduction see 144080.

#### 144106 to 144114. CINCHONA.

144106. Hybrid. (General Kaatoan collection.) Collected December 1941 and January 1942.

144107. Hybrid. (General collection. Impalatao stock.) Collected February 1942.

144108. Hybrid No. 1. (Impalatao stock.) Collected December 1941 and February 1942.

144109. Hybrid No. 2. (Impalatao stock.) Collected January to February 1942.

144110. Hybrid No. 3. (Impalatao stock.) Collected December 1941 to February 4, 1942.

144111. Hybrid No. 10. Collected April 1, 1942.

144112. Hybrid No. 11. Collected March 16, 1942.

144113. Hybrid No. 168. Collected March 9 and 26, 1942.

144114. Hybrid. X-4. Collected April 1, 1942.

#### 144115. ROMULEA RAMIFLORA Ten. Iridaceae.

From Sweden. Seeds presented by the Botanic Garden, Göteborg. Received April 7, 1934.

#### 144116 to 144118. QUERCUS SUBER L. Fagaceae. Cork oak.

From Spain. Seeds obtained through the Office of Foreign Agricultural Relalations, United States Department of Agriculture. Received June 5, 1942.

144116. From Huelva Province. Collected on a mountain slope 800 meters altitude; soil stony; climate cold; humidity low.

144117. From Sevilla Province. Collected on ravines at 500 meters altitude; soil slaty; climate warm; humidity high.

144118. From Cádiz Province. Collected on flat land at 150 meters altitude; soil poor, sandy; climate warm; humidity low.

For previous introduction see 82397.

#### 144119 and 144120. Gossypium. Malvaceae.

Cotton.

From Egypt. Seeds presented by the Ministry of Agriculture, Botanical and Plant Breeding Section, El Giza. Received June 6, 1942.

144119 and 144120—Continued.

144119. Karnak (Giza 29).

144120. Malaki (Giza 26).

144121. Luffa aegyptiaca Mill. Cucurbitaceae.

Suakwa towelgourd.

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From Ecuador. Seeds presented by Commander G. M. Dyott, British Legation, Quito. Received June 5, 1942.

144122. ACER SACCHARUM Marsh. Aceraceae. Sugar maple.

From Maryland. Trees presented by J. J. Hohman, Kingsville Nurseries Inc., Kingsville. Received June 3, 1942. THE COURTS OF STREET, STREET,

Var. Globosum.

144123. HEDERA CANARIENSIS Willd. Araliaceae.

From New Jersey. Plants presented by W. A. Manda Inc., South Orange. Received June 4, 1942.

A green sport which appeared on the variegated variety, Gloire de Marengo.

144124 to 144126. LUFFA AEGYPTIACA Mill. Cucurbitaceae.

Suakwa towelgourd.

From the British West Indies. Seeds presented by the Agricultural Superintendent, St. Lucia. Received June 5, 1942.

144124. A.

144125. B.

144126. C.

144127 and 144128. AMYGDALUS PERSICA L. Amygdalaceae.

From Palestine. Seeds presented by Dr. Y. Carmon, Chief, Division of Horticulture, The Jewish Agency Agriculture Research Station, Rehovoth. Received June 11, 1942. Charles of the Control of the Contro

144127. Balady. ("Native" in Arabic.)

144128. Yellow. Nematode- and alkali-resistant.

144129 to 144138. SORGHUM VULGARE Pers. Poaceae. Sorghum.

From the Union of South Africa. Seeds presented by Dr. H. H. Dodds, Director, Experiment Station, Mount Edgecombe, Natal. Received June 10, 1942.

144129, Amber Cane.

144134. Inyangentombi.

144130. Basutoland No. 254.

144135. Koster 250.

144131. Blacktop.

144136. Machavie 246.

144132. Eshowe.

144137. Wintersome.

144133. Haakdoorn.

144138, No. 284.

144139. SACCHARUM. Poaceae.

From Egypt. Cuttings presented by Gadallah Abou Ela, Government Sugar Cane Technician, Orman, Giza. Received June 13, 1942.

P.O.J. 105.

144140. ZINGIBER OFFICINALE Roscoe. Zingiberaceae.

From Puerto Rico. Roots presented by Kenneth A. Bartlett, Acting Director, Federal Experiment Station, Mayaguez. Received June 16, 1942.

For previous introduction see 98793.

#### 144141. LUFFA AEGYPTIACA Mill. Cucurbitaceae.

Suakwa towelgourd.

From the British West Indies. Seeds presented by the Agricultural Department, Montserrat. Received June 15, 1942.

#### 144142 and 144143. HIBISCUS ELATUS Swartz. Malvaceae.

Mountain rosemallow.

From Cuba. Seeds presented by José Garcia, Havana. Received June 19, 1942.
Originally from Dr. J. Albertos Fors, Forestry Department.

For previous introduction see 87513.

#### 144144. Manihot sp. Euphorbiaceae.

From Georgia. Seeds presented by A. J. Ingram, Valdosta. Received June 19, 1942.

## 144145. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Argentina. Seeds presented by R. F. Worlock, Buenos Aires. Received June 22, 1942.

Wild peach seeds from the mountains of San Luis and Cordoba.

#### 144146. Gossypium. Malvaceae.

Cotton.

From the British West Indies. Seeds presented by S. C. Barham, Kingston, Jamaica. Received June 10, 1942.

#### 144147. LUFFA AEGYPTIACA Mill. Cucurbitaceae.

Suakwa towelgourd.

From Mexico. Seeds purchased from Manuel de Ymbert, Mexico City. Received June 25, 1942.

#### 144148 to 144152.

From Puerto Rico. Presented by Dr. K. A. Bartlett, Acting Director, Puerto Rico Agricultural Experiment Station, Mayaguez. Received June 29, 1942.

144148. AGAVE SISALANA Perrine. Amaryllidaceae.

Sisal.

Offsets.

For previous introduction see 49837.

144149 and 144150. DERRIS ELLIPTICA (Roxb.) Benth. (Deguelia elliptica (Roxb.) Taub.). Fabaceae.

Cuttings.

144149. Changi No. 3, Clone 104-3.

144150. Sarawak Creeping.

For previous introduction see 128922.

144151. PIPER NIGRUM L. Piperaceae.

Black pepper.

Cuttings.

For previous introduction see 134270.

144152. ZINGIBER OFFICINALE Roscoe. Zingiberaceae.

Ginger.

Rhizomes.

For previous introduction see 144140.

144153. Phaseolus vulgaris L. Fabaceae. Common bean.

From Peru. Seeds presented by Julian Greenup, Commercial Attaché, Lima. Received June 29, 1942.

Nunña.

144154. DIOSCOREA ALATA L. Dioscoreaceae. Winged yam.

From Brazil. Tubers collected by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received March 28, 1941.

For previous introduction see 107738.

144155. MALVA PARVIFLORA L. Malvaceae.

From Texas. Seeds presented by C. C. Albers, Professor of Pharmacognosy, University of Texas, Austin. Received July 3, 1942.

For previous introduction see 122894.

144156. EREMOCITRUS GLAUCA (Lindl.) Swingle (Atalantia glauca Benth.). Rutaceae. Australian desert kumquat.

From California. Seeds presented by the United States Date Garden, Indio. Received July 3, 1942.

For previous introduction see 144056.

#### 144157 to 144220.

From Bolivia. Seeds collected by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received June 18, 1942.

144157 to 144167. Collected in the Department of Cochabamba.

144157. ACIOTIS CAULIALATA Triana. Melastomaceae.

No. 39.2374. Altitude, 550 m.

144158 and 144159. ALONSOA ACUTIFOLIA Ruiz & Pav. Scrophulariaceae.

144158. No. 39.2167. Collected from W. Eyerdam, March 19, 1939. The plant grows among stones in red clay soil at an altitude of 3,000 m.

144159. No. 39.2421. Altitude 2,600 m.

For previous introduction see 127783.

144160. ARISTOLOCHIA sp. Aristolochiaceae.

No. 39.2373. Altitude 2,500 m.

144161. BACCHARIS GLUTINOSA Pers. Asteraceae.

No. 39.2379. Altitude 2,600 m.

144162. BACCHARIS RIPARIA H. B. K.

No. 39.2331. Altitude, 2,800 m.

144163. BACCHARIS Sp.

No. 39.2188. Altitude 2,600 m.

144164. BACCHARIS sp.

No. 39.2185. Altitude 2,600 m.

144165. BACCHARIS Sp.

No. 39.2184. Collected by W. Eyerdam, April 6, 1939.

The bush is rather common but showy, and has yellow flowers. It grows at an altitude of 2,600 m.

144166. BACCHARIS sp.

No. 39.2330. Altitude 800 m.

144167. BARNADESIA Sp. Asteraceae.

No. 39.2347. Altitude 2,500 m.; flowers white.

144168. BARTSIA HISPIDA Benth. Scrophulariaceae.

No. 39.2420. From the Department of La Paz; altitude 2,500 m.

#### 144157 to 144220—Continued.

144169. Begonia sp. Begoniaceae.

No. 39.2332. From the Department of Cochabamba; altitude 550 m.

144170. BOMAREA DISTICHOPHYLLA (Herb.) Baker. Amaryllidaceae.

No. 39.2322. From the Department of Cochabamba; altitude 2,800 m.

144171. Bomarea multiflora (L.) Mirb.

No. 39.2375. From the Department of Cochabamba; altitude 2,800 m. 144172. CALCEOLARIA sp. Scrophulariaceae.

No. 39.2112. From the Department of Colombo.

144173. Castilleja communis Benth. Scrophulariaceae.

No. 39.2367. From the Department of La Paz; altitude 2,500 m.

144174. CESTRUM STRIGILLATUM Ruiz & Pav. Solanaceae.

No. 39.2334. From the Department of Cochabamba; altitude 550 m.

144175. CLEOME sp. Capparidaceae.

No. 39.1986. From the Department of La Paz; altitude 2.500 m. Collected by W. Eyerdam, April 15, 1939.

144176. CLEOME Sp.

No. 39.2378. From the Department of Cochabamba: altitude 2,800 m. Flowers pink.

144177. CLEOME sp.

No. 39.2343. From the Department of Cochahamba; altitude 2,800 m. Flowers white.

144178. Conyza gnaphalioides H. B. K. Asteraceae.

No. 39.2350. From the Department of Cochabamba; altitude 3,200 m.

144179. Cosmos sp. Asteraceae.

No. 39.2339. From the Department of Cochabamba; altitude 2,700 m. Flower heads orange, with yellow rays.

144180. CRASSULA CONNATA (Ruiz & Pav.) Berger. Crassulaceae.

No. 39.2348. From the Department of Cochabamba; altitude 1,700 m.

144181. CROTALARIA PUMILA Ortega. Fabaceae.

No. 39.2349. From the Department of Cochabamba; altitude 2,700 m. For previous introduction see 97308.

144182. Dahlia Rosea Cav. Asteraceae.

No. 39.2352. From the Department of La Paz; altitude 2,700 m. For previous introduction see 97748.

144183. EPILOBIUM HAENKEANUM Hausskn. Onagraceae.

No. 39.2395. From the Department of La Paz; altitude 3,200 m.

144184. EUPATORIUM sp. Asteraceae.

No. 39.2247. From the Department of Cochabamba. Collected by W. Eyerdam, April 5, 1939. Grows in stony ground; flowers purple.

144185. EUPATORIUM sp.

No. 39.2326. From the Department of Cochabamba; altitude 600 m., flowers white.

144186. GALACTIA SPECIOSA (DC.) Britt. Fabaceae.

No. 39.2405. From the Department of La Paz. A shrub or bush 3 to 4 m.

#### 144157 to 144220—Continued.

high, with purple flowers, and seed pods that burst with an audible report, then curl.

144187. GAULTHERIA sp. Ericaceae.

No. 39.2216. From the Department of La Paz; altitude 3,200 m. Collected by W. Eyerdam, April 15, 1939.

144188. GAULTHERIA ERECTA Vent.

No. 39.2215. From the Department of Cochabamba; altitude 900 m.

144189. GERANIUM BOLIVIANUM Knuth. Geraniaceae.

No. 39.2354. From the Department of La Paz; altitude 3,200 m. A perennial herb 1 m. high with pink to purple flowers.

144190. GERARDIA LANCEOLATA Benth. Scrophulariaceae.

No. 39.2419. From the Department of La Paz; altitude 2,800 m. A shrub or bush 1-to 2.5 m. high, with pink to rose-red flowers.

144191. HESPEROMELES PERNETTYOIDES Wedd. Malaceae.

No. 39.2369. From the Department of La Paz; altitude 3,200 m. A shrub or bush 2 m. high.

144192. HYPTIS KUNTZEANA Brig. Menthaceae.

No. 39.2409. From the Department of Cochabamba; altitude 2,600 m. Flower heads lavender.

144193 and 144194. INDIGOFERA SUFFRUTICOSA Mill. (I. anil L.). Fabaceae. Indigo.

144193. No. 39.2345. From the Department of Cochabamba; altitude 2,800 m. Shrub 0.5 m. high.

144194. No. 39.2404. From the Department of La Paz; altitude 2,500 m. Shrub or bush 1 to 2.5 m. high.

For previous introduction see 111456.

144195. LEPECHINIA CONFUSA (Brig.) Epling. Menthaceae.

No. 39.2361. From the Department of Cochabamba; altitude 2,900 m.

144196. MALVASTRUM TENELLUM (Cav.) Hieron. Malvaceae.

No. 39.2338. From the Department of Cochabamba; altitude 2,700 m.

144197. MUEHLENBECKIA PERUVIANA Meissn. Polygonaceae.

No. 39.2355. From the Department of La Paz; altitude 3,200 m.

144198. OENOTHERA CAMPYLOCALYX Koch & Bouché. Onagraceae.

No. 39.2411. From the Department of La Paz; altitude 2,500 m.

144199. PHYTOLACCA BOGOTENSIS H. B. K. Phytolaccaceae.

No. 39.2329. From the Department of Cochabamba; altitude 800 m.

144200. PHYTOLACCA RIVINOIDES Kunth & Bouché.

No. 39.2178. From the Department of Cochabamba; altitude 800 m. A subtropical bush found in rich soil in shady woods.

144201. Porophyllum ruderale (Jacq.) Cass. Asteraceae.

No. 39.2340. From the Department of Cochabamba; altitude 2,700 m. 144202. Porophyllum sp.

No. 39.2186. From the Department of Cochabamba. Flowers yellow.

144203. PORTULACA sp. Portulacaceae.

No. 39.2335. From the Department of Cochabamba; altitude 2,700 m. Flowers dark red to reddish purple.

#### 144157 to 144220—Continued.

144204. RUPRECHTIA APETALA Wedd. Polygonaceae.

No. 39.2365. From the Department of Cochabamba; altitude 2,600 m.

144205. SCHIZANTHUS sp. Solanaceae.

Butterflyflower.

No. 39.2249. From the Department of La Paz.

144206. SEEMANNIA CUNEATA Rusby. Gesneriaceae.

No. 39.2368. From the Department of La Paz; altitude 2,500 m.

144207. Senecio sp. Asteraceae.

No. 39.2187. From the Cervecería Colón, Department of Cochabamba; altitude 2,800 m. Flowers yellow.

144208. SENECIO Sp.

No. 39.2193. From the Department of La Paz; altitude 4,500 m. Collected by W. Eyerdam, April 15, 1939. Found growing in peat bog; flowers yellow.

144209. SENECIO sp.

No. 39.2245. From the Department of Cochabamba. Collected by W. Eyerdam, April 5, 1939. Grows in stony soil.

144210. SISYMBRIUM sp. Brassicaceae.

No. 39.2392. Altitude 2,700 m.

144211. Solanum Pallidum Rusby. Solanaceae.

No. 39.2428. From the Department of Cochabamba; altitude 2,500 m.

144212. SOLANUM SISYMBRIFOLIUM Lam.

No. 39.2336. From the Department of Cochabamba; altitude 2,700 m. For previous introduction see 114476.

144213. SOLANUM SD.

No. 39.2327. From the Department of Cochabamba; altitude 2,500 m. Flowers purple.

144214. SOLANUM SD.

No. 39.2429. From the Department of Cochabamba; altitude 550 m. Flowers purple.

144215. SOLANUM Sp.

No. 39.2430. From the Department of Cochabamba; altitude 2,800 m. Flowers white; fruit resembling a tomato.

144216. STEVIA sp. Asteraceae.

No. 39.2191. From the Department of Cochabamba; altitude 2,600 m. Flowers purple.

144217. TALINUM PANICULATUM (Jacq.) Gaertn. Portulacaceae.

No. 39.2337. From the Department of Cochabamba; altitude 2,700 m. For previous introduction see 95705.

144218. TOVARIA PENDULA Ruiz & Pay. Tovariaceae.

No. 39.2176. From the Department of Cochabamba; altitude 800 m.

144219. URERA CARACASANA (Jacq.) Griseb. Urticaceae.

No. 39.2333. From the Department of Cochabamba; altitude 55 m.

144220. VERBESINA Sp. Asteraceae.

No. 39.2190. From the Department of Cochabamba; altitude 2,600 m. Flowers blue.

#### 144221 to 144223.

From Mexico. Seeds presented by E. Locke, Acapulco, Guerrero. Received July 6, 1942.

144221. AMPELOCISSUS ACAPULCENSIS (H. B. K.) Planch. Purple Grape.

For previous introduction see 57218.

144222. Vitis sp. Vitaceae.

144223. (Undetermined.)

A small-rooted plant whose tuber is cooked and eaten by the natives of Acapulco.

#### 144224. Oxalis Tuberosa Molina. Oxalidaceae.

Oca.

From Bolivia. Seeds presented by H. Cutler, La Paz. Received July 7, 1942. For previous introduction see 100717.

#### 144225 and 144226.

From Chile. Seeds presented by the Department of Genetics and Fitotecnia, Santiago, Received July 3, 1942.

144225. CARICA PAPAYA L. Papayaceae. Papaya.

144226. Persea sp. Lauraceae.

A hardy semi-dwarfed species received under the name "melanocarpa," for which a place of publication has not been found.

## 144227. CARICA PAPAYA L. Papayaceae.

Papava.

From Brazil. Seeds presented by C. M. Holmes, Rezende, through the American Embassy, Rio de Janeiro. Received July 3, 1942.

#### 144228 to 144277.

From Argentina. Seeds collected by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received June 19, 1942.

144228. ALOPHIA LAHUE (Molina) Espinosa. Iridaceae.

No. 39.1926. From San Vincente, Province of Buenos Aires; altitude 10 m.

144229. Anemone sp. Ranunculaceae.

No. 39.1452. From Bariloche.

144230. Anemone sp.

No. 39.1720. From the Department of Lago; altitude 270 m.

144231. Anemone sp.

No. 39.1734. From the Department of Lago; altitude 280 m.

144232. ARISTOTELIA CHILENSIS (Molina) Stuntz (A. macqui L'Her.). Maqui. Elaeocarpaceae.

No. 39.1789. From Cerro Campana.

For previous introduction see 98043.

144233. BACCHARIS sp. Asteraceae.

No. 39.1670. From the Department of Lago Nahuel; altitude 850 m.

144234. Baccharis sp.

No. 39.1216. From the Department of Trelew, Chubut; altitude 30 m.; flowers pink.

144235. BACCHARIS sp.

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#### 144228 to 144277—Continued.

No. 39.1217. From Trelew, Chubut; altitude 30 m.; flowers pink.

144236. CALCEOLARIA sp. Scrophulariaceae.

No. 39.1544. From the Department of Lago; altitude 200 m., flowers yellow.

144237. CALCEOLARIA sp.

No. 39.1542. From the Department of Corpen; altitude 200 m.; flowers yellow.

144238. CALCEOLARIA Sp.

No. 39.1546. From Santa Cruz; altitude 30 m., flowers yellow.

144239. CALCEOLARIA Sp.

No. 39.1547. From the Department of Guar Aiken; altitude 480 m.

144240. CHUQUIRAGA sp. Asteraceae.

No. 39.1712. From the Department of Lago; altitude 200 m.

144241. CLEOME CHILENSIS DC. Capparidaceae.

No. 39.1127. From the Department of Lima; altitude 200 to 300 m.

144242. EPHEDRA sp. Gnetaceae.

No. 39.1754. From the Department of Escalante; altitude  $100\ \mathrm{m.}$ ; flowers purple.

144243. Erigeron sp. Asteraceae.

No. 39.2490. From the Department of Pilcaniew; altitude 800 m.

144244. Hybanthus parviflorus (L.f.) Baill. Violaceae.

No. 39.1932. From the Province of Buenos Aires; altitude 50 m. A perennial herb 0.25 m. high.

144245. Hypochaeris brasiliensis (Less.) Griseb. Cichoriaceae.

No. 39.1924. From the Province of Buenos Aires; altitude 50 m. An herb 0.75 m. high with yellow flowers.

144246. HYPOCHAERIS Sp.

No. 39.1828. From Bahia Blanca.

144247. HYPOCHAERIS sp.

No. 39.1218. From Rawson, Chubut; altitude 30 m.; flowers yellow.

144248. JATROPHA EXCISA Griseb. Euphorbiaceae.

No. 40.1093. From La Rioja.

144249. Jussiaea Peruviana L. Onagraceae.

No. 39.1918. From the Department of Ledesma; altitude 1,400 m. Shrub 1 m. high; flowers yellow.

144250. LITHRAEA CAUSTICA (Molina) Hook. & Arn. (L. venenosa Miers). Anacardiaceae.

No. 39.1871. From Cerro Campana.

For previous introduction see 54634.

144251. Lupinus sp. Fabaceae.

No. 39.2096. From the Department of Lago; altitude 850 m.; flowers white.

144252. MORRENIA ODORATA (Hook. & Arn.) Lindl. Asclepiadaceae.

No. 39.1922. From the Province of Jujuy; altitude 1,250 m.

For previous introduction see 33988.

#### 144228 to 144277—Continued.

144253. NASSAUVIA sp. Asteraceae.

No. 39.1877. From the Department of Paso de Indios; altitude 800 m.

144254. NIEREMBERGIA HIPPOMANICA Miers. Solanaceae.

No. 40.1036. From Sierra Grande, Córdoba; altitude 1,000 m.

144255. OXALIS SERPENS St.Hil. Oxalidaceae.

No. 39.1920. From the Department of Capital; altitude 1,250 m.; flowers small, yellow, not showy.

144256. Perezia sp. Asteraceae.

No. 39.1757. From the Department of Deseado; altitude 250 m.

#### 144257 to 144260.

From the Department of Vera; flowers white. Weeds in alfalfa fields.

144257. PETUNIA sp. Solanaceae.

No. 41.1008.

144258. PETUNIA Sp.

No. 41.1009.

144259. PETUNIA Sp.

No. 41.1011.

144260. PETUNIA Sp.

No. 41.1012.

#### 144261 to 144263.

From the Department of 9 de Julio; flowers white. Weeds in alfalfa fields.

144261. Salpiglossis sp. Solanaceae.

No. 41.1005.

144262. SALPIGLOSSIS Sp.

No. 41,1006.

144263. Salpiglossis sp.

No. 41.1007.

144264. SCHINUS POLYGAMUS (Cav.) Johnston. Anacardiaceae.

No. 39.1936. From the Department of Escalante; altitude 300 m.

144265. Senecio sp. Asteraceae.

No. 39.1408. From Rio Paraná.

144266. SENECIO Sp.

No. 39.1219. From Chubut; altitude 700 m.; flowers yellow.

144267. SISYRINCHIUM LAXUM Sims. Iridaceae.

No. 39.1928. From Buenos Aires.

144268. SOLANUM ABUTILOIDES (Griseb.) Bitter & Lillo. Solanaceae.

No. 39.1923. From the Department of Santa Barbara; altitude 1,500 m.

144269. STATICE sp. Plumbaginaceae.

No. 39.1674. From the Department of Corpen; altitude 200 m.; flowers pink.

144270. STEVIA SATUREIAEFOLIA (Lam.) Sch. Bip. Asteraceae.

No. 40.1038. From Córdoba; altitude 1,000 m.

## 144228 to 144277—Continued.

144271. STEVIA sp.

No. 39.1710, From Buenos Aires; altitude 50 m.

144272. TRIXIS sp. Asteraceae.

No. 39.1749. From the Department of Deseado; altitude 15 m.; said to be ornamental.

144273. VERBENA sp. Verbenaceae.

No. 39.1709. From the Department of Rio Chico; altitude 300 m.

144274. WAHLENBERGIA LINARIOIDES A. DC. Campanulaceae.

No. 39.1933. From Buenos Aires; altitude 50 m.

144275. WEDELIA BUPHTALMIFLORA Lor. Asteraceae.

No. 40.1032, From Córdoba; altitude 1,000 m.

144276. ZINNIA sp. Asteraceae.

No. 39.1421. From Sierra Chica, Province of Córdoba.

144277. ZINNIA sp.

No. 39.1900. From Córdoba.

# 144278 and 144279. SACCHARUM. Poaceae.

Sugarcane.

From the British West Indies. Cuttings presented by Dr. A. M. Adamson, Plant Quarantine Station, Trinidad. Received July 10, 1942.

144278. B. 38192.

144279. B. 38233.

# 144280. BOEHMERIA NIVEA var. TENACISSIMA (Roxb.) Miq. Urticaceae.

From El Salvador. Roots presented by W. A. Dalton, San Salvador. Received July 11, 1942.

#### 144281 to 144283.

From Haiti. Seeds presented by Alex Large, Port-au-Prince. Received July 14, 1942.

144281. FOENICULUM VULGARE Mill. Apiaceae.

Fennel.

For previous introduction see 138808.

144282 and 144283. LUFFA AEGYPTIACA Mill. (L. cylindrica (L.) Roemer). Cucurbitaceae. Suakwa towelgourd.

# 144284 to 144288. SACCHARUM. Poaceae.

Sugarcane.

From Argentina. Cuttings presented by Dr. William Cross, Tucumán. Received July 17, 1942.

144284. No. 2622.

144287. No. 2680.

144285. No. 2645.

144288. No. 2683.

144286. No. 2657.

# 144289. OLEA MACROCARPA C. H. Wright. Oleaceae.

From the Union of South Africa. Seeds presented by E. Percy Phillips, Department of Agriculture and Forestry. Received July 13, 1942.

144290 to 144293. AVENA SATIVA L. Poaceae.

Oats.

From Argentina. Seeds presented by E. S. Sala, Director of Agriculture, Buenos Aires. Received July 14, 1942.

144290. Klein Capa.

144292. Klein Victoria.

144291. Klein Mar.

144293. La Prevision.

144294. Hibiscus sabdariffa L. Malvaceae.

Roselle.

From El Salvador. Received without data July 18, 1942.

For previous introduction see 143963.

144295 to 144300. ALEURITES MONTANA (Lour.) Wilson. Euphorbiaceae. Mu-oil tree.

From Africa. Seeds presented by C. C. Webster, Agricultural Officer, Nyasaland. Received July 21, 1942.

144295, Tree F. 9.

144298. Tree M. 13.

144296. Tree H. 14.

144299. Tree N. 10.

144297, Tree M. 8.

144300. Tree N. 24.

For previous introduction see 143844.

# 144301. LICANIA RIGIDA Benth. Rosaceae.

From South America. Seeds presented by Dr. David Fairchild, Coconut Grove, Fla. Received July 23, 1942.

For previous introduction see 108015.

# 144302. Musa textilis Nee. Musaceae.

Abacá.

From Puerto Rico. Suckers presented by the Agricultural Experiment Station, Mayagüez. Received July 24, 1945.

For previous introduction see 65217.

# 144303. Prosopis strombulifera (Lam.) Benth. Mimosaceae.

From Argentina. Seeds presented by Rudolfo Martinez, Rector of the University of Córdoba, Córdoba. Received July 16, 1942.

A low shrub, not over 12 inches high, with peculiar screw-shaped, persistent pods that look like bright-yellow spikes of flowers a short distance away.

For previous introduction see 124043.

# 144304 and 144305. OXALIS TUBEROSA Molina. Oxalidaceae.

From Bolivia. Tubers presented by H. Cutler, La Paz. Received July 28, 1942. 144304. Yellow tubers.

144305. Purple tubers.

For previous introduction see 144224.

# 144306. Scorzonera sp. Cichoriaceae.

From the Union of Soviet Socialist Republics. Seeds obtained through the American Embassy at Kuibyshev. Received July 30, 1942.

Tau Sagyz.

# 144307 and 144308.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received July 22, 1942.

144307. Eragrostis bicolor Nees. Poaceae.

Grass.

Collected at Leeuwfontein, between Capetown and Kenib.

144308. Eragrostis lehmanniana var. ampla Stapf.

Grass.

Collected in the Museum Garden, Kimberley; more stoloniferous than the type but not so hardy.

For previous introduction see 142033.

144309. Cassia obovata Collad. Caesalpiniaceae.

From the Union of South Africa. Seeds presented by Mrs. E. Zoe Harris, Cape Province. Received July 30, 1942.

A drought-resistant, shrubby plant which grows in the wild veldt, preferably in sandy soil. It grows close to the ground and has attractive yellow flowers.

For previous introduction see 98821.

144310. FICUS PRETORIAE Burtt-Davy. Moraceae.

From the Union of South Africa. Seeds sent from the Division of Plant Industry, Pretoria. Received August 1, 1942.

An evergreen tree up to 75 feet high, with wide-spreading branches, some of which touch the ground and put out roots from which new stems arise. The leaves are oblong to oblong-elliptic, mostly abruptly acuminate, rigid, entire, and rounded at the base, often somewhat glaucous below. The spotted globose fruits, usually in threes, are crowded toward the ends of branchlets, and their reddish color when mature is said to be attractive to birds.

For previous introduction see 137595.

144311 to 144313. PYRUS COMMUNIS L. Malaceae. Common pear.

From Maryland. Plants growing at the Plant Introduction Garden, Glenn Dale. Numbered August 4, 1942.

Selected seedlings of P.I. 124067.

144311. Latvian A.

144312. Latvian B.

144313. Latvian C.

## 144314 to 144316.

From Ecuador. Seeds presented by W. R. Schreiber, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received August 4, 1942.

144314. MEDICAGO SATIVA L. Fabaceae.

Alfalfa.

144315. Solanum Quitoense Lam. Solanaceae.

Naraniilla.

An ornamental shrub about 3 feet high with oblong-ovate, deep-green leaves and large white flowers in short axillary clusters. The aromatic, orange-colored, juicy fruits are used in the preparation of refreshing drinks.

For previous introduction see 143694.

144316. Caesalpinia spinosa (Molina) Kuntze. Caesalpiniaceae.

Algarrobilla. A tall, upright, spiny shrub or small tree, with deep-green foliage and greenish-yellow flowers in cylindrical open spikes. The pods are produced in large clusters, and the exposed surfaces show bright scarlet for a long time before maturing; they contain a high percentage of tannin.

For previous introduction see 142572.

#### 144317 to 144323.

From Southern Rhodesia. Seeds presented by Douglas Aylen, Technical Assistant for Soil Conservation, Irrigation Department, Salisbury. Received August 6, 1942.

144317. Tephrosia eriosemoides Oliver. Fabaceae.

144318. TEPHROSIA RADICANS Baker.

144319. TEPHROSIA TOXICARIA (Sw.) Pers. (Cracca toxicaria (Sw.) Kuntze).

For previous introduction see 129364.

#### 144317 to 144323—Continued.

144320. TEPHROSIA Sp.

144321. TEPHROSIA VOGELII Hook. f. (Cracca vogelii (Hook. f.) Kuntze). For previous introduction see 139626.

144322. TEPHROSIA Sp.

144323. TEPHROSIA Sp.

# 144324 to 144328. CYAMOPSIS TETRAGONOLOBA (L.) Taub. (C. psoraloides DC.). Fabaceae. Guar.

From India. Seeds obtained through L. L. Schnare, American Consul General, Calcutta. Received August 4, 1942.

144324. From Pusa Farm, Pusa.

144325. Grown in Chota Nagpur range, including Kanke, Ranchi, and Bihar.

144326. Grown in Sind, Punjab, and on Kathiawar coast; used as cattle feed only.

144327. From the Student Farm, Cawnpore.

144328. From the Botanical Research Farm, Cawnpore.

# 144329. MALUS SYLVESTRIS Mill. Malaceae.

Apple.

From Maryland. Plant growing at the United States Plant Introduction-Garden, Glenn Dale. Numbered August 10, 1942.

A selection (from P.I. 121451) with unusually small and narrow leaves.

# 144330. Eragrostis echinochloidea Stapf. Poaceae.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received July 27, 1942.

# 144331 to 144338. SORGHUM VULGARE Pers. Poaceae. Sorghum.

From the Union of South Africa. Seeds presented by Dr. H. H. Dodds, Director, Experiment Station, Mount Edgecombe, Natal. Received August 10, 1942.

144331. Potch. 996, Isidomba.

144332. Potch. 998, Mabediane.

144333. Potch. 999, Manyoblae.

144334. Potch. 995, Sidonda.

144335. Potch. 993, Ufatane.

144336. Potch. 994, Upondondhlovu.

144337. Potch. 997, Ziboyana.

144338. Potch. 1001, unnamed; from Natal (Tugela Ferry).

#### 144339 to 144641.

From Chile. Seeds presented by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received June 20, 1942.

144339. ADENOCAULON CHILENSE Less. Asteraceae.

No. 39.2164. From the Department of Victoria; altitude 1,200 m.

144340. ADESMIA FUENTESH Grandj. Fabaceae.

No. 39.1506. From the Department of Los Andes; altitude 2,200 to 2,280 m.

144341. Adesmia parviflora Clos.

No. 39.1682. From the Department of Elqui; altitude 700 m.

144342. ADESMIA RETUSA Griseb.

No. 39.2370. From the Department of Llanquihue; altitude 75 m.

144343. AEXTOXICON PUNCTATUM Ruiz & Pav. Euphorbiaceae.

No. 40.1097. From Cunco. A tree with dense foliage, and small colorless scales covering all of its parts. The stiff, narrowly oblong leaves are dark green on the upper surface and light green to whitish beneath. Its small white flowers are borne in short axillary racemes, and the fruits are small, black, olive-shaped drupes. Growing equally well in moist or dry soils, the tree reaches a height of about 40 feet, and because of the beauty of its wood is sometimes used in the making of small furniture.

For previous introduction see 124873.

144344 and 144345. ALONA CARNOSA Lindl. Nolanaceae.

From the Province of Atacama.

144344. No. 39.1939. Altitude 10 m.

144345. No. 39.1944. Altitude 5 m.

144346. Alona filifolia (Hook. & Arn.) Johnston.

No. 39.1718. From the Department of La Serena; altitude about 100 m.

144347. ALONA ROSTRATA Lindl.

No. 39.1716. From the Department of Huasco; altitude about 200 m.

144348 and 144349. ALONSOA INCISIFOLIA Ruiz & Pav. Scrophulariaceae.

144348. No. 39.1655. From the Department of Quillota; altitude 1,800 m.

144349. No. 39.1768. From the Department of Illapel; altitude 2,660 m.

144350. ALSTROEMERIA AURANTIACA D.Don. Amaryllidaceae.

Yellow alstroemeria.

No. 40.1132. From Cunco. A plant 2 to 4 feet high with about 50 thin leaves 3 to 4 inches long, and bright-yellow flowers, spotted brown within, in a compound umbel.

For previous introduction see 78874.

144351 and 144352. ALSTROEMERIA PELEGRINA L.

An alstroemeria with thin lanceolate leaves 2 inches long and a flower stem a foot high bearing an umbel of either lilac or pure-white flowers.

144351. No. 40.1048. From Laguna Verde.

144352. No. 40.1092. From Lago Verde.

For previous introduction see 139510.

144353. Alstroemeria sp.

No. 39.1620. From Valparaiso.

144354. ALSTROEMERIA Sp.

No. 39.1872. From the Department of Los Andes; altitude 11,000 m.

144355. ALSTROEMERIA Sp.

No. 40.1047. From Valparaiso.

144356. ALSTROEMERIA Sp.

No. 39.1614. Collected along the road from San Antonio to Valparaiso; flowers brilliant scarlet.

144357. ALSTROEMERIA Sp.

No. 39.1619. From Valparaiso; altitude 1,400 to 1,500 m.

144358. ALSTROEMERIA Sp.

No. 39.1313. From the Department of Taltal; altitude about 150 m. The plant is 2 to 4 inches high and grows best in stony soil. The flowers are white to violet, and two segments are marked yellow.

144359. ALSTROEMERIA Sp.

No. 40.1142. From the Department of Elqui; altitude 1,400 m.

144360. ALSTROEMERIA Sp.

No. 39.1532. From the Department of Elqui; altitude 3,500 to 7,600 m.; flowers small, bluish.

144361. AZARA sp. Flacourtiaceae.

No. 40.1099. From Cunco.

144362. ALSTROEMERIA sp. Amaryllidaceae.

No. 39.1337. From Laguna Verde, south of Valparaiso. An excellent, brilliant-flowered species from the sea cliffs.

144363. ALSTROEMERIA Sp.

No. 39.1612. From Valparaiso; flowers yellow.

144364. ALSTROEMERIA Sp.

No. 39.1616. From Isla Guacalda (Huasco).

144365. ALSTROEMERIA Sp.

No. 39.1618. Found along the road from Vallenar to San Felix.

144366. ALSTROEMERIA Sp.

No. 39,1615, From Taltal.

144367. Amblyopappus pusillus Hook. & Arn. Asteraceae.

No. 39.1940. From the Province of Atacama; altitude 5 m.

144368. APLOPAPPUS CUNEIFOLIUS Nutt. Asteraceae.

No. 39.1692. From the Department of Los Andes; altitude 3,000 m. A shrubby yellow-flowered composite with stiff alternate leaves. Native to Chile.

For previous introduction see 119267.

144369. APLOPAPPUS GLUTINOSUS DC.

No. 39.2314. From the Department of Llanquihue; altitude 75 m.

144370. APLOPAPPUS HIRTELLUS Phil.

No. 39.1652. From the Department of La Serena; altitude 100 m.

144371. APLOPAPPUS PULCHELLUS DC.

No. 39.1804. From the Department of Illapel; altitude about 560 m.

144372. APIUM LACINIATUM (DC.) Urb. Apiaceae.

No. 39.1654. From the Department of La Serena; altitude 200 m.

144373. ARISTOLOCHIA CHILENSIS Lindl. Aristolochiaceae.

No. 39.1791. From the Department of La Serena; altitude about 100 m.

144374. ARISTOTELIA CHILENSIS (Molina) Stuntz (A. macqui L'Her.). Elaeocarpaceae.

No. 40.1062. From San José de la Mariquina. A small evergreen shrub or tree 7 to 15 feet high with attractive ovate, dentate, dark-green leaves 2 to 5 inches long; inconspicuous flowers, and purple edible fruits that resemble small cherries. These fruits are used in Chile for coloring pale wines.

counting to the 17 or

#### 144339 to 144641—Continued.

For previous introduction see 144232.

144375. ASTER sp. Asteraceae.

No. 82. From San José; flowers white.

144376. ASTERISCIUM CHILENSE Cham. & Schlecht. Apiaceae.

No. 39.1662. From the Department of Quillota; altitude 1,700 m. A fragrantly aromatic plant that is a refreshing febrifuge, and which yields a great quantity of seeds.

For previous introduction see 33800.

144377. ASTERISCIUM POZOIDES Clos.

No. 39.1684. From the Department of Petorca; altitude 2,100 to 2,200 m.

144378. ASTRAGALUS BERTERI Colla. Fabaceae.

No. 39.1810. From the Department of Illapel; altitude 1,800 m.

144379. ASTRAGALUS BUSTILLOSII Clos.

No. 39.1739. From the Department of Elqui; altitude 3,300 m.

144380. ASTRAGALUS CHAMISSONIS (Vogel) Reiche.

No. 40.1135. From the Department of Elqui; altitude 500 m.

144381. ASTRAGALUS COQUIMBENSIS (Hook. & Arn.) Reiche.

No. 39.1679. From the Department of Copiapo; altitude about 10 m.

144382 and 144383. ASTRAGALUS CURVICAULIS (Clos) Reiche.

144382. No. 39,1677. From the Department of Illapel; altitude about 1,000 m.

144383. No. 39,1763. From the Department of Melipilla; altitude about 1,400 to 1,500 m.

144384. ASTRAGALUS DODTI Phil.

No. 39.1680. From the Department of Copiapo; altitude about 10 m.

144385. ASTRAGALUS Sp.

No. 39.1917. From the Department of Petorca; altitude 2,700 m. Introduced under the name "losseri," for which a place of publication has not been found.

144386. ASTRAGALUS NUDUS Clos.

No. 39.1784. From the Department of Huasco; altitude 5 to 15 m.

144387. ASTRAGALUS VESICULOSUS Clos.

No. 39.1658. From the Department of Illapel; altitude 2,800 to 3,450 m.

144388. BACCHARIS PATAGONICA Hook. & Arn. Asteraceae.

No. 39.2320. From the Department of Osorno; altitude 780 m.

144389. BAHIA AMBROSIOIDES Lag. Asteraceae.

No. 39.1773. From Taltal.

144390. Blepharocalyx divaricatus (Berg) Ndzu. Myrtaceae.

No. 40.1101. From San José de la Mariquina.

144391. Bomarea salsilla (L.) Mirb. Amaryllidaceae.

No. 39.1456. From Cerro Campana, Province of Valparaiso; altitude 500 to 700 m. A twining vine with parallel-veined, oblong-lanceolate leaves 2 to 4 inches long on twisted petioles, and small reddish flowers marked with blue and purple inside, in compound umbels. Native to Chile.

For previous introduction see 92943.

144392. BOQUILA TRIFOLIATA (DC.) Decaisne. Lardizabalaceae.

No. 40.1072. From San José de la Mariquina.

For previous introduction see 33851.

144393. BOWLESIA INTEGERRIMA Turcz. Apiaceae.

No. 39.1255. From the Department of Huasco; altitude about 500 m.

144394 and 144395. BRIDGESIA INCISIFOLIA Cambess. Sapindaceae.

144394. No. 40.1136. From the Department of Elqui; altitude 700 m.

144395. No. 40.1161. From the Department of Elqui. Grows on dry slopes.

144396. BUDDLEIA GLOBOSA Hope. Loganiaceae. Globe butterflybush.

No. 40.1102. From Cunco. A shrub with soft fleshy leaves which are used in treating inflammation and washing wounds. The flowers are yellow, in globose clusters.

For previous introduction see 42864.

144397. CALANDRINIA GRANDIFLORA Lindl. Portulacaceae.

No. 39.1496. From the Department of Quillota; altitude 1,700 to 1,800 m. A succulent shrubby perennial with tortuous stems about 2 feet high, small, fleshy, rhomboid leaves and terminal racemes of few large violet flowers.

For previous introduction see 128876.

144398. CALANDRINIA CYMOSA Phil.

No. 39.1454. From Taltal; altitude about 150 m.

144399. CALANDRINIA LITORALIS Phil.

No. 39.1462. From the Department of Copiapo; altitude about 25 m.

144400. CALANDRINIA TRIFIDA Hook & Arn.

No. 40.1502. From the Department of Elqui; altitude 1,400 m.

144401. CALANDRINIA PARVIFLORA Phil.

No. 40.1156. From the Department of Elqui; altitude 1,400 m.

144402. CALANDRINIA FRIGIDA Barn.

No. 39.1502. From the Department of Illapel; altitude 3,450 m.

144403. CALANDRINIA GAYANA var. HIRTELLA (Phil.) Reiche.

No. 39.1748. From the Department of La Liqua; altitude 3,100 m.

144404. CALANDRINIA POLIA Phil.

No. 39.1529. From the Department of Elqui; altitude 3,400 to 3,500 m., flowers small, pink.

144405. CALANDRINIA SERICEA Hook & Arn.

No. 39.1685. From the Department of Los Andes; altitude 2,200 m.

144406. CALANDRINIA Sp.

No. 39.1548. From Taltal.

144407. CALANDRINIA Sp.

No. 39.1345. From Huasco. The plant was found growing in 1 foot of sandy soil.

144408. CALANDRINIA sp.

No. 39.1346. From northern Chile. The plant is quite common in this section and it is very well formed. The stems are 2 feet high and bear large, red flowers that measure more than  $1\frac{1}{2}$  inches horizontally and

which usually open one at a time. It will thrive on a sandy beach or in any gravel, or rocky soil.

144409. CALANDRINIA Sp.

No. 39.2468. From La Serena. Flowers large, red, calyx and leaves very pubescent.

144410 to 144412. CALCEOLARIA ADSCENDENS Lindl. Scrophulariaceae.

144410. No. 39.1249. From the Department of Huasco; altitude about 200 m.

144411. No. 39.1280. From the Department of Ovalle; altitude about 1,800 m.

144412. No. 39.1478. From the Department of Illapel; altitude about 1,600 m.

144413 and 144414. CALCEOLARIA CORYMBOSA Ruiz & Pav.

144413. No. 39.1467. From the Department of La Serena; altitude about 200 m.

144414. No. 39.1291. From the Department of Illapel; altitude about 500 m. A herbaceous plant, up to 2 feet high, which grows in rock crevices on foggy hills; leaves very woolly; flowers dark yellow to orange, 34 inch long.

144415. CALCEOLARIA LEPIDA Phil.

No. 39.1512. From the Department of Quillota.

144416. CALCEOLARIA PETIOLARIS Cav.

No. 39.1491. From the Department of Valparaiso; altitude 500 m.

144417. CALCEOLARIA SD.

No. 39.1199. From the Department of Los Andes near Juncal, Province of Acancagua; altitude about 2,300 m. Flowers purple.

144418. CALCEOLARIA Sp.

No. 39.1481. From the Department of Illapel; altitude about 150 m. Flowers bright yellow.

144419. CALCEOLARIA Sp.

No. 39.1551. From Taltal.

144420. CALCEOLARIA Sp.

No. 39.1837. From Rio Sobrante, Province of Aconcagua; altitude 3,000 m.

144421. CALCEOLARIA Sp.

No. 39.1509. From the Department of Petorca; altitude 1,900 to 2,100 m. Flowers red and yellow.

144422. CALCEOLARIA Sp.

No. 39.1344. From the Department of Elqui; altitude 2,900 m.

144423. CALCEOLARIA sp.

No. 39.1348. From the Department of Elqui; altitude 3,000 m.

144424. CALCEOLARIA Sp.

No. 39.1476. From the Province of Coquimbo; altitude about 500 m. Bush 0.6 to 0.8 m. high; flowers light greenish yellow to pure yellow.

144425. CALDCLUVIA PANICULATA (Cav.) D. Don. Cunaniaceae. Tiaca.

No. 40.1103. From Cunco. The tree may reach a height of 15 m. The leaves, up to 14 cm. long, are elliptic, serrate, short stemmed, and frequently opposite. The white, aromatic flowers that appear in spring

are borne in axillary corymbs. The wood is excellent for carriage making. For previous introduction see 52588.

144426. CALLIANDRA CHILENSIS Benth. Mimosaceae.

No. 40.1137. From the Department of Elqui; altitude 750 m.

144427. CALYCERA SESSILIFLORA Phil. Calyceraceae.

No. 39.1811. From the Department of Illapel; altitude 1,800 to 2,000 m.

144428 and 144429. CAMPSIDIUM CHILENSE Reiss. & Seem. Bignoniaceae.

144428. No. 40.1015. From San José.

144429. No. 40.1071. From San José de la Mariquina.

144430. CARDAMINE sp. Brassicaceae.

No. 39.1700. From the Department of Illapel; altitude 2,600 m.

144431. CAREX CATARACTAE R. Br. Cyperaceae.

No. 39.2317. From the Department of Osorno; altitude 780 m.

144432. CENTAUREA ATACAMENSIS (Reiche) Johnston. Asteraceae.

No. 39.1722. From the Department of Taltal; altitude 500 to 600 m.

144433. CENTAUREA CHILENSIS Hook & Arn.

No. 39.1246. From the Department of Copiapo; altitude about 150 m.

144434. CEPHALOPHORA LITORALIS Phil. Asteraceae.

No. 39.1705. From the Department of Taltal; altitude about 100 m. 144435. CEPHALOPHORA URMENETAE Phil.

No. 39.1789. From the Department of La Serena; altitude about 100 m. 144436. CERASTIUM VISCOSUM L. Silenaceae.

No. 39.2313. From the Department of Llanquihue; altitude 100 m.

144437. CESTRUM PARQUI L'Her. Solanaceae. Chilean cestrum.

No. 39.1781. From the Department of Huasco; altitude 100 to 800 m. A semihardy, nearly glabrous shrub native to Chile. The leaves are lanceolate to oblong, and the long tubular flowers are sessile, in open panicles, greenish yellow, and are very fragrant at night. It is much grown in warm countries where it blooms continuously.

For previous introduction see 128817.

144438. CHAETANTHERA ACEROSA (Remy) Benth. & Hook. f. Asteraceae.

No. 39.1672. From the Department of Elqui; altitude 3,300 to 3,600 m.

144439. CISSUS STRIATA Ruiz & Pav. (Vitis striata Miq.) Vitaceae.
Striped treebine.

No. 40.1068. From San José de la Mariquina. A low, shrubby, evergreen vine with small leaves of 3 to 5 leaflets and yellowish flowers in rather dense clusters.

For previous introduction see 62239.

144440. CLEMATIS sp. Ranunculaceae.

No. 39.1867. From the Province of Valparaiso.

144441 and 144442. CLEOME CHILENSIS DC. Capparidaceae.

144441. No. 39.1226. From the Department of Taltal; altitude 50 m. For previous introduction see 144241.

144442. No. 30.1818. From the Department of Taltal.

144443. COLLOMIA BIFLORA (Ruiz & Pav.) Brand. Polemoniaceae.

No. 39.1688. From the Department of Los Andes; altitude 2,100 m.

144444. Conyza Chilensis Spreng. Asteraceae.

No. 39.1802. From the Department of Illapel.

144445. CORDIA DECANDRA Hook & Arn. Boraginaceae.

No. 39.1790. From the Department of La Serena; altitude about 20 m.

144446. CORIARIA RUSCIFOLIA L. Coriariaceae.

No. 40.1022. From Chile; rather poisonous.

144447. CRINODENDRON PATAGUA Molina (Tricuspidaria dependens R. & P.) Elaeocarpaceae. Patagua.

No. 39.1862. From the Province of Valparaiso. An ornamental tree that grows well in swampy regions. It has small, bell-shaped, white fragrant flowers, and the wood is used for cabinet making and the bark for tanning. For previous introduction see 54628.

144448. Cristaria dissecta Hook. & Arn. Malvaceae.

No. 39.1701. From the Department of Quillota; altitude 1,700 m.

144449 and 144450. CRUCKSHANKSIA PUMILA Clos. Rubiaceae.

144449. No. 39.1333. From the Department of Taltal. A tiny plant with relatively enormous yellow calvees and tubular yellow flowers; found dotting roadsides in various gravelly soils.

144450. No. 40.1151. From the Department of Ovalle; altitude 1,500 m.

144451. CRUCKSHANKSIA sp. Rubiaceae.

No. 39.1624. From the Department of Taltal.

144452. CRUCKSHANKSIA Sp.

No. 39.1625. From Huasco.

144453. CRUCKSHANKSIA Sp.

No. 39.1627. From the Island of Huacolda (Huasco).

144454. CRYOPHYTUM CRYSTALLINUM (L.) N. E. Brown. Aizoaceae.

No. 39.1943. From the Province of Atacama.

144455. CYPHOCARPUS INNOCUUS Sandwith. Campanulaceae.

No. 40.1150. From the Department of Ovalle; altitude 1,500 m.

144456. CYTISUS MONSPESSULANUS L. Fabaceae.

Broom.

No. 39.1758. From the Department of Valparaiso; altitude 2,900 m. A strong, erect-growing shrub that is evergreen in regions where the winters are mild. It becomes 10 feet or less high, with grooved branches, trifoliate leaves having obovate leaflets less than an inch long, and fragrant, bright-yellow flowers in 3-flowered to 9-flowered headlike racemes on leafy branches. It is native to the Canary Islands.

For previous introduction see 80314.

144457. DAUCUS MONTEVIDENSIS Spreng. Apiaceae.

No. 39.1260. From the Department of La Serena; altitude about 100 m.

144458. DESCURAINIA PIMPINELLIFOLIA var. GLAUCESCENS (Phil.) O. E. Schulz. Brassicaceae.

No. 39.1657. From the Department of Illapel; altitude 2,620 m.

144459. DESCURAINIA Sp.

No. 39.1740. From the Department of Elqui; altitude 3,300 m.

144460 and 144461. DISCARIA SERRATIFOLIA (Vent.) Mast. Rhamnaceae.

144460. No. 40.1006. From Chile.

144461. No. 40.1061. From San José de la Mariquina.

144462. Domeykoa oppositifolia Phil. Apiaceae.

No. 39.1661. From the Department of Taltal; altitude about 75 m.

144463. DONIOPHYTON ANOMALUM (D. Don) Kurtz. Asteraceae.

No. 39.1671. From the Department of Elqui; altitude from 3,200 to 3,300 m. Flowers reddish yellow.

144464 to 144466. EMBOTHRIUM COCCINEUM Forst. Proteaceae. Notro.

144464. No. 39.2294. From the Department of Llanquihue; altitude 50 m.

144465. No. 40.1055. From San José de la Mariquina.

144466. No. 40.1106. From San José de la Mariquina.

144467. ENCELIA CANESCENS var. LANUGINOSA I. M. Johnst. Asteraceae.

No. 39.1693. From the Department of Taltal; altitude about 100 m.

144468. ENCELIA CANESCENS var. TOMENTOSA (Walp.) Ball.

No. 39.1937. From the Province of Atacama; altitude 10 m.

144469. EPHEDRA sp. Gnetaceae.

No. 39.1687. From the Department of Petorca; altitude 2,280 m. Bracts orange red.

144470. EPHEDRA sp.

No. 39.1777. From the Department of Copiapo; altitude 50 m.

144471. EPILOBIUM CHILENSE Hausskn. Onagraceae.

No. 39.1771. From the Department of Los Andes; altitude 1,900 m.

144472. EPILOBIUM GLAUCUM Phil.

No. 39.1770. From the Department of Los Andes; altitude 1,900 m. 144473. EPILOBIUM VALDIVIENSE Hausskn.

No. 39.2394. From the Department of Victoria; altitude 1,140 to 1,180 m. 144474. ERIGERON sp. Asteraceae.

No. 39.2398. From the Island of Mas Atierra (Weber's garden); flowers small, white.

144475. ESCALLONIA PULVERULENTA (Ruiz & Pav.) Pers. Escalloniaceae.

No. 39.1861. From Cerro. A shrub with large, thick, silvery-gray, oval or elliptic leaves and white flowers in long, dense, terminal racemes.

For previous introduction see 128878.

144476. ESCALLONIA sp.

No. 40.1065. From San José de la Mariquina.

144477. EUCRYPHIA CORDIFOLIA Cav. Eucryphiaceae.

No. 40.1165. From Cunco. An ornamental and useful tree that attains a height of about 15 feet, with thick, leathery, shining leaves and aromatic white flowers that appear in the spring and make the tree a beautiful sight. The bark, rich in tannin, is utilized in dyeing and also in medicine.

For previous introduction see 52589.

144478. EUPHRASIA SUBEXSERTA Benth. Scrophulariaceae.

No. 39.2199. From the Department of Victoria; altitude 950 to 1,100 m.

144479. FITZROYA CUPRESSOIDES (Molina) I. M. Johnst. Pinaceae.

No. 39.2319. From the Department of Osorne; altitude 780 m.

144480. FLOURENSIA THURIFERA (Molina) DC. (Helianthus thurifer Molina). Asteraceae.

No. 40.1152. From the Province of Coquimbo; altitude 660 m. A shrub 1 to 1.5 m. high, abounding in an aromatic resin, which in early times was used for incense. Flowers bright golden yellow.

For previous introduction see 33872.

144481. FUCHSIA MAGELLANICA Lam. Onagraceae. Magellan fuchsia.

No. 40.1108. From San José de la Mariquina.

For previous introduction see 131910.

144482. FUCHSIA ROSEA Ruiz & Pav.

No. 39.1258. From the Province of Coquimbo; altitude about 100 m. Shrub 2 to 3 m. high; flowers red, small.

144483. GAULTHERIA BRACHYBOTRYS DC. Ericaceae.

No. 39.1061. From San José de la Mariquina.

144484. GAULTHERIA sp.

No. 39.2309. From the Department of Victoria; altitude 1,140 to 1,180 m. 144485. Gentiana sp. Gentianaceae.

No. 39.2153. From the Province of Cautin; altitude 950 to 1,100 m. A perennial herb 0.2 m. high. Flowers pink.

144486. GENTIANA Sp.

No. 39.1843. From the Department of Elqui; altitude 3,000 m.

144487. GERANIUM MAGELLANICUM Hook f. Geraniaceae.

No. 39.2435. From Termas Tolhuaca.

144488. GERANIUM sp.

No. 39.1865. From Chile.

144489. GERANIUM sp.

No. 39.1262. From the Department of La Serena, Province of Coquimbo; altitude about 200 m. A perennial herb 0.1 m. high.

144490. GERANIUM Sp.

No. 39.1803. From the Department of Illapel; Province of Coquimbo; altitude about 560 m. A perennial herb 0.1 to 0.2 m. high, flowers pink.

144491. GERARDIA LINARIOIDES. Cham. & Schl. Scrophulariaceae.

No. 40.1163. From the Department of Elqui, Province of Coquimbo; altitude 1,300 m. Flowers pink, 0.6 to 1 m. high.

144492 to 144495. GILIA CRASSIFOLIA Benth. Polemoniaceae.

144492. No. 39.1690. From the Department of Petorca, Province of Aconcagua; altitude 1,900 m. Flowers blue, 0.3 m. high.

144493. No. 39.1793. From the Department of Elqui; altitude about 1,000 m. Flowers pink to white, 0.1 m. high.

144494. No. 39.1806. From the Department of Illapel; altitude about 2,800 m. Flowers pink to white.

144495. No. 39.1809. From the Department of Illapel; altitude 1,800 m. An annual herb 0.2 m. high, corolla lobes pink, tube white and yellow.

144496. GILIA GRACILIS Hook. Polemoniaceae.

No. 39.1766. From the Department of Quillota; altitude 1,700 to 1,800 m. An annual herb 0.1 m. high, flowers rose purple, yellow at base.

144497 and 144498. GREIGIA SPHACELATA (Ruiz & Pav.) Regel. Bromeliaceae.

144497. No. 39.1884. From southern Chile near Puerto Montt. A bromeliad up to 3 feet high with spiny leaves. The rose-colored flowers, in dense axillary heads, make this a very showy plant. The seedy fruit is eaten by the natives.

For previous introduction see 138470.

144498. No. 40.1086. From San José de la Mariquina.

144499. GYMNOPHYTON FOLIOSUM Phil. Apiaceae.

No. 39.1240. From the Department of Taltal; altitude about 30 m. Flowers wine red, bush 1 m. high.

144500. HYPERICUM HUMIFUSUM L. Hypericaceae.

No. 39.2311. From the Department of Victoria; altitude 950 to 1,050 m. A perennial herb 3 cm. high; flowers yellow.

144501. HYPOCHAERIS SCORZONERAE (DC.) F. Muell. Cichoriaceae.

No. 39.1325. From the Department of Illapel; altitude about 150 m. A perennial herb 0.2 m. high; flowers yellow.

144502. HYPOCHAERIS RADICATA L.

No. 39.2386. From the Department of Victoria; altitude 1,140 to 1,180 m. A perennial herb 0.4 m. high, flowers yellow.

144503. HYPOCHAERIS Sp.

No. 39.1359. From the Province of Aconcagua.

144504. HYPOCHAERIS Sp.

No. 39.1360. From the Province of Aconcagua.

144505. HYPOCHAERIS Sp.

No. 39.1358. From the Department of Valparaiso; altitude 290 m.

144506. HYPOCHAERIS Sp.

No. 39.1744. From the Department of Petorca; altitude 2,100 m. A perennial herb 0.15 m. high, flowers lemon yellow.

144507. HYPOCHAERIS Sp.

No. 39.1379. From a hill south of Huasco.

144508. HYPOCHAERIS sp.

No. 39.1380. From Morro de Caldera; grows on sandy flats and rocky slopes.

144509. HYPOCHAERIS Sp.

No. 39.1311. From the Department of Huasco; altitude about 5 to 15 m. A perennial herb 0.3 m. high, flowers pale yellow.

144510. HYPOCHAERIS Sp.

No. 39.1307. From the Department of Copiapo; altitude about 50 m., flowers bright yellow, involucral bracts red-tipped and hairy.

144511 to 144513.

From the Department of Elqui.

144511. IPOMOEA sp. Convolvulaceae.

No. 40.1153. Altitude 1,100 m.

144512. IPOMOEA Sp.

No. 40.1140. Altitude 1,100 m.

144513. IPOMOEA Sp.

No. 40.1138. Altitude 640 m.

144514. LAPAGERIA ROSEA Ruiz & Pav. Liliaceae. Copihue.

No. 39.2277. From Temuco. An evergreen climber of slow growth, with slender, wiry stems; alternate, narrowly ovate leaves; and bright-crimson, pendent, tubular flowers about 3 inches long in the axils of the upper leaves or in terminal racemose clusters.

For previous introduction see 141356.

144515, LAPSANA COMMUNIS L. Cichoriaceae.

No. 39.1750. From the Province of Aconcagua; altitude 1,950 m. An annual herb to 1 m. high; flowers yellow.

144516. LATHYRUS sp. Fabaceae.

No. 40.1080. From San José de la Mariquina.

144517. LEPTOCARPHA RIVULARIS DC. Asteraceae.

No. 40.1075. From San José de la Mariquina.

144518. (Undetermined.)

No. 39.2383. From the Department of Victoria; altitude 950 to 1,050 m. Flowers pink.

144519. LINARIA TEXANA Scheele. Scrophulariaceae.

No. 39.1234. From the Department of Taltal; altitude about 75 m. Flowers large, violet, very fragrant. It grows to a foot high and on rocky

144520. LOTUS SUBPINNATUS Lag. Fabaceae.

No. 39.1675. From the Department of Illapel; altitude about 400 m.

144521 and 144522. LUPINUS MICROCARPUS Sims. Fabaceae.

144521. No. 39.1717. From the Department of Valparaiso; altitude 290 m.

144522. No. 39.1786. From the Department of La Serena; altitude about 200 m.

144523. LUPINUS Sp.

No. 39.1387. Found between Cartagena and San Antonio, south of Valparaiso; a rather large, compact bush with yellow flowers.

144524. LUZULA sp. Juncaceae.

No. 39.1769. From the Department of Illapel; altitude 3,350 to 3,500 m. Flowers reddish.

144525. LYCIUM CHILENSE Bert. Solanaceae.

No. 39.1683. From Las Cruces, south of Valparaiso; altitude 15 m. Shrub small, dense, stiff, grows near the sea.

144526. MALACOTHRIX COULTERI A. Gray. Cichoriaceae.

No. 39.1792. From the Department of Elqui; altitude about 860 m.

144527. Malesherbia paniculata D. Don. Passifloraceae.

No. 39.1681. From the Department of Huasco; altitude about 600 m.

144528. MALACOCARPUS sp. Cactaceae.

No. 39.1632. From the Province of Valparaiso.

144529. MALACOCARPUS sp.

No. 39.1630. From the Province of Valparaiso.

144530. MALACOCARPUS CURVISPINUS (Bert.) Britt. & Rose.

No. 39.1631. From the Province of Valparaiso.

144531. MATHEWSIA INCANA Phil. Brassicaceae.

No. 39.1247. From the Department of Copiapo; altitude about 150 m.

144532. MENONVILLEA CHILENSIS Turcz. Brassicaceae.

No. 39.1242. From the Department of Taltal; altitude about 125 m. 144533. MICROPHYES LITORALIS Phil. Silenaceae.

No. 39.1238. From the Department of Taltal; altitude about 30 m.

144534. MIMULUS GLABRATUS H. B. K. Scrophulariaceae.

No. 39.2422. From the Department of Illapel; altitude 1,300 m.

144535 and 144536. MIMULUS LUTEUS L.

144535. No. 39.1504. From the Department of Los Andes; altitude 1,900 m.

144536. No. 39.1520. From the Province of Valparaiso; altitude 600 m. 144537. MIMULUS sp.

No. 39.1528. From the Department of Elqui; altitude 3.400 m.

144538 and 144539. MONNINA ANGUSTIFOLIA DC. Polygalaceae.

144538. No. 39.1651. From the Department of Elqui; altitude 860 m.

144539. No. 39.1686. From the Department of Quillota; altitude 1,600 m.

144540. MUTISIA sp. Asteraceae.

No. 40.1078. From San José de la Mariguina.

144541. NEOPORTERIA NIDUS (Söhrens) Britt & Rose. Cactaceae.

No. 39.1634. From Valparaiso.

144542. NEOPORTERIA Sp.

No. 39.1633. From Valparaiso.

144543. NOLANA ACUMINATA Dun. Nolanaceae.

No. 39.1269. From the Department of Ovalle; altitude about 500 m.

144544. NOLANA APLOCARYOIDES (Gaud.) I. M. Johnst.

No. 39.1948. From the Province of Atacama; altitude 100 m.

144545. NOLANA DIVARICATA (Lindl.) I. M. Johnst.

No. 39.1678. From the Department of Copiapo; altitude about 10 m.

144546. NOLANA RUPICOLA Gaud.

No. 39.1310. From the Department of Huasco; altitude about 10 to 15 m. A lovely, very rare plant found on rocky cliffs. The flower is 8 cm. across, white with a blue border and yellow throat.

144547. NOLANA sp.

No. 39.1854. From the Island of Guacolda (Huasco).

144548. NOLANA Sp.

No. 39.1855. From Taltal.

144549 and 144550. Nothofagus obliqua (Mirb.) Oerst. Fagaceae.

144549. No. 40.1064. From San José de la Mariquina.

144550. No. 40.1117. From Cunco.

For previous introduction see 124878.

144551. NOTOTRICHE COMPACTA (C. Gay) A. W. Hill. Malvaceae.

No. 39.1895. From the Department of La Ligua; altitude 3,600 to 3,700 m.

144552 to 144554. OENOTHERA CONTORTA Lehm. Onagraceae.

144552. No. 39.1251. From the Department of Huasco; altitude about 600 m.

144553. No. 39.1649. From the Department of La Serena; altitude 30 m.

144554. No. 39.1764. From the Department of Valparaiso; altitude 10 m.

144555. OENOTHERA COQUIMBENSIS C. Gay.

No. 39.1715. From the Department of Copiapo; altitude about 10 m. 144556. Oenothera rosea Soland.

No. 39.1698. From the Department of Elqui; altitude about 700 m.

144557. OPHRYOSPORUS TRIANGULARIS Meyen. Asteraceae.

No. 39.1942. From the Province of Atacama; altitude 5 m.

144558. OPUNTIA sp. Cactaceae.

No. 40.1134. From the Department of Elqui; altitude 3,360 m.

144559. ORTHOCARPUS ATTENUATUS A. Gray. Scrophulariaceae.

No. 39.1800. From the Department of Illapel; altitude about 560 m.

144560. Ourisia serpyllifolia Benth. Scrophulariaceae.

No. 39.1689. From the Department of Los Andes; altitude 1,800 to  $2,200~\mathrm{m}$ .

144561. OURISIA COCCINEA Pers.

No. 39.2151. From the Department of Victoria; altitude 950 to 1,100 m. 144562. Oxalis BULBOCASTANUM Phil. Oxalidaceae.

No. 39.1455. From the Department of Taltal; altitude about 150 m. 144563. OXALIS GIGANTEA Barn.

No. 39.1312. From the Department of Huasco; altitude about 35 m. 144564. Oxalis Laxa Hook & Arn.

No. 39.1518. From the Province of Valparaiso; altitude 1,150 m. 144565. Oxalis lineata Hook.

No. 39.1479. From the Department of Illapel; altitude about 2,700 m. 144566. OXALIS MARITIMA Barn.

No. 39.1261. From the Department of La Serena; altitude about 200 m. 144567. Oxalis Megalorrhiza Jacq.

No. 39.1482. From the Department of Illapel; altitude about 150 m. 144568. OXALIS MICRANTHA Colla.

No. 39.1466. From the Department of La Serena; altitude about 200 m.

144569. OXALIS PLATYPILA Hook.

No. 39.1524. From the Department of Elqui.

144570. OXALIS sp.

No. 39.1472. From the Department of Elqui; altitude about 700 m.; flowers yellow.

144571. OXALIS sp.

No. 40.1053. From San José de la Mariquina.

144572. OXALIS Sp.

No. 40.1087. From San José de la Mariquina.

144573. OXALIS sp.

No. 39.2204. From the Department of Victoria; altitude 1,000 to 1,180 m. 144574. Pelargonium sp. Geraniaceae.

No. 39.1398. From Las Cruces, south of Valparaiso; flowers bicolored. 144575. Peumus boldus Molina. Monimiaceae.

No. 39.1733. From the Province of Valparaiso; altitude 200 to 700 m. A small evergreen tree or large shrub, with opposite, very rough, ovate-obtuse leaves. The small white flowers, ½ inch across, are not very showy but are attractive to bees, and are in small panicles; the edible fruits are sweet and aromatic. The exceedingly hard wood is used for tools and the bark is used for tanning and dyeing.

For previous introduction see 129005.

144576. Phrodus Bridgesh Miers. Solanaceae.

No. 39.1697. From the Department of Elqui; altitude about 660 m.

144577. PINTOA sp. Zygophyllaceae.

No. 39.1309. From the Department of Huasco; altitude about 800 m. Introduced under the name "ruicola," for which a place of publication has not been found.

144578. PODANTHUS MITIQUI Lindl. Asteraceae.

No. 39.1799. From the Department of Illapel; altitude about 560 m. An evergreen shrub 3 feet high, with yellow flowers appearing in autumn. For previous introduction see 99457.

144579. POLEMONIUM GAYANUM (Wedd.) Brand. Polemoniaceae.

No. 39.1656. From the Department of Illapel; altitude about 2,800 m.

144580. Polyachyrus fuscus (Meyen) Walp. Asteraceae.

No. 39.1951. From the Province of Atacama; altitude 5 m.

144581. Rosa canina L. Rosaceae. No. 40.1070. From San José de la Mariquina.

Dogurier

For previous introduction see 54183.

144582. Ruta Chalepensis L. Rutaceae.

No. 39.1272. From the Department of Ovalle; altitude about 500 m.

144583. SALPIGLOSSIS SINUATA Ruiz & Pav. Solanaceae.

No. 39.1490. From the Department of Valparaiso; altitude 50 to 60 m.

144584. Salpiglossis sinuata Ruiz & Pav.

No. 39.1510. From the Department of Petorca; altitude 1,900 to 2,200 m.

144585. SALPIGLOSSIS Sp.

No. 39.1511. From the Department of Quillota; altitude 1,600 m. Flowers deep purple.

144586. SALVIA sp. Menthaceae.

No. 39.1824. From Dr. Reed's garden, Valparaiso; flowers dark blue, an excellent plant.

144587. SALPIGLOSSIS PARVIFLORA Phil. Solanaceae.

No. 39.1741. From the Department of Elqui; altitude 3,300 m. Flowers yellow.

144588. SATUREJA MULTIFLORA (Ruiz & Pav.) Brig. Menthaceae.

No. 40.1076. From San José de la Mariquina.

144589. Schinus Polygamus (Cav.) I. M. Johnst. (S. dependens Ortego). Anacardiaceae.

No. 40.1005.

For previous introduction see 88256.

144590. Schizopetalon Rupestre (Barn.) Reiche. Brassicaceae.

No. 39.1737. From the Department of Elqui; altitude 3,400 m.

144591. SENECIO DENTICULATUS (Hook. & Arn.) DC. Asteraceae.

No. 40.1003. From Cunco.

144592 and 144593. SENECIO HAKEIFOLIUS var. ochroLeucus (Phil.) Reiche.

144592. No. 39.1788. From the Department of La Serena; altitude about 100 m.

144593. No. 39.1796. From the Department of Illapel; altitude about 2.700 m.

144594. Senecio sinuatilobus var. littoralis DC.

No. 39.1273. From the Department of Ovalle; altitude about 300 to 500 m. 144595. Senecio sp.

No. 39.1916. From the Department of Petorca; altitude 3,100 m.; flowers yellow.

144596. SENECIO sp.

No. 39.1650. From the Department of La Serena; altitude 100 m.; flowers yellow.

144597. SILENE CUCUBALUS Wibel. Silenaceae.

No. 39.2152. From the Department of Victoria; altitude 1,140 to 1,180 m.

144598. SISYRINCHIUM sp. Iridaceae.

No. 39.1317. From the Department of Illapel; altitude about 500 m.; flowers bright yellow.

144599. SISYRINCHIUM sp.

No. 40.1007. From San José de la Mariquina.

144600. Solanum Brachyantherum Phil. Solanaceae.

No. 39.1947. From the Province of Atacama; altitude 100 m.

144601. SOLANUM ELAEAGNIFOLIUM Cav.

No. 39.1703. From the Department of Huasco; altitude about 150 to 800 m.

144602. Solanum elaeagnifolium Cav.

No. 39.1946. From Calderon; altitude 5 m.

144603. SOLANUM PINNATUM Cav.

No. 39.1765. From the Department of Valparaiso; altitude 5 m.

144604. SOLANUM Sp.

No. 40.1125. From Cunco.

144605 and 144606. SOPHORA TETRAPTERA J. Miller. Fabaceae.

Fourwing sophora.

A large shrub or small tree up to 30 feet high. The green pinnate leaves and large clusters of yellow flowers make it an attractive ornamental.

144605. No. 40.1059. From San José de la Mariquina.

144606. No. 40.1004.

For previous introduction see 136022.

144607. SPERGULARIA DEPAUPERATA (Gay) Rohrb. Silenaceae.

No. 39.1746. From the Department of Petorca; altitude 3,100 m.

144608. SPHAERALCEA OBTUSILOBA (Hook.) Don. Malvaceae.

No. 39.1785. From the Department of Serena; altitude 200 m.

144609. STACHYS GRANDIDENTATA Lindl. Menthaceae.

No. 39.1805. From the Department of Illapel; altitude about 560 m. 144610. STACHYS SERRATA Clos.

No. 39.1798. From the Department of Illapel; altitude about 150 m.

144611. STACHYS sp.

No. 39.1726. From the Province of Valparaiso; altitude 1,150 m.; flowers pink to red.

144612 to 144614. STELLARIA CUSPIDATA Schlecht. Silenaceae.

144612. No. 39.1275. From the Department of Ovalle; altitude about 300 to 500 m.

144613. No. 39.2165. From the Department of Victoria; altitude 950 to 1,050 m.

144614. No. 39.1783. From the Department of La Serena; altitude 200 m.

144615. STENOLOBIUM AREQUIPENSE Sprague. Bignoniaceae.

No. 39.1125. From Cunco. An erect shrub up to 6 feet high, with slender 4-angled branches and pinnate leaves 4 to 5 inches long. The funnel-shaped orange flowers are 2 to 3 inches long and are borne in terminal racemes 4 to 8 inches long.

For previous introduction see 128918.

144616. CAESALPINIA SPINOSA (Molina) Kuntze. Caesalpiniaceae.

No. 40.1162. From the Department of Elqui; altitude 800 m.

For previous introduction see 144316.

144617. TECOMA sp. Bignoniaceae.

No. 39.1864. From Valparaiso; flowers large, fragrant, yellow.

144618. TRICHOCEREUS sp. Cactaceae.

No. 39.1640. From the Department of Los Andes.

144619. CHAETANTHERA sp. Asteraceae.

No. 39.1816. From the Island of Guacoldo. Received as Tylloma, a genus now considered synonymous with Chaetanthera.

144620. CHAETANTHERA Sp.

No. 39.1832. From Taltal. Received as Tylloma, a genus now considered synonymous with Chaetanthera.

144621. UGNI MOLINAE (Barn.) Turcz. (Myrtus molinae Barn.). Myrtaceae.

No. 40.1085. From San José de la Mariquina. An evergreen shrub with leathery ovate leaves much like those of the myrtle, but with smaller flowers, shorter enclosed stamens and reflexed sepals, and 5 petals. It is sometimes grown on walls and the edible berries are sold in Chilean markets.

For previous introduction see 124048.

144622. VALERIANA BRIDGESII Hook, & Arn. Valerianaceae.

No. 39.1276. From the Department of Ovalle; altitude about 300 to 500 m.

144623. VALERIANA Sp.

No. 39.2433. From the Department of Victoria; altitude about 1,140 to 1,180 m.; flowers greenish white.

144624. Verbascum sp. Scrophulariaceae.

No. 39.1819. From Valparaiso.

144625. VERBENA ORIGENES Phil. Verbenaceae.

No. 39.1667. From the Department of Elqui; altitude 3,200 to 3,500 m.

144626. VERBENA SULPHUREA Don.

No. 39.1808. From the Department of Illapel; altitude 3,440 m.

144627 and 144628. VERONICA ANAGALLIS-AQUATICA L. Scrophulariaceae.

144627. No. 39.1628. From the Department of Ovalle; altitude about 500 m.

144628. No. 39.1751. From the Department of Los Andes; altitude 1,950 m.

144629. VERONICA PERSICA Poir.

No. 39.1122. From San José de la Mariquina.

144630. VICIA APICULATA Phil. Fabaceae.

No. 39.2225. From Tolhuaca; altitude 1,100 m., flowers lavender.

144631. VICIA NIGRICANS Hook. & Arn.

No. 39.1731. From Valparaiso; altitude 1,500 m., flowers light yellow.

144632. VIOLA sp. Violaceae.

Violet.

No. 39.1315. From the Department of Elqui; altitude about 660 m., flowers yellow.

144633. VIOLA OVALLEANA Phil.

No. 39.1285. From the Department of Illapel; altitude about 2,700 m., flowers rosettes with reddish leaves, white-netted.

144634. VIOLA OVALLEANA Phil.

No. 39.1691. From the Department of Petorca; altitude 2,200 m.

144635. VIOLA POLYPODA Turcz.

No. 39.1243. From the Department of Copiapo; altitude about 150 m.

144636. VIOLA POLYPODA Turcz.

No. 39.1336. From the Department of Copiapo; altitude about 50 to 100 m. An annual which grows on sunny gravel and granite slopes; flowers small, yellow.

144637. VIOLA PUSILLA Hook. & Arn.

No. 39.1290. From the Department of Illapel; altitude 2,700 m.

144638, VIOLA PUSILLA Hook, & Arn.

No. 39.1495. From the Department of Quillota; altitude 1,700 m.

144639. VIOLA RUBELLA Cav.

No. 40.1009.

144640. VIOLA TALTALENSIS W. Becker.

No. 39.1231. From the Department of Taltal; altitude about 75 m.

144641. WISTERIA sp. Fabaceae.

No. 39.1826. From Valparaiso.

# 144642 and 144643. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From Ohio. Budsticks presented by L. Havis, Agricultural Experiment Station, Wooster. Received August 15, 1942.

144642. Kette.

144643. Zarn.

# 144644 and 144645. PRUNUS ARMENIACA L. Amygdalaceae.

Apricot.

From Canada. Budsticks presented by L. M. Howlett, Westbank, British Columbia. Received August 17, 1942.

144644. Hall's Blenheim, C-14.

144645. Sport, F-27.

# 144646. TARAXACUM KOK-SAGHYZ Rodin. Cichoriaceae.

Dandelion.

From the Union of Soviet Socialist Republics. Received August 17, 1942.

This dandelion is native to Turkistan and is cultivated in the Soviet Union as a source of rubber.

For previous introduction see 143989.

# 144647 and 144648. PRUNUS DOMESTICA L. Amygdalaceae.

Common plum.

From New York. Plants presented by the New York State Agricultural Experiment Station, Geneva. Received February 23, 1937.

144647. Kahinta.

144648. Red Wing.

#### 144649 and 144650.

From New Zealand. Plants presented by H. R. Wright, Auckland. Received August 21, 1934.

144649. PRUNUS SPINOSA L. Amygdalaceae.

Variety purpurea.

144650. PRUNUS sp.

# 144651. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Minnesota. Plants presented by the Andrews Nursery Co., Faribault. Received April 10, 1941.

Scout.

# 144652. PRUNUS ARMENIACA L. Amygdalaceae.

From Delaware. Plant received from Bunting's Nurseries, Selbyville. Received March 10, 1941.

Manchurian.

144653. PRUNUS ARMENIACA L.

From Minnesota. Plant presented by Andrews Nursery Co., Faribault. Received April 10, 1941.

Ninguta.

144654 to 144656. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Maryland. Plants growing at the United States Plant Introduction Garden, Glenn Dale. Numbered August 18, 1942.

144654. Early Red.

144655. Gage Elberta.

144656. Polly.

144657. PITHECELLOBIUM BREVIFOLIUM Benth. Mimosaceae.

From Texas. Seeds presented by Peter Heinz, Brownsville. Received August 19, 1942.

An ornamental evergreen shrub or small tree about 18 ft. high, found in semiarid situations. It has short spines, pinnate leaves, and pale cream-colored flowers in headlike spikes.

For previous introduction see 75261.

#### 144658 and 144659.

From Guatemala. Seeds presented by Wilson Popenoe, through Dr. John R. Shuman, Plant Geneticist, Merck & Co., Rahway, N. J. Received August 19, 1942.

144658. CINCHONA OFFICINALIS L. Rubiaceae.

For previous introduction see 144102.

144659. CINCHONA PUBESCENS Vahl. (C. succirubra Pav.).

For previous introduction see 144105.

144660. TARAXACUM KOK-SAGHYZ Rodin. Cichoriaceae.

From the Union of Soviet Socialist Republics. Received August 24, 1942. For previous introduction see 144646.

144661 and 144662. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From California. Plants growing at the United States Plant Introduction Garden, Chico. Numbered August 27, 1942.

144661. Selection (J-4-46) from P.I. 99243.

144662. Selection (J-4-48) from P.I. 99243.

144663. SWINGLEA GLUTINOSA (Blanco) Merrill. Rutaceae.

From the Canal Zone. Seeds presented by the Experimental Gardens, Summit. Received August 28, 1942.

A small spiny tree, native to the Philippine Islands, with trifoliolate leaves, small clusters of rather large white flowers and oblong, hard-shelled fruits. It is used as a stock for commercial citrus varieties.

For previous introduction see 142571.

144664. IPOMOEA BATATAS (L.) Lam. Convolvulaceae.

Sweetpotato.

From Mexico. Tubers presented by Robert Morgadanes, New Orleans, La. Received September 1, 1942.

An extraordinarily large variety, with tubers weighing up to 55 pounds. In Mexico these are used in making a sort of preserve or candy.

#### 144665 to 144669.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received August 24, 1942.

144665. CLEMATIS BRACHIATA Thunb. Ranunculaceae.

Introduced under the varietal name "burkei," for which a place of publication has not been found.

144666. Eragrostis sp. Poaceae.

Grass.

144667. Eragrostis brizantha Nees.

Grass.

For previous introduction see 144330.

144668. Eragrostis Lehmanniana Nees.

Grass.

For previous introduction see 144091.

144669. Eragrostis porosa Nees.

Grass.

144670. CASTILLA ELASTICA Cerv. Moraceae. Mexican rubbertree.

From Mexico. Seeds presented by Raymond Stadelman, Oaxaca. Received September 4, 1942.

For previous introduction see 143986.

# 144671 to 144674. AVENA SATIVA L. Poaceae.

Oats.

From Australia. Seeds presented by the Department of Agriculture, Melbourne, Victoria. Received August 31, 1942.

- 144671. Algeribee. A new single plant selection of the midseason type that has outyielded Algerian for both hay and grain in many districts of Victoria. It is slightly earlier and taller with larger heads and grain; therefore, the most extensively grown variety in the State.
- 144672. Palestine × Dawn, M 5126 R4-1-1. Although somewhat short-strawed, this is a promising crossbred type that has given encouraging results and has shown definite ability to recover after grazing in early growth and to produce good yields for both hay and grain.
- 144673. Palestine × Dawn, W8103 P8-1-1-1-9-2. This is an attractive, early, midseason type with good-colored purple straw of medium height and commendable plump grain. It too, has produced encouraging yields.
- 144674. Palestine × Dawn, M5126 R46-2-1. A fairly late-maturing selection of this cross that has at times shown slight variation in maturity and height.

#### 144675 to 144726.

From Iran. Seeds presented by Dr. Walter Koelz, Tehran. Received September 3, 1942.

144675. Beta vulgaris L. Chenopodiaceae.

Common beet.

No. 8148. From Veramin, March 16, 1942.

144676 to 144678. Cucumis melo L. Cucurbitaceae.

Muskmelon.

- 144676. No. 8140. Garmak. From Brujird, Luristan, July 15, 1942. Fruit flattened, 7 by 4 inches, heavily netted, weakly ribbed, orange yellow, ribbed greenish; flesh white, 1½ inches thick, of good quality for an early melon.
- 144677. No. 8143. Kharbuza. From Brujird, Luristan, July 17, 1942. Fruit elongate, 7 by 5 inches, yellow heavily netted; flesh salmon, 1½ inches thick, crisp, good enough for an early melon, ripening with late apricots.
- 144678. No. 8144. From Brujird, Luristan, July 18, 1942. Fruit elongate, 7 by 6 inches, pale yellow, heavily netted, unribbed; flesh white, 1¾ inches thick, crisp, slightly sweet. An early melon that, when it is the size of a walnut, is buried under dry earth and matures underground.

## 144675 to 144726—Continued.

- 144679 and 144680. LYCOPERSCION ESCULENTUM Mill. Solanaceae. Tomato.
  - 144679. No. 8146. *Goji faranji*. From Brujird, Luristan, July 19, 1942. Fruit flattened, one contour round, 2½ inches thick, tomato red; flavor good.
  - 144680. No. 8150. Goji faranji. From Brujird, Luristan, July 20, 1942. Fruit pyriform, 2 inches thick, red to cerise, fleshy; used for roasting with meat.
- 144681 to 144721. PRUNUS ARMENIACA L. Amygdalaceae. Apricot.

From Brujird, Luristan. Zardalu is the vernacular name for apricot in Iran.

- 144681. No. 8097. June 1, 1942. Fruit pale yellow, red-cheeked, 1½ to 1¾ inches, very fragrant; delicious flavor, no fiber; edible kernel. A first-class apricot, and one of the earliest by 10 to 14 days.
- 144682. No. 8098. June 4, 1942. Fruit elongate, 2 inches high, yellow; flesh pale yellow, even gold when fully ripe; no fiber; early; flavor fair.
- 144683. No. 8099. June 4, 1942. Bazaar mixture of fruits, apparently brought in from distant villages; picked green. All white-fleshed types.
- 144684. No. 8102. June 12, 1942. Fruit amygdaloid, 1¾ inches thick, rich yellow, red cheeked; flesh pale gold, no fiber; flavor good; kernel sweet; early.
- 144685. No. 8103. June 13, 1942. Fruit amygdaloid, 2 inches long, pale yellow, red-cheeked; flesh pale yellow, fiberless, semi-clinging; flavor fair.
- 144686. No. 8104. June 15, 1942. Fruit subglobose, 2 inches long, pale yellow; flesh white, clingstone; flavor fair.
- 144687. No. 8105. June 15, 1942. Fruit 2 inches long; yellow; flesh yellow, no fiber; quality good.
- 144688. No. 8106. June 17, 1942. Fruit 2 inches long, amygdaloid, pale yellow, more or less red-cheeked; flesh white, fiberless; flavor sweet and fine.
- 144689. No. 8107. June 19, 1942. Fruit subglobose, 1½ inches long, yellow, red-cheeked; flesh fiberless; flavor tending to be mealy, sweet.
- 144690. No. 8108. June 19, 1942. Fruit amygdaloid, 2 inches long, pale yellow, red-cheeked; flesh fiberless, white; flavor weak but unusually sweet.
- 144691. No. 8109. June 20, 1942. A mixture of fruit from the bazaar; flesh mostly white; midseason.
- 144692. No. 8110. June 21, 1942. Fruit subglobose, 1½ inches long, gold; flesh good, fiberless; quality good.
- 144693. No. 8111. June 22, 1942. Fruit amygdaloid, 1% inches long, pale yellow; flesh pale yellow, fiberless; flavor good.
- 144694. No. 8112. June 23, 1942. Fruit compressed amygdaloid, 2¼ inches long, gold; flesh pale yellow, fiberless; quality good.
- 144695. No. 8113. June 23, 1942. Fruit subglobose, 2 inches long, pale yellow; flesh white, sweet; fiberless; a good fruit.
- 144696. No. 8114. June 24, 1942. Fruit amygdaloid, somewhat compressed, gold; flesh pale gold, fiberless; flavor good.
- 144697. No. 8115. June 24, 1942. Fruit subglobose, 1¾ inches long, hazelnut-shaped, green yellow; flesh green yellow, fiberless; flavor faintly suggesting bitter almond.
- 144698. No. 8116. June 24, 1942. Fruit globose, 1¾ inches long, pale yellow, somewhat checked; flesh pale yellow, fiberless; flavor good.

#### 144675 to 144726—Continued.

- 144699. No. 8118. June 25, 1942. Fruit subglobose, 1¾ inches long, gold, handsomely red-cheeked; flesh gold, fiberless; flavor fair.
- 144700. No. 8119. June 25, 1942. Fruit subglobose, 1½ inches long, yellow, heavily purple-red-cheeked; flesh fiberless, white; flavor good.
- 144701. No. 8120. June 25, 1942. Fruit subglobose, 2 inches long, pale yellow, red-cheeked; flesh fiberless, white; flavor fair.
- 144702. No. 8121. June 26, 1942. Fruit 1¾ inches long, yellow; flesh fiberless, pale yellow; quality good.
- 144703. No. 8122. June 26, 1942. Fruit amygdaloid, compressed, gold, mottled red, 2½ inches long; flesh white, fiberless; quality fair.
- 144704. No. 8123. June 27, 1942. Fruit subglobose, 1¾ inches long, pale yellow, heavily red-cheeked; flesh white, fiberless; quality fair.
- 144705. No. 8124. June 28, 1942. Fruit amygdaloid, 2¼ inches long, gold, heavily mottled red; flesh pale gold, fiberless; quality good; striking.
- 144706. No. 8125. June 28, 1942. Fruit subglobose, 2 inches long, pale yellow; flesh white, fiberless; quality poor.
- 144707. No. 8127. June 28, 1942. Fruit globose, 1% inches long, gold, red-cheeked; flesh gold, fiberless; quality fair.
- 144708. No. 8128. June 28, 1942. Fruit subglobose, 1% inches long, yellow, red-cheeked; flesh yellow, fiberless; quality good.
- 144709. No. 8129. June 29, 1942. Fruits globose, 1½ inches long, gold, more or less tinged red; flesh firm, sometimes with fiber; flavor good.
- 144710. No. 8131. July 6, 1942. Fruit compressed globose, 2 inches long, yellow, very freestone; flesh yellow, sweet; late season.
- 144711. No. 8132. July 7, 1942. Fruit compressed amygdaloid, 2 inches long, yellow, more than half-covered with rich red; flesh yellow, fiberless, completely freestone; flavor good; very handsome.
- 144712. No. 8133. July 7, 1942. Fruit subglobose, 2 inches long, yellow, handsomely tinged red; flesh yellow, freestone, sweet.
- 144713. No. 8134. July 8, 1942. Fruit subglobose, 2¼ inches long, yellow, freestone; flesh pale yellow; quality good.
- 144714. No. 8135. July 8, 1942. Fruit globose, 1% inches long, yellow, more or less tinged pink; flesh solid, pale yellow, exceptionally sweet.
- 144715. No. 8137. July 12, 1942. Fruit globose, 2 inches long, yellow, more or less tinged pink on the cheek; flesh yellow, fiberless, unusually sweet.
- 144716. No. 8138. July 15, 1942. Fruit amygdaloid, 1½ inches long, gold half-covered with rich red; flesh yellow, fiberless; quality good. Fruit fragrant, splendidly colored.
- 144717. No. 8139. July 15, 1942. Fruit globose, 1% inches long, slightly flattened, yellow, more or less tinged red; flesh yellow, fiberless, very freestone; quality good; late.
- 144718. No. 8141. July 16, 1942. Fruit amygdaloid, 1½ inches long, yellow, lightly and extensively red-cheeked; flesh white, fiberless, rather dry but sweet; breeding characteristics: good color, late ripening.
- 144719. No. 8142. July 16, 1942. Fruit subglobose, somewhat compressed, 2¼ inches long, pale yellow tinted more or less salmon; flesh fiberless, yellow, sweet; an excellent late sort.
- 144720. No. 8145. July 19, 1942. Fruit sharply almond-shaped, 2 to 2¼ inches long, pale yellow slightly tinted red; flesh pale yellow, sweet, kernel sweet; rare shape but a good late sort; pits tend to split.
- 144721. No. 8149. July 20, 1942. Fruit subglobose, 1¾ inches long, half gold and half green; flesh yellow, fiberless, sweet flavor; rich.

## 144675 to 144726-Continued.

· 144722 to 144726.

From Brujird, Luristan.

144722. PRUNUS DOMESTICA L. Amygdalaceae. Common plum.

No. 8101. Alu. July 11, 1942. Fruit globose, deeply slit, 2 inches long, green with a more or less red cheek; flesh yellow green, sweet flavor; good.

144723. PRUNUS sp.

No. 8136. July 12, 1942. Fruit globose, 1¼ inches long, yellow, heavily clouded red; flavor sweet, good.

144724. PRUNUS sp.

No. 8100. June 8, 1942. Fruit globose,  $1\frac{1}{4}$  inches long, red purple; flavor good; one of the earliest.

144725. PRUNUS sp.

No. 8117. June 24, 1942. Fruit subglobose, red purple, 1 inch long; tree wild, bushy, growing along a watercourse 15 feet deep.

144726. Rubus sp. Rosaceae.

No. 8130. *Tamishk*. Plant semiprostrate, spreading rapidly from root, growing in forests and along watercourses; flowers white; fruit subglobose, 1 inch long, black with bloom, juicy flavor; good.

# 144727. HIBISCUS CANNABINUS L. Malvaceae. Ambari hemp.

From Brazil. Seeds presented by Erwin P. Keeler, American Embassy, Rio de Janeiro. Received September 11, 1942.

For previous introduction see 134301.

# 144728. STEVIA REBAUDIANA Bertoni. Asteraceae. Caá-heê.

From Argentina. Seeds presented by Andres Haddad, Santa Ana, Misiones. Received September 10, 1942.

The leaves contain a sweet glucoside, used locally on a small scale as a sugar substitute for diabetics.

For previous introduction see 121427.

# 144729 to 144740. MANIHOT ESCULENTA Crantz. (M. utilissima Pohl). Euphorbiaceae. Cassava.

From Brazil. Cuttings presented by Dr. F. Fabeliano da Costa Filho, Instituto Agronomico, Campinas. Received September 16, 1942.

144729. No. 78. Areal.

144730. No. 407. Branca.

144731. No. 59. Branca de Santa Catarina.

144732. No. 103. Brava de Itu.

144733. No. 118. Cambai.

144734. No. 192. Itu.

144735. No. 80. Pitanga.

144736. No. 199. Raiz Comprida.

144737. No. 85. Rio Dourado.

144738. No. 371. Tatu.

144739. No. 1. Vassourinha.

144740. No. 10. Vassourinha Dois.

For previous introduction see 108223.

#### 144741 to 144929.

From Peru. Seeds collected by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received June 24, 1942.

144741. ABUTILON REFLEXUM Sweet. Malvaceae.

No. 39.2122. From the Department of Lima; altitude 1,800 m.

144742. ACAENA OVALIFOLIA Ruiz and Pav. Rosaceae.

No. 39.1604. From the Department of Cajamarca; altitude 3,000 m.

144743. ACALYPHA SCANDENS Benth. Euphorbiaceae.

No. 39.1180. From the Department of Huanuco.

144744. ACALYPHA INFESTA Poepp. & Endl.

No. 39.2049. From the Department of Apurimac; altitude 2,200 m.

144745. ACANTHOSPERMUM HISPIDUM DC. Asteraceae.

No. 39.2092. From the Department of Apurimac; altitude 2,200 m.

144746. AESCHYNOMENE SCOPARIA H. B. K. Fabaceae.

No. 39.2457. From the Department of Lima; altitude 1,400 m.

144747 and 144748. ALONSOA ACUTIFOLIA Ruiz & Pav. Scrophulariaceae.

144747. No. 39.1197. From the Department of Arequipa; altitude 500 m.

144748. No. 39.1965. From the Department of Apurimac; altitude 2,800 m. For previous introduction see 144159.

144749 to 144751. Anemone Helleborifolia DC. Ranunculaceae.

144749. No. 39.1968. From the Department of Cuzco; altitude 2,500 to 3,300 m.

144750. No. 39.2006. From the Department of Apurimac; altitude 3,200 m.

144751. No. 39.2007. From the Department of Huancavelica; altitude  $3,450~\mathrm{m}.$ 

144752. ALONSOA ACUTIFOLIA Ruiz & Pav. Scrophulariaceae.

No. 39.2068. From the Department of Huancavelica; altitude 3,700 m.

144753. Anoda cristata (L.) Schlecht. Malvaceae.

No. 39.1586. From the Department of Cajamarca; altitude 2,800 m.

144754. Anodiscus peruvianus Benth. Gesneriaceae.

No. 39.1436. From the Department of Huanuco; altitude 700 m.

144755 and 144756. BACCHARIS FLORIBUNDA H. B. K. Asteraceae.

144755. No. 39.1096. From the Department of Lima; altitude 2,500 m.

144756. No. 39.1564. From the Department of Cajamarca; altitude 3,000 m.

144757. BACCHARIS GLUTINOSA Pers.

No. 39.2438. From the Department of Huancavelica; altitude 2,000 m. For previous introduction see 144161.

144758. BACCHARIS STERNBERGIANA Steud.

No. 39.1101. From the Department of Ancash; altitude 5 m.

144759 and 144760. BACCHARIS TEINDALENSIS H. B. K.

144759. No. 39.1566. From the Province of Hualgayoc; altitude 2,900 m.

144760. No. 39.1780. From the Department of Cajamarca; altitude 2,600 m. Tree or shrub about 4 m. high; purple bracts.

144761. BARNADESIA DOMBEYANA Less. Asteraceae.

No. 39.1449. From the Department of La Libertad; altitude 2,900 m.

144762. BARTSIA CINEREA Diels. Scrophulariaceae.

No. 39.1994. From the Department of Apurimac; altitude 2,700 m.

144763. BARTSIA DENSIFLORA Benth.

No. 39.1983. From the Department of Junin; altitude 3,700 m.

144764. BARTSIA THIANTHA Diels.

No. 39.1993. From the Department of Apurimac; altitude 2,700 m.

144765 and 144766. BEGONIA CLARKET Hook. f. Begoniaceae.

144765. No. 39.1036. From the Department of Puno; altitude 3,200 to  $3,800~\mathrm{m}.$ 

For previous introduction see 142996.

144766. No. 39.1971. From the Department of Huancavelica; altitude 3,500 m.

144767. BEGONIA GERANIIFOLIA Hook.

No. 39.1223. From the Department of Lima; altitude 200 to 600 m.

144768. BEGONIA PLEIOPETALA A. DC.

No. 39.1973. From the Department of Huancavelica; altitude 3,500 m. For previous introduction see 142998.

144769. BIDENS PILOSA L. Asteraceae.

No. 39.1084. From the Department of Lima. Reported to be a splendid forage plant in the Belgian Congo.

For previous introduction see 49959.

144770. BIDENS RIPARIA H. B. K.

No. 39.2145. From the Department of Piura.

144771. BOMAREA OVATA (Cav.) Mirb. Amaryllidaceae.

No. 39.1169. From the Department of Huanuco; altitude 2,850 m.

For previous introduction see 90087.

144772 to 144774. Boussingaultia diffusa (Moq.) Volkens. Basellaceae.

From the Department of Lima.

144772. No. 39.2303. Altitude 2,800 m.

144773. No. 39.2304. Altitude 3,250 m.

144774. No. 39.2458. Altitude 1,400 m.

144775. Brachyotum Lutescens (Ruiz & Pav.) Triana. Melastomaceae.

No. 39.1060. From the Department of La Libertad; altitude 2,800 m.

144776 and 144777. Browallia americana L. Solanaceae.

A slender annual about 2 feet high, with smooth ovate leaves up to 2 inches long and solitary flowers less than 1 inch long. Native to tropical America.

144776. No. 39.1149. From the Department of Huanuco; altitude 1,100 m.

144777. No. 39.1164. From the Department of Huanuco; altitude 1,300 m.

For previous introduction see 107822.

144778. BUDDLEIA AMERICANA L. Loganiaceae.

No. 39.1975. From the Department of Apurimac; altitude 2,500 m. A shrub 4 to 5 feet high with small, fragrant, white or yellow flowers.

For previous introduction see 111439.

144779. BYTTNERIA CORDATA Lam. Sterculiaceae.

No. 39.1570. From the Department of Cajamarca; altitude 2,500 m.

144780. BYTTNERIA HIRSUTA Ruiz & Pav.

No. 39.2460. From the Department of Lima; altitude 1,400 m.

144781. CAESALPINIA CORYMBOSA Benth. Caesalpiniaceae.

No. 39.2105. From Sayon, inland from Huacho.

144782. CALCEOLARIA AQUATICA A. Br. & Bouché. Scrophulariaceae.

No. 39.2130. From the Department of Lima; altitude 2,000 m.

144783. CALCEOLARIA CHELIDONIOIDES H. B. K.

No. 39.1051. From the Department of Huanuco; altitude 2,800 m. An annual about 18 inches high, with pinnate leaves and attractive yellow flowers about  $\frac{1}{2}$  inch long. Native to Ecuador.

For previous introduction see 122072.

144784. CALCEOLARIA SALICIFOLIA Ruiz & Pav.

No. 39.1556. From the Department of La Libertad; altitude 2,700 m.

144785. CALCEOLARIA Sp.

No. 39.1978. From the Department of Cuzco. Altitude 3,650 m.

144786. CALCEOLARIA Sp.

No. 39.1979. From the Department of Cuzco. Altitude 3,860 m.

144787. CALONYCTION ACULEATUM (L.) House (Ipomoea bona-nox L.).

Convolvulaceae.

Moonflower.

No. 39.1134. From the Department of Lima. A woody climber with large white flowers that are said to open in the evening.

For previous introduction see 114870.

144788 and 144789. CARDIOSPERMUM CORINDUM L. Sapindaceae.

144788. No. 39.2076. From the Department of Apurimac; altitude 2,300 m. 144789. No. 39.2095. From the Department of Apurimac; altitude 2,700 m.

144790 and 144791. CASTILLEJA FISSIFOLIA var. PUMILA (Benth.) Wedd. Scrophulariaceae.

144790. No. 39.1558. From the Department of La Libertad; altitude 3,500 m.

144791. No. 39.1982. From the Department of Apurimac; altitude 2,800 m.

144792. Castilleja fissifolia L. f.

No. 39.2028. From the Department of Huancavelica; altitude 3,700 m.

144793. CASTILLEJA FISSIFOLIA var. PUMILA (Benth.) Wedd.

No. 39.2437. From the Department of Cuzco; altitude 3,800 to 4,500 m. For previous introduction see 144791.

144794. CENTROPOGON CUSPIDATUS DC. Campanulaceae.

No. 39.1184. From the Department of Huanuco.

144795. CENTROPOGON LONGIFOLIUS Wimm.

No. 39.2058. From the Department of Cuzco; altitude 2,500 m.

144796. CENTROPOGON CORNUTUS (L.) Druce.

No. 39.1181. From the Department of Huanuco; altitude 700 m. Received as *Centropogon surinamensis*, now referred to the above species.

144797. CEPHALOCEREUS MELANOSTELE Vaup. Cactaceae.

No. 39.2118. From the Department of Lima; altitude 1,200 to 1,600 m.

144798. CERASTIUM sp. Silenaceae.

No. 39.1985. From the Department of Junin; altitude 4,200 m.

144799. CEREUS MACROSTIBAS (Schum.) Berger. Cactaceae.

No. 39.2117. From the Department of Lima; altitude 1,200 to 1,600 m.

144800. Chaptalia nutans (L.) Polak. Asteraceae.

No. 39.1158. From the Department of Huanuco; altitude 1,800 m.

144801. CHUQUIRAGA FEROX (Wedd.) Britton. Asteraceae.

No. 39.2440. From the Department of Junin; altitude 3,054 m.

144802. Cissampelos tropaeolifolia DC. Menispermaceae.

No. 39.1159. From the Department of Huanuco; altitude 1,300 m.

144803 to 144805. CLEOME CHILENSIS DC. Capparidaceae.

144803. No. 39.1192. From the Department of Arequipa; altitude 100 m.

144804. No. 39.1981. From the Department of Huancavelica; altitude 2,500 m.

144805. No. 39.2116. From the Department of Cuzco; altitude 2,860 m. For previous introduction see 144442.

144806 and 144807. CLEOME HERRERAE Macbr.

144806. No. 39.2031. From the Department of Apurimac; altitude 3,000 m.

144807. No. 39.2037. From the Department of Cuzco; altitude 2,300 to 2.600 m.

144808. COCCOCYPSELUM CONDALIA Pers. Rubiaceae.

No. 39.1148. From the Department of Huanuco.

144809. COMMELINA sp. Commelinaceae.

No. 39.2182. From the Department of Lima; altitude about 1,800 m., flowers deep navy blue.

144810. CORCHORUS PILOLOBUS Link. Tiliaceae.

No. 39.2464. From the Department of Lima; altitude about 100 m.

144811. CORDIA POLYANTHA Benth. Boraginaceae.

No. 39.2126. From the Department of Piura; altitude 150 m.

144812. CREMOLOBUS PINNATIFIDUS Hook. Brassicaceae.

No. 39.2306. From the Department of Lima; altitude 2,800 m.

144813. Cristaria formosula I. M. Johnst. Malvaceae.

No. 39.1204. From the Department of Arequipa.

144814. CROTON ALNIFOLIUS Lam. Euphorbiaceae.

No. 39.1126. From the Department of Lima; altitude 500 to 600 m.

144815. CROTON sp.

No. 39.2391. From the Department of Arequipa; sea level, flowers yellow.

144816 and 144817. CYCLANTHERA MATHEWSH Cogn. Cucurbitaceae.

144816. No. 39.1087. From the Department of Lima; altitude 80 m.

144817. No. 39.1107. From the Department of Ancash.

144818. Dalea Ayavacensis H. B. K. Fabaceae.

No. 39.1446. From the Department of La Libertad; altitude 2,800 m.

144819. DESMODIUM UNCINATUM (Jacq.) DC. (Meibomia uncinata (Jacq.) Kuntze). Fabaceae.

No. 39.2459. From the Department of Lima; altitude 1,400 m.

For previous introduction see 132799.

144820. DODONAEA VISCOSA (L.) Jacq. Sapindaceae.

Hopbush.

No. 39.1583. From the Department of Cajamarca; altitude 2,800 m. A shrub from 6 to 10 feet high, found on arid, rocky slopes. The large flower clusters are like those of hydrangea.

For previous introduction see 103515.

144821. DUNALIA BRACHYSTEMON A. Br. & Bouché. Solanaceae.

No. 39.1142. From the Department of Huanuco; altitude 1,900 m.

144822. DURANTA DOMBEYANA Moldenke. Verbenaceae.

No. 39.2207. From the Department of Cuzco; altitude 1,040 m.

144823. DURANTA Sp.

No. 39.2098. From the Department of Apurimac; altitude 2,200 m.

144824. Datura sanguinea Ruiz & Pav. Solanaceae. Red floripondio.

No. 39.1058. From the Department of La Libertad; altitude 2,800 m. A tree 20 feet high with masses of pendent flowers several inches long.

For previous introduction see 142558.

144825. DURANTA TRIACANTHA Juss. Verbenaceae.

Skyflower

No. 39.1198. From the Department of Arequipa; altitude 800 m. A shrub 15 feet high with stiff, sharp thorns, and pale-blue flowers, borne in clusters 3 or 4 inches long, and followed by golden berries half an inch in diameter. For previous introduction see 52610.

144826. Embothrium grandiflorum Lam. Proteaceae.

No. 39.1059. From the Department of La Libertad; altitude 2,800 m.

144827. ENCELIA CANESCENS Cav. Asteraceae.

No. 39.1082. From the Department of Lima.

144828. EPILOBIUM DENTICULATUM Ruiz & Pav. Onagraceae.

No. 39.2208. From the Department of Lima; altitude 3,200 m.

144829. Erigeron sp. Asteraceae.

No. 39.2305. From the Department of Lima; altitude 2,800 m., flowers musty white.

144830. EUPATORIUM GLOMERATUM DC. Asteraceae.

No. 39.2211. From the Department of Huancavelica; altitude 2,400 m.

144831. EUPHORBIA NUTANS Lag. Euphorbiaceae.

No. 39.1083. From the Department of Lima; flowers white.

144832. Excremis coarctata (Ruiz & Pav.) Baker. Liliaceae.

No. 39.2495. From the Department of Cuzco; altitude 2,600 m.

144833. FUCHSIA MACROPHYLLA I. M. Johnst. Onagraceae.

No. 39.1599. From the Department of Cajamarca; altitude 3,000 m., shrub to 4 m. high; flowers dark coral red throughout.

144834. FUMARIA CAPREOLATA L. Papaveraceae.

No. 39.1121. From the Department of Lima; altitude 300 m.; an annual herb; flowers greenish white with purple tips.

144835. GAIADENDRON PUNCTATUM (Ruiz & Pav.) Don. Loranthaceae.

No. 39.1577. From the Department of Cajamarca; altitude 2,600 m.; tree up to 5 m. high with smooth gray bark and flexible twigs; fruit an orange-colored drupe.

144836. GALVESIA BALLII Munz. Scrophulariaceae.

No. 39.1075. From the Department of Piura; altitude 2 m., shrub up to 1 m. high; flowers red, with a white throat marked with red lines on the inside.

144837. GALVESIA FRUTICOSA Gmel.

No. 39.2132. From the Department of Lima; altitude 1,200 m., shrub usually 0.8 to 1 m. high; flowers dark red.

144838. GENTIANA STRICTICAULIS Gilg. Gentianaceae.

No. 39.1554. From the Department of La Libertad; altitude 2,700 m.; an herb used as medicine.

144839. EURYTHALIA UMBELLATA G. Don. Gentianaceae.

No. 40.1041. From the Department of Cuzco; altitude 3,400 to 3,700 m.; prostrate herb 0.5 to 1.2 m. high; flowers blue. Received as Gentiana umbellata, apparently an invalid name.

144840. GERANIUM LIMAE Knuth. Geraniaceae.

No. 39.2401. From the Department of Lima; altitude 2,800 m.

144841. MICONIA sp. Melastomaceae.

No. 39.1152. From the Department of Huanuco; altitude 1,100 m., flowers yellow.

144842. HOFFMANSEGGIA VISCOSA Hook. & Arn. Fabaceae.

No. 39.2139. From the Department of Piura; altitude 30 m.; annual herb 5 cm. high; flowers orange-yellow, faintly tipped and spotted with red.

144843. HYPOCHAERIS ELATA (Wedd.) Griseb. Cichoriaceae.

No. 39.2221. From the Department of Lima; altitude 2,800 m.; annual herb 0.3 to 0.4 m. high.

144844. HYPOCHAERIS Sp.

No. 39.1062. From the Department of La Libertad; altitude 2,800 m., herb up to 0.3 m. high; flowers yellow.

144845. HYPOXIS DECUMBENS (L.) Amaryllidaceae.

No. 39.1967. From the Department of Apurimac; altitude 2,800 m.; perennial herb 0.05 m. high; flowers yellow with green midrib.

144846. HYPTIS MUTABILIS (L. Rich.) Brig. Menthaceae.

No. 39.2084. From the Department of Cuzco; altitude 900 m.; flowers lavender, somewhat fragrant.

144847. Hyptis sidifolia (L'Hérit.) Briq.

No. 39.1118. From the Department of Ancash; perennial herb up to 0.2 m. high; flowers light pink.

144848. IOCHROMA GRANDIFLORA Benth. Solanaceae.

No. 39.1562. From the Department of Cajamarca; altitude about 3,000 m.; tree or shrub; flowers dark purple, almost black.

144849. IPOMOEA ASARIFOLIA (Desr.) Roem. & Schult. Convolvulaceae.

No. 39.1079. From the Department of Piura; a shrub or perennial herb, prostrate; flowers white, fleshy.

144850 and 144851. JUSSIAEA PERUVIANA L. Onagraceae.

144850. No. 39.2448. From the Department of Lima; a perennial herb up to 2 m. high; flowers pale yellow.

144851. No. 39.1589. From the Department of Cajamarca; altitude 2,800 m.; a perennial herb up to 0.8 m. high; flowers yellow.

For previous introduction see 144249.

144852. Jussiaea suffruticosa L.

No. 39.2240. From the Department of Lima. Introduced under the varietal name "ligustiifolia," for which a place of publication has not been found.

144853. LANTANA LIMENSIS Hayek. Verbenaceae.

No. 39.2234. From the Department of Lima; altitude 2,900 m.

144854. LANTANA Sp.

No. 39.2142. From the Department of Piura; altitude 200 m.; an annual herb up to 1 m. high; flowers white.

144855. LEPECHINIA FLORIBUNDA (Benth.) Epl. Menthaceae.

No. 39.190. From the Department of Huancavelica; altitude 2,500 m.

144856. LEPECHINIA LAMIIFOLIA (Benth.) Epl.

No. 39.1992. From the Department of Apurimac; altitude 2,800 m.

144857. Leucocarpus perfoliatus (H. B. K.) Benth. Scrophulariaceae. No. 39.1166. From the Department of Huanuco; altitude 2,800 m.

144858. LIPPIA sp. Verbenaceae.

No. 39.1984. From the Department of Lima; altitude about 600 m.

144859. LITHOSPERUM MACBRIDEI I. M. Johnst. Boraginaceae.

No. 39.2022. From the Department of Huancavelica; altitude 3,500 m.

144860. LUPINUS sp. Fabaceae.

No. 39.2149. From the Department of Lima; altitude 3,200 m.; flowers indigo blue.

144861. MALVASTRUM PERUVIANUM A. Gray. Malvaceae.

No. 39.2408. From the Department of Lima; altitude 2,800 m.

144862. Melastoma sp. Melastomaceae.

No. 39.1574. From the Department of Cajamarca; altitude 2,500 m.; flowers pale yellow.

144863. MIRABILIS sp. Nyctaginaceae.

No. 39.2455. From the Department of Lima; altitude 1,200 m.

144864 and 144865. Monnina Pterocarpa Ruiz & Pav. Polygalaceae.

144864. No. 39.2445. From the Department of Lima; altitude 1,100 to 1,400 m.

144865. No. 39.2050. From the Department of Huancavelica; altitude 2.400 m.

144866. Monochaetum lineatum (D. Don) Naud. Melastomaceae.

No. 39.2451. From the Department of Piura; altitude 1,250 m.

144867. MUTISIA PEDUNCULARIS Cav. Asteraceae.

No. 39.1030. From the Department of Lima; altitude 2,500 m.

144868 to 144870. NICANDRA PHYSALODES (L.) Gaertn. Solanaceae.

144868. No. 39.1135. From the Department of Huanuco.

144869. No. 39.2001. From the Department of Apurimac; altitude 2,100 m.

144870. No. 39.2146. From the Department of Piura; altitude 20 m. For previous introduction see 127834.

144871. NOLANA LYCIOIDES I. M. Johnst. Nolanaceae.

No. 39.2410. From the Department of Arequipa.

144872 and 144873. NOLANA SPATHULATA Ruiz & Pav.

144872. No. 39.1332. From the Department of Arequipa; altitude 3 m.; plants growing in sand near shore, forming great domes up to 1½ feet high and 5 feet across, covered with pale to deep-lavender morning-glories 2 inches across.

144873. No. 39.2357. From the Department of Arequipa.

Nos. 144874 to 144876 are from the Department of Lima.

144874. OENOTHERA DRUMMONDII Hook. Onagraceae.

No. 39.2465. Altitude 100 m.

144875 and 144876. OENOTHERA LACINIATA var. LIMENSIS Munz & Johnst.

144875. No. 39.1124. Altitude 500 m.

144876. No. 39.1132. Altitude 300 m.

144877. OLYRA LATIFOLIA L. Poaceae.

No. 39.1974. From the Department of Cuzco; altitude 900 m. A handsome, broadleaved, bamboolike perennial grass, sometimes 5 feet high, with panicles 4 to 6 inches long.

For previous introduction see 70913.

144878. Oxalis lotoides H. B. K. Oxalidaceae.

No. 39.2162. From the Department of Lima; altitude 1,200 m.

144879. Oxalis megalorrhiza Jacq.

No. 39.1105. From the Department of Ancash.

For previous introduction see 144567.

144880. Oxalis melilotoides Zucc.

No. 39.2003. From the Department of Apurimac; altitude 2,200 m.

144881. Passiflora mollissima (H. B. K.) Bailey. Passifloraceae.

Softleaf passionflower.

No. 39.1057. From the Department of La Libertad; altitude 2,700 m.

144882. PAULLINIA ALATA (Ruiz & Pav.) Don. Sapindaceae.

No. 39.2091. From the Department of Cuzco; altitude 900 m.

144883. PECTIS sp. Asteraceae.

No. 39.2125. From the Department of Piura; altitude 150 m.

144884. PERYMENIUM FEATHERSTONEI Blake. Asteraceae.

No. 39.2197. From the Department of Apurimac; altitude 2,200 m.

144885. PHYLLANTHUS BRASILIENSIS (Aubl.) Muell. Arg. Euphorbiaceae.

No. 39.2032. From the Department of Cuzco; altitude 900 m. A shrub 5 to 8 feet high with alternate, roundish, pale-green leaves and inconspicuous flowers. Native to Brazil.

For previous introduction see 107833.

144886. PHYSALIS ANGULATA L. Solanaceae.

Groundcherry.

No. 39.2147. From the Department of Piura; altitude 20 m. A muchbranched herb with very small flowers and a fruiting calyx which is conical ovoid with a sunken base, 10-angled, loosely inflated, at length well filled by the greenish-yellow berry.

For previous introduction see 91535.

144887. PILEA SERPYLLACEA (H. B. K.) Liebm. Urticaceae.

No. 39.1987. From the Department of Huancavelica; altitude 2,400 m.

144888. PIQUERIA PERUVIANA (Gmel.) Robins. Asteraceae.

No. 39.1098. From the Department of Lima; altitude 2,500 m.

144889. PLUCHEA sp. Asteraceae.

No. 39.2128. From the Department of Lambayeque; altitude 50 m.

144890, POLYLEPIS INCANA H. B. K. Rosaceae.

No. 39.1450. From the Department of La Libertad; altitude 2,900 m.

144891. POLYMNIA GLABRATA DC. Asteraceae.

No. 39.2042. From the Department of Apurimac; altitude 3,000 m.

144892 and 144893. POROPHYLLUM RUDERALE (Jacq.) Cass.

144892. No. 39.2131. From the Department of Lima; altitude 2,010 m. 144893. No. 39.2436. From the Department of Cuzco; altitude 2,750 m.

For previous introduction see 144201.

144894. PSORALEA LASIOSTACHYS Vog. Fabaceae.

No. 39.2060. From the Department of Junin; altitude 3,054 m.

144895. PSYCHOTRIA sp. Rubiaceae.

No. 39.1575. From the Department of Cajamarca; altitude 2,500 m.

144896. RANUNCULUS PRAEMORSUS DC. Ranunculaceae.

No. 39.2008. From the Department of Apurimac; altitude 3,200 m.

144897 and 144898. RECHSTEINERIA PERUVIANA Fritsch. Gesneriaceae.

From the Department of Apurimac.

144897. No. 39.2055. Altitude 2,800 m.

144898. No. 39.2156. Altitude 2,000 to 2,500 m.

144899. Rhynchospora sp. Cyperaceae.

No. 39.2449. From the Department of Lima; grows in great masses below sea level in moist muck.

144900. SALVIA BIFLORA Ruiz & Pav. Menthaceae.

No. 39.2099. Found along the highway east of the Sierras from Lima; a good pink salvia.

144901. SALVIA FLORIDA Benth.

No. 39.1603. From the Department of Cajamarca.

144902 and 144903. SALVIA OPPOSITIFLORA Ruiz & Pav.

An erect shrubby perennial about 2 feet high with ovate, obtuse, crenate leaves and terminal spikes of many scarlet flowers.

144902. No. 39.1565. From the Province of Hualgayoc; altitude 2,900 m.

144903. No. 39.1988. From the Department of Huancavelica.

For previous introduction see 127838.

144904. SALVIA RHOMBIFOLIA Ruiz & Pav.

No. 39.1109. From the Department of Ancash; altitude 450 m.

144905. SALVIA TUBIFLORA J. E. Sm.

No. 39.1201. From the Department of Arequipa; altitude 300 m.

144906. SARACHA sp. Solanaceae.

No. 39.1112. From the Department of Ancash; flowers white with lavender centers.

144907. SAXIFRAGA MAGELLANICA var. PERUVIANA (Sternb.). Macbr. Saxifragaceae.

No. 39.2026. From the Department of Huancavelica; altitude 3,900 m.

144908. SCHINUS POLYGAMUS (Cav.) I. M. Johnst. (S. dependens Ortega).
Anacardiaceae.

No. 39.2114. From the Department of Cuzco; altitude 2,800 to 3,000 m. For previous introduction see 144589.

144909. Scleria sylvestris Poepp. & Kurth. Cyperaceae.

No. 39.1188. From the Department of Huanuco; altitude 700 m.

144910. SIDA ANGUSTIFOLIA Lam. Malvaceae.

No. 39.2226. From the Department of Apurimac; altitude 2,200 m.

144911. SIDA LOMAGEITON Ulbr.

No. 39.2454. From the Department of Lima; altitude 1,200 m.

144912. SILENE ANDICOLA Gill. Silenaceae.

No. 39.1980. From the Department of Huancavelica; altitude 3,400 m.

144913. Sonchus oleraceus L. Cichoriaceae.

No. 39.1071. From the Department of Lima.

144914. STACHYS PERUVIANA Benth. Menthaceae.

No. 39.2019. From the Department of Apurimac; altitude 3,200 m.

144915. STACHYS PUSILLA (Wedd.) Brig.

No. 39.2020. From the Department of Cuzco; altitude 3,600 to 3,900 m.

144916. STELLARIA CUSPIDATA Schlecht. Silenaceae.

No. 39.1092. From the Department of Lima; altitude 50 m.

144917. CHELONANTHUS ALATUS (Aubl.) Standl. Gentianaceae.

No. 39.1151. From the Department of Huanuco; altitude 1,100 m. Re-

ceived as Symbolanthus alatus, a name for which a place of publication has not been found.

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144918. Syncretocarpus sericeus (DC.) Blake. Asteraceae.

No. 39.2120. From the Department of Lima; altitude 1,100 to 1,400 m.

144919 to 144921. TALINUM TRIANGULARE (Jacq.) Willd. Portulacaceae.

From the Department of Lima. An erect, branching, herbaceous plant, about 3 feet high, with pink flowers produced in great profusion. The fleshy, tender leaves are boiled like spinach and make an excellent serving with meat in the West Indies and other islands where it is native.

144919. No. 39.2446. Altitude 1,100 to 1,500 m.

144920. No. 39.2447. Altitude 1,800 m.

144921. No. 39.2463.

For previous introduction see 68864.

144922. CAESALPINIA SPINOSA (Molina) Kuntze. Caesalpiniaceae.

No. 39.1128. From the Department of Lima; altitude 600 m.

For previous introduction see 144616.

144923. Tessaria integrifolia Ruiz & Pav. Asteraceae.

No. 39.1102. From the Department of Ancash; altitude 5 m.

144924. Tribulus sp. Zygophyllaceae.

No. 39.2142. From the Department of Piura; altitude 20 m.; flowers soft lemon yellow and pale green.

144925. TRIUMFETTA SEMITRILOBA Jacq. Tiliaceae.

No. 39.2462. From the Department of Lima; altitude 1,400 m. A bushy, herbaceous, hairy plant, with bright-yellow flowers produced in long leafy racemes.

For previous introduction see 62919.

144926. TRIXIS RADIALIS (L.) Ktze. Asteraceae.

No. 39.2194. From the Department of Lima; altitude about 500 m.

144927. VALERIANA INTERRUPTA Ruiz & Pav. Valerianaceae.

No. 39,1088. From the Department of Lima: altitude 80 m.

144928. VERBESINA AURICULIGERA Blake. Asteraceae.

No. 39.2196. From the Department of Huancavelica; altitude 2,400 m.

144929. Wedelia sp. Asteraceae.

No. 39.2016. From the Department of Apurimac; altitude 2,000 m.; flowers orange and black.

#### 144930 to 144934.

From Guadeloupe. Seeds presented by M. A. Buffon, Chief, Agricultural Service, Basse-Terre. Received September 12, 1942.

144930 and 144931. LUFFA ACUTANGULA (L.) Roxb. Cucurbitaceae. Singkwa towelgourd.

144930. No. 1. Pikinga.

144931. No. 3. Torchon.

For previous introduction see 141704.

144932 to 144934. LUFFA AEGYPTIACA Mill.

Suakwa towelgourd.

144932. No. 2. Pikinga.

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#### 144930 to 144934—Continued.

144933. No. 4. Torchon.

144934. No. 5. Torchon.

# 144935 to 144937. Bromus inermis Leyss. Poaceae. Bromegrass.

From Canada. Seeds received from the Central Experimental Farm, Ottawa. Received September 14, 1945.

144935. Commercial.

144936. Parkland.

144937. Superior.

#### 144938 to 144971.

From South America. Seeds collected by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received June 26, 1942.

Nos. 144938 to 144940 were collected in Chile.

#### 144938 and 144939. BERBERIS ACTINACANTHA Mart. Berberidaceae.

144938. No. 36.1566. From the Province of Valparaiso. Altitude 300 m. The shrub was found on the edge of woods and in open pasture land. It is from 1 m. to 2 m. high, with spherical blue-black berries.

144939. No. 36.1651. From the Province of Valparaiso. Altitude 300 m. This shrub was also found on the edge of woods and in open pasture land. It is from 1 to 2 m. high, with spherical blue-black berries.

For previous introduction see 81144.

#### 144940. BERBERIS Sp.

No. 40.1100. From Cunco. Introduced under the name "aravena," for which a place of publication has not been found.

#### 144941 and 144942. BERBERIS BUXIFOLIA Lam.

Magellan barberry.

144941. No. 39.1878. From Sarmiento, Province of Córdoba, Argentina, altitude 150 m. A shrub or bush 1 to 3 m. high found growing in dry sand and gravel. It produces edible, well-flavored, blue berries.

144942. No. 40.1017. From Chile. A thorny shrub 1.5 m. high which blooms very early in August.

For previous introduction see 103480.

#### 144943. BERBERIS COMMUTATA Eichl.

No. 39.2071. From the Department of Apurimac, Peru; altitude 2,800 m.

#### 144944 to 144946. BERBERIS DARWINII Hook.

Darwin barberry.

144944. No. 36.1582. From the Province of Llanquihue, Chile; altitude 100 m.

144945. No. 40.1001. From San José de la Mariquina, Chile.

144946. No. 36.1321. From the Province of Llanquihue, Chile, near Ensenada; altitude 100 m. A shrub 1.5 to 2 m. high, found in lava fields and openings in evergreen forests, with blue-black fruits. The common name for this fruit in Chile is *michai*.

For previous introduction see 76214.

#### 144947 to 144956.

Collected in Peru.

144947. BERBERIS JELSKIANA Schneid.

No. 39.2093. From the Department of Apurimac; altitude 3,100 m.

#### 144938 to 144971—Continued.

144948. Berberis sp.

No. 36.1869. From near Acanacu Pass, Department of Cuzco; altitude 3,400 to 3,600 m. A shrub 1 to 2 m. high found in open brushland. An excellent species with large yellow flowers, black fruits.

144949. Berberis sp.

No. 39.2489. Peru (?).

144950. CACTUS TOWNSENDII Britt. & Rose. Cactaceae.

No. 39.2121. From the Department of Lima; altitude 1,200 to 1,500 m.

144951 and 144952. Capsicum frutescens L. Solanaceae. Redpepper.

144951. No. 39.1176. From the Department of Huanuco; altitude 700 m. 144952. No. 39.1177. From the Department of Huanuco; altitude 700 m.

144953. DAUCUS MONTANUS Schult. Apiaceae.

No. 39.2065. From the Department of Apurimac; altitude 3,200 m.

144954. LATHYRUS MAGELLANICUS Lam. Fabaceae. Lord Anson pea. No. 39.2150. From the Department of Lima; altitude 3,200 m.

144955. Lycopersicon peruvianum (L.) Mill. Solanaceae.

No. 39.1045.

For previous introduction see 128656.

For previous introduction see 81919.

144956. Solanum Albidum Dun. Solanaceae.

No. 39.1601. From Arenales, Department of Cajamarca; altitude 3,000 m.

144957. Solanum diphyllum L.

No. 39.1034. From Manzanillo, Mexico; altitude 10 m.

#### 144958 to 144962.

Collected in Peru.

144958. Solanum nigrum L.

Black nightshade.

No. 39.2015. From the Department of Apurimac; altitude 2,200 m. A low herb with white flowers and orange fruits.

For previous introduction see 135854.

144959. Solanum pinnatifidum Ruiz & Pav.

No. 39.1205. From the Department of Arequipa; altitude 3 m.

144960. SOLANUM RADICANS L. f.

No. 39.1208. From the Department of Arequipa; altitude 300 m. For previous introduction see 126459.

144961. SOLANUM RIPARIUM Pers.

No. 39.1162. From the Department of Huanuco; altitude 630 m.

144962. Solanum Tuberiferum Dunal.

No. 39.1439. From the Department of Lima.

144963. SOLANUM Sp.

No. 39.2237. From Cochabamba, Bolivia.

#### 144964 to 144969.

Collected in Peru.

# 144938 to 144971—Continued.

144964. Solanum sp.

No. 39.1578. From the Department of Cajamarca; altitude 2,400 m., flowers yellow.

144965. Solanum sp.

No. 39.1155. From the Department of Huanuco; altitude 600 m., flowers lemon yellow.

144966. SOLANUM Sp.

No. 39.1441. From the Department of La Libertad; altitude 5 m.

144967. SOLANUM Sp.

No. 39.1602. From the Department of Cajamarca; altitude 3,100 m.; flowers pale gold.

144968. SOLANUM sp.

No. 39.2014. From the Department of Cuzco; altitude 900 m.; flowers purple. 144969. VICIA sp. Fabaceae. Vetch.

No. 39.1080. From the Department of La Libertad; altitude 5 m.; flowers lavender.

144970. Vicia sp. No. 39.1858. From the Province of Valparaiso, Chile.

144971. VIGNA LUTEOLA Benth. Fabaceae.

No. 39.2108. From the Department of Lima, Peru.

## 144972. SCORZONERA TAU-SAGHYZ Lipschitz & Bosse. Cichoriaceae.

From the Union of Soviet Socialist Republics. Received September 21, 1942.

#### 144973 to 144988.

From South America. Seeds collected by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received September 21, 1942.

144973. ASTRAGALUS sp. Fabaceae.

No. 39.1823. February 2, 1939; from the Rio Sobrante; altitude 2,490 m.; eaten by animals.

144974. CALCEOLARIA sp. Scrophulariaceae.

No. 39.1573. From the Department of Cajamarca, Peru; altitude 2,500 m.; flowers yellow.

144975. Calceolaria sp.

No. 39.1552. February 12, 1939; from the Rio Sobrante, Argentina.

144976. CELTIS TALA Gillies. Ulmaceae.

Nettle tree.

No. 39.1356. From the Sierra Chica, Province of Córdoba, Chile. A tree with a short, stout, branched trunk, and smooth, yellowish-white wood which is used for posts and firewood.

For previous introduction see 48663.

For previous introduction see 40000.

144977. Centropogon cuspidatus DC. Campanulaceae.

No. 39.1161. From Elqui, Peru.

144978. CLEMATIS HILARII Spreng. Ranunculaceae.

No. 39.1361. From General Paz, near Córdoba, in the Sierra Chica, Argentina. A tropical climbing shrub with ternate or nearly ternate leaves

#### 144973 to 144988—Continued.

2 to 4 inches wide and fragrant blue-white flowers. It is native to south-eastern Brazil.

For previous introduction see 130547.

144979. DENMOZA RHODACANTHA (Salm-Dyck) Britt. & Rose. Cactaceae.

No. 39.1638. From Mendoza, Argentina. Taken from plants in "Cactus Park."

144980. EUPHORBIA sp. Euphorbiaceae.

No. 39.2041. From the Department of Huancavelica, Peru; altitude 2,500 m.; flowers blood red.

144981. IPOMOEA sp. Convolvulaceae.

No. 39.2201. From the Department of Lima, Peru; altitude 5,500 m.; flowers reddish purple.

144982. KRAMERIA TRIANDRA Ruiz & Pav. Krameriaceae.

No. 39.1329. From Chala, Peru; altitude 200 m.; a prostrate shrub found growing on dry sandy beaches; usually most of the plant is buried in sand; flowers bright red.

144983. LUFFA ASTORI Svenson. Cucurbitaceae.

No. 39.2138. From the Department of Piura, Peru; altitude 35 m.

144984. LUPINUS sp. Fabaceae.

No. 39.2265. From La Ensenada, Chile (?).

144985. MITRARIA COCCINEA Cav. Gesneriaceae.

No. 39.2266. From Rio Tepú, slopes of Volcan Calbuco, Chile; altitude 50 m.

144986. Nothoscordum sp. Liliaceae.

No. 39.1396. From Santa Catalina, Peru (?).

144987. SALVIA sp. Menthaceae.

No. 39.1165. From the Department of Huanuco, Peru; altitude 2,800 m.; flowers blue.

144988. SOPHORA sp. Fabaceae.

No. 39.2281. Pelú. From La Ensenada, Chile (?).

# 144989 and 144990. CYAMOPSIS TETRAGONOLOBA (L.) Taub. (C. psoraloides DC.). Fabaceae. Guar.

From India. Seeds presented by the Director of Development, Orissa, Cuttack, through L. L. Schnare, American consul general, Calcutta. Received September 21, 1942.

144989. Sample No. 1. Locally grown seed.

144990. Sample No. 2. Government farm-grown seed.

For previous introduction see 144328.

# 144991 and 144992. HESPEROMELES HETEROPHYLLA (Ruiz & Pav.) Hook. Malaceae.

From Colombia. Seeds presented by Dr. A. Dugand, Institute of Nature Sciences, Bogotá. Received September 12, 1942.

From Antioquia; altitude 7,000 feet.

#### 144993. CINCHONA OFFICINALIS L. Rubiaceae.

From Guatemala. Seeds presented by Dr. David Fairchild. Coconut Grove, Fla. Received September 21, 1942.

Seeds obtained by Dr. Fairchild from Dr. Wilson Popenoe.

#### 144994. Indigofera hirsuta L. Fabaceae.

Indigo

From Australia. Seeds presented by C. T. White, Government Botanist, Department of Agriculture and Stock, Brisbane, Queensland. Received September 21, 1942.

An annual or biennial prostrate legume 2 to 3 feet long, with 7 to 9 oblong leaflets and dense racemes of violet-purple flowers. It is used as a cover crop. For previous introduction see 132802.

#### 144995. Stevia rebaudiana Bertoni. Asteraceae.

From Argentina. Seeds presented by Dr. Moises S. Bertoni, Santa Ana, Misiones. Received September 21, 1942.

For previous introduction and description see 144728.

## 144996. Fraxinus uhdei (Wenzig) Lingelsh. Oleaceae. Ash.

From Mexico. Seeds presented by Dr. David Fairchild, Coconut Grove, Fla. Received September 22, 1942.

Originally collected by Dr. Wilson Popenoe in Oaxaca. A tree that becomes 45 feet or more in height, with dark, furrowed bark. The greenish flowers are in large panicles sometimes 8 inches long.

### 144997. CORCHORUS OLITORIUS L. Tiliaceae.

Inte

From Argentina. Seeds purchased from the Pan-American Trade Service, Buenos Aires. Received September 28, 1942.

# 144998. HELICONIA sp. Musaceae.

From Puerto Rico. Plants presented by Claud L. Horn, Experimental Station, Mayagüez. Received September 28, 1942.

# 144999. RICINUS COMMUNIS L. Euphorbiaceae. Castor-bean.

From Argentina. Seeds presented by the Ministerio de Agricultura de la Nación, Buenos Aires. Received September 30, 1942.

Ricino blanco.

For previous introduction see 143539.

# 145000 to 145002. Solanum Tuberosum L. Solanaceae. Potato.

From Chile. Tubers presented by Luis A. Belmar P., Director del Departamento Sanidad Vegetal, Santiago. Received October 5, 1942.

145000. Corahila (Red).

145001. Corahila (Rose-colored).

145002. Corahila (Large No. 140).

#### 145003 to 145029.

From Brazil. Seeds collected by E. C. Higbee, Office of Foreign Agricultural Relations, United States Department of Agriculture. Received October 6, 1942.

145003. ABELMOSCHUS ESCULENTUS (L.) Moench. Malvaceae. Okra.

No. 9. From Belém. August 10, 1942.

145004. ACHRAS ZAPOTA L. Sapotaceae. Sapodilla.

No. 12. From Bragança, August 12, 1942.

145003 to 145029—Continued...

145005. Alysicarpus sp. Fabaceae.

No. 11. Marmalada. From Bragança, August 12, 1942. Obtained from wild plants along railroad tracks.

145006 and 145007. CAPSICUM FRUTESCENS L. Solanaceae. Redpepper.

145006. No. 14. A yellow pepper obtained on board an Amazon River boat, August 29, 1942.

145007. No. 22. From a fruit market in Alenquer, August 22, 1942.

145008. Cassia tora L. Caesalpiniaceae.

No. 6. *Mata Pasta*. From Bragança, August 12, 1942. A vigorous succulent legume that is said to do well on poor soils but which has a tendency to become an undesirable weed in cultivated fields and high-grade pastures. It is evidently relished by hogs.

For previous introduction see 114895.

145009. CITRULLUS VULGARIS Schrad. Cucurbitaceae.

Watermelon.

No. 21. From a fruit market in Belém, September 10, 1942.

145010. Cucumis melo L. Cucurbitaceae.

Muskmelon.

No. 26. From a fruit market in Belém, September 10, 1942.

145011 and 145012. CUCURBITA MOSCHATA Duchesne. Cucurbitaceae.

Cushaw.

145011. No. 3. From Bragança, August 12, 1942.

145012. No. 4. From Belém, August 10, 1942.

145013. Dolichos Lablab L. Fabaceae.

Hyacinth-bean.

No. 10. From Belém, August 10, 1942.

145014. HYPARRHENIA RUFA (Nees) Stapf. Poaceae.

Grass.

No. 5. Jaragua. From Bragança, August 12, 1942.

For previous introduction see 139629.

145015. Lycopersicon esculentum Mill. Solanaceae.

Tomato.

No. 20. From Belém, September 10, 1942.

145016 and 145017. ORYZA SATIVA L. Poaceae.

Rice.

145016. No. 25. From market, Alenquer, August 22, 1942. Probably locally grown, upland rice.

145017. No. 1. Obtained from the Upland Rice Station, August 12, 1942. Said to average 300 kilos per hectare on unfertilized sandy loam soils.

145018. Petroselinum crispum (Mill.) Nym. Apiaceae. Parsley.

No. 8. Salsa. From Belém. Seed purchased in seed store, said to have come from Portugal.

145019. Phaseolus lunatus L. Fabaceae.

Lima bean.

No. 2. From a garden in Belém, August 10, 1942.

145020. Phaseolus vulgaris L.

Common bean.

No. 18. From market, Alenquer, August 22, 1942.

145021. PUERARIA PHASEOLOIDES (Roxb.) Benth. Fabaceae.

No. 15. From Belterra, August 24, 1942; used as a cover crop.

For previous introduction see 143802.

145022. Schizolobium amazonicum Ducke. Caesalpiniaceae.

No. 27. From garden of Museu Goeldi, Belém, September 11, 1942. An

#### 145003 to 145029—Continued.

unusually rapid-growing tree said to produce wood excellent for paper and matchsticks. A 6-year old tree has a trunk about 2 feet in diameter.

145023. TALINUM sp. Portulacaceae.

No. 7. Cariru. From garden, Belém, August 7, 1942. A very popular and common plant used in the same manner as spinach by the people in this region.

145024. VIGNA SESQUIPEDALIS (L.) Fruwirth. Fabaceae. Asparagus bean. No. 17. Feijão verde. From a local garden, Belém, August 10, 1942.

145025 to 145027. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.

From market, Alenquer.

145025. No. 16. August 22, 1942.

145026. No. 24. August 22, 1942.

145027. No. 13. August 23, 1942.

145028. VITIS sp. Vitaceae.

No. 23. From Alenquer, August 22, 1942.

145029. ZEA MAYS L. Poaceae.

Corn.

No. 19. From market, Alenquer, August 22, 1942.

# 145030 and 145031. PERSEA AMERICANA Mill. Lauraceae. Avocado.

From Mexico. Seeds presented by Lic. Eduardo Preciata, Mexico, D. F. Received October 5, 1942.

145030. Large-fruited variety.

145031. Small-fruited variety.

For previous introduction see 132737.

# 145032. JATROPHA sp. Euphorbiaceae.

From Mexico. Seeds presented by Floyd D. Ransom, Special Representative, United States Department of Agriculture, Mexico, D. F. Received October 8, 1942.

Chilte.

145033. Desmodium nicaraguense Benth. & Oerst. (Meibomia rensoni Painter. Fabaceae.

From El Salvador. Seeds presented by Leopoldo Barrientes, Chief of the Agricultural and Industrial Department, La Ceiba. Received October 5, 1942.

145034 to 145038. IPOMOEA BATATAS (L.) Lam. Convolvulaceae. Sweetpotato.

From Brazil. Tubers presented by the Secretary of Agriculture, Campinas, São Paulo. Received October 13, 1942.

145034. V-16 Das Almas.

145037. V-29.

145035. V-48 (or 84) Rosa.

145038. V-10 Napoleão.

145036. V-39 Roxa.

## 145039. CHENOPODIUM PALLIDICAULE Aellen. Chenopodiaceae.

From Bolivia. Seeds presented by Dr. Martin Cárdenas, Rector, Universidad Autónoma "Simon Bolívar," Cochabamba, Cochabamba. Received October 13, 1942.

Kañahua.

For previous introduction see 145055.

145040. HEVEA BRASILIENSIS (H. B. K.) Muell. Arg. Euphorbiaceae. Para rubbertree.

From Puerto Rico. Seeds presented by K. C. Bartlett, Mayagüez. Received October 15, 1942.

For previous introduction see 144067.

## 145041. SCORZONERA TORTUOSISSIMA Boiss. Cichoriaceae.

From Iran. Seeds presented by the Iranian Ministry of Agriculture, Teheran. Received October 8, 1942.

# 145042 to 145052. ARACHIS HYPOGAEA L. Fabaceae. Peanut.

From Hawaii. Seeds presented by A. J. Mangelsdorf, Experiment Station, Hawaiian Sugar Planters Association, Honolulu. Received October 16, 1942.

145042. No. 1942. Bilb. (Mauritius.)

145043. No. 1943. Bunch. (Mauritius.)

145044. No. 597. Doi. (Kailua.)

145045. No. 1941. Digan Lupog. (Mauritius.)

145046. No. 1138. Indian Coromandel. (Southern Rhodesia.)

145047. No. 1527. Masunbika No. 1. (Uganda.)

145048. No. 1526. Serere. (Uganda.)

145049. No. 885. Shanghai. (Kalama.)

145050. No. 2089. Schwarz No. 21. (Java.)

145051. No. 1939. Tirik. (Mauritius.)

145052. No. 2090. White Brazil. (Brazil.)

#### 145053 and 145054.

From Guatemala. Seeds presented by Hector Manuel Sierra, through the Bureau of Agricultural Economics, United States Department of Agriculture. Received October 19, 1942.

145053. Lupinus angustifolia L. Fabaceae.

Lupine.

Flowers yellow; seeds ovoid-globose, faintly speckled.

For previous introduction see 137170.

145054. LUPINUS LUTEUS L.

Flowers blue; seeds speckled.

For previous introduction see 137172.

#### 145055 to 145063.

From Bolivia. Seeds presented by Martín Cárdenas, Rector, Universidad Autónoma "Simon Bolívar," Cochabamba. Received October 22, 1942.

145055. CHENOPODIUM PALLIDICAULE Aellen. Chenopoliaceae.

Kanahua. From the Titicaca Lake Region, La Paz.

For previous introduction see 145039.

145056 to 145063. CHENOPODIUM QUINOA Willd.

Quinoa.

145056. Quinua Amarilla Salcedo. (Puno, Peru.)

145057. Quinua Amarilla Achacachi. (La Paz, Bolivia.)

145058. Quinua Blanca Salcedo. (Puno, Peru.)

145059. Quinua Blanca Achacachi. (La Paz, Bolivia.)

#### 145055 to 145063—Continued.

145060. Quinua "Cuchi huiva" (pig's fat) Cabo de Chancho, Guaqui. (La Paz, Bolivia.)

145061. Quinua "Huatajata" Chua. (La Paz, Bolivia.)

145062. Quinua "Jaru" Guaqui. (La Paz, Bolivia.)

145063. Quinua "Pallapi" or "Real," Tihuanacea. (La Paz, Bolivia.) For previous introduction see 126404.

# 145064. AMYGDALUS PERSICA L. Amygdalaceae. Peach.

From Michigan. Tree obtained from the Greening Nursery Co., Monroe. Received October 31, 1942.

Early Halehaven. (U. S. Plant Patent 325.)

#### 145065 to 145075.

From Brazil. Seeds presented by the Instituto Agronómico, Campinas, São Paulo. Received October 26, 1942.

145065. COFFEA ARABICA L. Rubiaceae.

Arabian coffee.

Variety Bourbon.

145066. COFFEA ARABICA L.

Variety Bourbon. Introduced as "var. bourbon forma xanthocarpa," for which a place of publication has not been found.

145067. COFFEA ARABICA var. GOIABA Taschdjian.

145068. COFFEA ARABICA var. LAURINA Cramer.

145069. COFFEA ARABICA var. MARAGOGIPE Froehner.

145070. COFFEA ARABICA var. MARAGOGIPE Froehner.

Introduced as "forma xanthocarpa," a name that is invalid because already used in this species.

145071. COFFEA ARABICA var. MOKKA Cramer.

145072. Coffea Arabica var. Polysperma Cramer.

145073. Coffea Arabica var. purpurascens Cramer.

145074. COFFEA ARABICA var. TYPICA Cramer.

145075. COFFEA ARABICA var. TYPICA Cramer.

Introduced as "forma xanthocarpa," a name that is invalid because already used in this species.

For previous introduction see 118448.

# 145076. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From Michigan. Tree ordered from Stahelin's Nursery, Bridgman. Received November 2, 1942.

Michigold.

# 145077. MYRISTICA FRAGRANS Houtt. Myristicaceae.

Common nutmeg.

From the British West Indies. Seeds presented by the Director of Agriculture, Trinidad. Received October 30, 1942.

For previous introduction see 97774.

## 145078. VACCINIUM sp. Vacciniaceae.

From Colombia. Seeds presented by Paul Epple, Bogotá. Received November 11, 1942.

Colombian wild blueberry.

145079 to 145092. GLYCINE MAX (L.) Merr, Eabaceae. Soybean.

From Southern Rhodesia. Seed presented by the Department of Agriculture, Salisbury. Received November 12, 1942.

145079. Hernon No. 6 145086. Hernon No. 268.

145080. Hernon No. 12. 145087. Jubiltan No. 65.

145088. Jubiltan No. 67. 145081. Hernon No. 18.

145082. Hernon No. 29. 145089. Jubiltan No. 77.

145083. Hernon No. 36. 145090. Jubiltan No. 109.

145084. Hernon No. 55. 145091. Potchefstroom No. 51. 145085. Hernon No. 107. 145092. Potchefstroom No. 184.

For previous introduction see 142491.

#### 145093. SACCHARUM. Poaceae.

Sugarcane.

From British Guiana. Cuttings presented by C. Holman B. Williams, Sugar Agronomist and Plant Breeder, Botanic Gardens, (Sugar Experiment Station), Georgetown. Received November 16, 1942.

D. 166/34.

## 145094. Lotus uliginosus Schkuhr. Fabaceae.

From Canada. Seeds presented by G. C. Pearson, Port Kells, British Columbia. Received October 30, 1942.

This plant is a very heavy seeder in its first year. It was outstanding among 400 plants seeded during the spring of 1942.

For previous introduction see 135131.

# 145095. Jacaranda filicifolia (Anders.) Don. Bignoniaceae.

From the Canal Zone. Seeds presented by Walter R. Lindsay, Director, Canal Zone Experiment Station, Summit. Received November 4, 1942.

A cultivated shade tree with fernlike leaves and showy panicles of large blue-purple flowers. Native to Panama.

For previous introduction see 109937.

#### 145096. CRYPTOSTEGIA GRANDIFLORA R. Br. Asclepiadaeceae. Palay rubbervine.

From Mexico. Seeds presented by Jack Tharp, Alamos, Sonora. Received November 9, 1942.

For previous introduction see 77392.

#### 145097 to 145117.

From Australia. Seeds presented by Dr. A. McTaggart, Division of Plant Industry, Canberra City. Received October 28, 1942.

145097. Arachis nambyquarae Hoehne. Fabaceae.

Peanut.

No. 6929. From the Division of Agrostology, Ministry of Agriculture, Deodore, Brazil, 1937.

For previous introduction see 111964.

145098 and 145099. CAJANUS CAJAN (L.) Druce. Fabaceae. 145098. No. 6053. From the University of Hawaii, 1935. 145099. No. 7779. From Rabat, Morocco, 1939.

145100. CANAVALIA ENSIFORMIS (L.) DC. Fabaceae. Jackbean.

No. 2317. From the Department of Agriculture, Samaru, Zaria, Nigeria, 1931.

## 145097 to 145117-Continued.

145101. CANAVALIA GLADIATA (Jacq.) DC.

Swordbean

No. 2270. From the Department of Agriculture, Reduit, Mauritius, 1931. For previous introduction see 143872.

145102. CROTALARIA RETUSA L. Fabaceae.

No. 1257. From Roland McKee, United States Department of Agriculture, Washington, D. C., 1930.

For previous introduction see 117935.

145103. CYAMOPSIS TETRAGONOLOBA (L.) Taub. (C. psoraloides DC.). Fabaceae. Guar.

No. 2780. From Dacca, Bengal, India, 1932.

For previous introduction see 144328.

145104. Desmodium Barbatum (L.) Benth. (Meibomia barbata (L.) Kuntze). Fabaceae.

No. 5814. From Deodoro, Brazil, 1934.

For previous introduction see 117948.

145105. GLYCINE JAVANICA L. Fabaceae.

No. 6943. From Tanganyika Territory, 1937.

For previous introduction see 142976. 145106. INDIGOFERA HIRSUTA L. Fabaceae.

Indigo.

No. 1669. From the General Experiment Station, Buitenzorg, Java, 1930. For previous introduction see 144994.

145107. Phaseolus acutifolius var. Latifolius G. F. Freeman. Fabaceae. Tepary bean.

No. 5973. From Moscow, Union of Soviet Socialist Republics, 1941-42 (produced at the Plant Introduction Garden, Lawes, southern Queensland.)
For previous introduction see 57734.

145108. Phaseolus calcaratus Roxb.

Rice bean.

No. 2778. Agartala Kalai. From Dacca, Bengal, India, 1932.

145109. Phaseolus metcalfei Woot. & Standl. Metcalfe bean.

No. 5553. From the Boyce Thompson Southwest Arboretum, Superior, Ariz., 1933.

145110. Phaseolus mungo L.

Urd.

No. 3712. From the Institute of Plant Industry, Indore, Indore, Central India, 1932.

For previous introduction see 126230.

145111. Phaseolus trinervius Heyne.

No. 5783. From the Department of Agriculture, Trinidad, British West Indies, 1934. An annual or biennial vine densely clothed with deflexed, tawny hairs. The trifoliate leaves have broadly ovate leaflets, 3 to 5 inches long, and the red flowers are in clusters of 3 to 6 on flexuous peduncles.

For previous introduction see 91962.

145112. SESBANIA PAULENSIS Barb.-Rodr. Fabaceae.

No. 1679. From the Botanic Gardens, Buitenzorg, Java, 1930. A leguminous shrub about 10 feet high, with narrow, angular branches, finely pinnate leaves, and handsome yellow flowers in few-flowered racemes.

For previous introduction see 73261.

#### 145097 to 145117—Continued.

145113. STIZOLOBIUM ATERRIMUM Piper & Tracy. Fabaceae. Velvetbean. No. 2271. From the Department of Agriculture, Reduit, Mauritius, 1931. For previous introduction see 132790.

145114. STIZOLOBIUM DEERINGIANUM Bort.

Deering velvetbean.

No. 6928. From C. Starke & Company Ltd., Mowbray, Capetown, South Africa, 1937.

For previous introduction see 139642.

145115. STIZOLOBIUM Sp.

No. 2041. From the Department of Agriculture, Southern Rhodesia, 1931.

145116. Stylosanthes guianensis (Aubl.) Swartz. Fabaceae.

No. 6058. From the University of Hawaii, 1935. (Seed grown at Tropical Research Station, South Johnstone, northern Queensland, 1940-41.) A branching herbaceous perennial about 3 feet high with rusty hirsute stems, trifoliolate leaves of lanceolate, sharp-pointed leaflets, and globose heads of small, fragrant, yellow flowers subtended by leafy bracts.

For previous introduction see 132811.

145117. VOANDZEIA SUBTERRANEA (L.) Thouars. Fabaceae.

No. W.3766. From the Waite Agricultural Research Institute, Adelaide, Australia, 1941-42. (Originally from the Union of South Africa.)

For previous introduction see 143971.

#### 145118 to 145122. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by F. Febeliano da Costa Filho, Director de Divisão de Experimentação e Pesquinas, Campinas. Received November 19, 1942.

145118. Delfos. 37.230.

145121, Delfos, 38,1408,

145119. Delfos. 38.1404.

145122. Delfos. 38.1435.

145120, Delfos, 38,1407,

#### 145123 to 145199.

From Australia. Seeds presented by Dr. A. McTaggart, Division of Plant Industry, Canberra City. Received October 29, 1942.

145123. MEDICAGO sp. Fabaceae.

No. 3511. From the Botanic Gardens, Cambridge, England, 1932.

145124 to 145126. MEDICAGO FALCATA L. Yellow-flowered alfalfa.

145124. No. 5618. From the Department of New Cultures and Introduction, Institute of Plant Industry, Leningrad, Union of Soviet Socialist Republics, 1933.

145125. No. 7702. From the Division of Forage Plants, Ottawa, Canada, 1939.

145126. No. 7909. From Alma-Ata, Institute of Plant Industry, Leningrad, the Union of Soviet Socialist Republics, 1940.

145127 to 145136. MEDICAGO SATIVA L.

Alfalfa.

145127 and 145128. From the University of Saskatchewan, 1929.

145127. No. 1092.

145128. No. 1093.

145129 to 145131. From Macdonald College, Quebec, Canada, 1929. 145129. No. 1282.

#### 145123 to 145199—Continued.

145130. No. 1283.

145131. No. 1284.

145132. No. 6964. From the Institut für Pflanzenzüchtung, Landsberg (Wartha) Germany, 1937.

145133. No. 7233. From Sutton & Sons, Reading, England, 1938.

145134 to 145136. From the Division of Forage Plants, Ottawa, Canada, 1939.

145134. No. 7590.

145135. No. 7591.

145136. No. 7699.

145137. MELILOTUS ALBA Desr. Fabaceae.

White sweetclover.

No. 1783. Supplied by the Bureau of Introduction, Institute of Applied Botany and New Cultures, Leningrad, the Union of Soviet Socialist Republics, 1930.

145138. MELILOTUS OFFICINALIS (L.) Lam.

Yellow sweetclover.

No. 5620. From the Department of New Cultures and Introduction, Institute of Plant Introduction, Leningrad, the Union of Soviet Socialist Republics, 1933.

145139. TRIFOLIUM HYBRIDUM L. Fabaceae.

Alsike clover.

No. 2326. From Cambridge, England, originally from Sofia, Bulgaria. For previous introduction see 126519.

145140 to 145165. Trifolium pratense L. Fabaceae. Red clover.

145140. No. 2354. From the Botanic Gardens, Cambridge, England, 1931.

145141. No. 2843. From the Plant Research Station, Palmerston, New Zealand, 1932.

145142. No. 5621. From the Department of New Cultures and Introductions, Institute of Plant Industry, Leningrad, Union of Soviet Socialist Republics, 1933.

145143. No. 5622. From the Department of New Cultures and Introductions, Institute of Plant Industry, Leningrad, Union of Soviet Socialist Republics, 1933.

145144. No. 5719. From the Royal Danish Agricultural Society, Copenhagen, Denmark, 1934.

145145. No. 6608. From the Macdonald College, Quebec, Canada, 1937.

145146 and 145147. From the Plant Research Station, Palmerston, New Zealand, 1937.

145146. No. 6653.

145147. No. 6654.

145148. No. 6960. From Mühlhausen, Germany, 1937.

145149. No. 6961. From Weimar, Germany, 1937.

145150. No. 7035. From Aberystwyth, Wales, 1938.

145151. No. 7036. From Aberystwyth, Wales, 1938.

145152. No. 7037. From the Welsh Plant Breeding Station, Aberystwyth, Wales, 1938.

145153. No. 7043. From the Department of Plant Breeding, Institute of Agricultural Research, Bucharest, Rumania, 1938.

#### 145123 to 145199—Continued.

145154 to 145160. From the Moravian Institute of Agricultural Research, Brno, Czechoslovakia, 1938.

145154. No. 7197.

145158. No. 7201.

145155. No. 7198.

145159. No. 7202.

145156. No. 7199.

145160. No. 7205.

145157. No. 7200.

145161 to 145165. From the Danish Station for Seed Control, Royal Agricultural Society of Denmark, 1938.

145161. No. 7225.

145162. No. 7226. A high-yielding strain of two-cut or broadleaf clover.

145163. No. 7227. A high-yielding strain of single-cut clover.

145164. No. 7228.

145165. No. 7229.

145166 to 145196. Trifolium repens L. Fabaceae. White clover.

145166. No. 3540. From Copenhagen, Denmark; originally from the Botanic Gardens, Cambridge, England, 1932.

145167 to 145168. From the Plant Research Station, Palmerston North, New Zealand, 1932.

145167. No. 2840. Type 1 - Ac766.

145168. No. 2841. Type 2 - Ac128.

145169. No. 3560. From the Botanic Gardens, Cambridge, England, 1932.

145170 to 145171. From the Plant Research Station, Palmerston North, New Zealand, 1932.

145170. No. 3675. Certified Mother Seed.

145171. No. 3676. Certified Permanent Pasture.

145172. No. 5721. From the Royal Danish Agricultural Society, Copenhagen, Denmark, 1934.

145173 to 145178. From the Plant Research Station, Palmerston North, New Zealand, 1937.

145173. No. 6647. Type 1 - Ac2243.

145174. No. 6648. Type 2 - Ac2160.

145175. No. 6649. Type 3 - Ac2243.

145176. No. 6650. Type 4 - Ac2304.

145177. No. 6651. Type 5 - Ac2215.

145178. No. 6652. Type 6 - Ac2399.

145179. No. 6851. Collected in Maison Carrée, Algeria, 1937.

145180. No. 6855. Collected at Lavandou, Var, France, 1937.

145181. No. 6856. Collected on the Island of Port Cros, Var, France, 1937.

145182. No. 6962. From the Anstalt für Pflanzenbau and Pflanzenzucht, University of Thuringia, Jena, Germany, 1937.

145183. No. 6965. From Lodi, Italy, supplied by the Institut für Pflanzenzüchtung, Landsberg (Wartha), Germany, 1937.

145184. No. 6966. From Silesia, Germany, supplied by the Institut für Pflanzenzüchtung, Landsberg (Wartha) Germany, 1937.

145185 and 145186. From a royal Hungarian estate, Rompolt, Hungary, 1937.

#### 145123 to 145199—Continued.

145185. No. 6968. (Bakony.)

145186. No. 6969. (Hortobagy.)

- 145187. No. 7038. (S. 100, early.) From Aberystwyth, Wales, 1938.
- 145188. No. 7046. (Ac2419.) From the Plant Research Station, Palmerston North, New Zealand, 1938.
- 145189 and 145190. From the Plant Breeding Sub-Division, Moravian Institute of Agricultural Research, Brno, Czechoslovakia, 1938.

145189. No. 7303. (Tetc, Moravia.)

145190. No. 7204. (Topolcany, Slovakia.)

- 145191. No. 7230. Morso. From the Danish Station for Seed Control, 1938.
- 145192. No. 7589. Nappan, wild white clover. From the Division of Forage Plants, Ottawa, Canada, 1939.
- 145193. Dingee. A commercial variety grown under irrigation in Victoria, Australia.
- 145194. No. 2243. From the Bureau of Introduction, Institute of Plant Industry, Leningrad, Soviet Union, 1931.
- 145195. No. 2244. From the Bureau of Introduction, Institute of Plant Industry, Leningrad, Soviet Union, 1931.
- 145196. No. 7984. Purpurea. From the Botanic Garden, Leyden, Netherlands, 1940.

#### 145197. Trifolium tumens Stev. Fabaceae.

Clover.

No. 2429. From the Botanic Gardens, Copenhagen, Denmark, 1931; native to Transcaucasia.

For previous introduction see 31054.

- 145198 and 145199. VIGNA SINENSIS (Torner) Savi. Fabaceae. Cowpea.
  - 145198. No. 5980. Brabham. From the Nicholson Seed Co., Dallas, Tex., 1935.
  - 145199. No. 8085. (34c361.) From the Division of Plant Industry, Union Department of Agriculture, Pretoria, Union of South Africa.

#### 145200 to 145528. MEDICAGO SATIVA L. Fabaceae. Alfalfa.

From Saudi Arabia. Seeds presented by James G. Hamilton, United States Agricultural Mission. Received November 23, 1942.

145200. From near Burcida, altitude 1,870 feet, July 15, 1942. A region of high temperatures, with a continuous growing season, where nearly all alfalfa is grown in date groves.

145201 to 145203.

Collected at Mecca.

145204 to 145528.

[No special data.]

#### 145529. ARUNDINARIA AMABILIS McClure. Poaceae.

From Texas. Seeds presented by R. R. Eckhart, Dallas, and E. A. McIlhenny, Avery Island, La. Received December 1, 1942.

For previous introduction see 134091.

145530. Gossypium. Malvaceae.

Cotton.

From Brazil. Seeds presented by the Instituto Agronómico de Campinas, São Paulo. Received December 3, 1942.

Stoneville (resistant) 42/26.

# 145531. MAGNOLIA MOLLICOMATA W. W. Smith. Magnoliaceae.

From North Wales. Seeds presented by Lord Aberconway, Bodnant, Tal-y-Cafn. Received November 25, 1942.

A deciduous tree 50 to 80 feet high in southwestern China, where it is native. The dull-green, broadly oval leaves are 6 to 10 inches long, and the rosy, cup-shaped flowers, 6 to 7 inches across, appear before the leaves. Closely related to *Magnolia campbellii*, this species flowers more freely and on younger trees.

#### 145532 to 145534.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received November 11, 1942.

Numbers 145532 and 145533 were collected by Mrs. Quiller Gray at Daleside, Transvaal.

145532. DIGITARIA sp. Poaceae.

Grass.

145533. THEMEDA TRIANDRA Forsk. Poaceae.

Rooi grass.

For previous introduction see 75384.

145534. ZIZIPHUS MUCRONATA Willd. Rhamnaceae.

Jujube.

A spiny tree, native to South Africa, about 25 feet high, with small, 3-nerved leaves, inconspicuous yellowish flowers, and red fruits about the size of cherries.

#### 145535 to 145545. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Received December 3, 1942.

145535. Bamboo Morada, Imp. 768 × Hind's Special.

145536. Criola × P.O.J. 2878.

145537. Cristalina × Hind's Special.

145538. Cristalina × P.O.J. 2878.

145539. Cristalina × P.O.J. 2878.

145540. Gestreipt Preanger  $\times$  Toledo.

145541. Green Ribbon × C. P. 1161.

145542. La. Purple  $\times$  Hind's Special.

145543. P. O. J. 2725  $\times$  C.P. 27-108.

145544. Simpson  $\times$  C.P. 1165.

145545. Yellow Bamboo  $\times$  C. P. 1165.

#### 145546 to 145553.

From Brazil. Seeds presented by the Instituto Agronómico de Campinas, São Paulo. Received November 19, 1942.

145546 to 145548. RICINUS COMMUNIS L. Euphorbiaceae. Castor-bean.

145546. No. 37.

145547. No. 38-A.N.A.

145548, No. 39,

#### 145546 to 145553—Continued.

145549 to 145553. Triticum Aestivum L. Poaceae. Common wheat.

145549. No. 5-Pusa 90.

145550. No. 6-Pusa 80-5.

145551. No. 8-Pusa 12.

145552. No. 9-Pusa 4.

145553. No. 90-Pusa 111.

# 145554 and 145555. JUGLANS REGIA L. Juglandaceae.

Persian walnut.

From California. Plants growing at the Plant Introduction Garden, Chico. Numbered December 7, 1942.

145554, Selection D-36-32,

145555. Selection D-37-1.

# 145556. INDIGOFERA COLUTEA (Burm. f.) Merr. Fabaceae.

From Tanganyika Territory. Seeds presented by P. G. Greenway, Systematic Botanist, East African Agricultural Research Station, Amani. Received November 25, 1942.

A herbaceous species 1 to 4 feet high, native to the East Indies. Received as Indigofera viscosa, now considered a synonym of I. colutea.

# 145557. AMYGDALUS PERSICA L. Amygdalaceae.

From California. Plants growing at the Plant Introduction Garden, Chico. Numbered December 8, 1942.

Selection (D-8-24) from P.I. 92046.

#### 145558. Solanum Tuberosum L. Solanaceae.

Potato.

From Bolivia. Tubers presented by the Universidad Autónoma de Cochabamba, Cochabamba. Received December 8, 1942.

#### 145559, SOLANUM AGRARIUM Sendt, Solanaceae.

From Brazil. Seeds presented by W. R. Schreiber, Office of Foreign Agricultural Relations, Department of Agriculture, Washington, D. C. Received December 1, 1942.

Bobo. A yellow-fruited species from Santo Amaro district in the state of Bahia, October 1, 1942.

### 145560. Helicostylis ojoche Pittier. Moraceae.

From Costa Rica. Seeds presented by J. M. Orozco C., Jefe de la Sección de Botánica, Centro Nacional de Agricultura, San Pedro Montes de Oca. Received December 3, 1942.

Ojoche. A large handsome tree up to 100 feet high. The flowers are gathered and cooked with meal in cakes. The flowers, the small round fruits, and the foliage are eaten by livestock.

#### 145561 to 145565.

From Brazil. Seeds presented by Ferdinand Febeliano da Costa Filho, Instituto Agronómico de Campinas, São Paulo. Received December 4, 1942.

145561 to 145563. CINCHONA OFFICINALIS L. Rubiaceae.

#### 145561 to 145565—Continued.

Received as Cinchona calisaya var. josephiana.

145561. No. 31-1.

145562. No. 31-2.

145563. No. 31-3.

#### 145564 and 145565. CINCHONA OFFICINALIS L.

Received as Cinchona calisaya var. ledgeriana.

145564. No. 1-20.

145565. No. 2-21.

# 145566. ENNEAPOGON CENCHROIDES (Licht.) C. E. Hubb. Poaceae.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley. Received November 30, 1942.

#### 145567. TARCHONANTHUS MINOR Less. Asteraceae.

From the Union of South Africa. Seeds presented by the McGregor Museum, Kimberley, through Mrs. E. Zoe Harris, Modder River, Cape Province. Received December 8, 1942.

A drought-resistant evergreen shrub that grows preferably in rocky places. For previous introduction see 143898.

# 145568. AMYGDALUS PERSICA L. Amygdalaceae.

Peach.

From Maryland. Tree growing at the United States Plant Introduction Garden, Glenn Dale. Numbered December 15, 1942.

Hardee. Received from Bunting's Nurseries, Selbyville, Del., March 10, 1941.

#### 145569 to 145571.

From Argentina. Seeds presented by A. T. Hunziker, Buenos Aires. Received December 8, 1942.

145569. ACROCOMIA TOTAI Mart. Phoenicaceae.

No. 2110.

145570. Arecastrum romanzoffianum (Cham.) Becc. Phoenicaceae. No. 2108.

145571. Butia yatay (Mart.) Becc. Phoenicaceae. No. 2109.

# 145572. Ampelocissus acapulcensis (H. K. B.) Planch. Vitaceae.

From Mexico. Seeds presented by Emilio Locke, Hotel Costa Verde, Acapulco. Received December 10, 1942.

A large woody vine with broadly cordate coarsely dentate leaves 3 to 6 inches long, densely tomentose beneath, and small red flowers in dense cymes. The round, dark-red fruits are up to 1 inch in diameter. Native to southern Mexico.

For previous introduction see 144221.

#### 145573 to 145584. SACCHARUM. Poaceae.

Sugarcane.

From the Canal Zone. Received December 17, 1942.

145573. Caria Blanca  $\times$  CP 1165.

#### 145573 to 145584—Continued.

145574. Caria Blanca × Kasoer.

145575. Caria Blanca × Toledo.

145576. CO 281  $\times$  CP 1161.

145577. Criola × P. O. J. 2878.

145578. Cristalina × Hind's Special.

145579. Cristalina × Toledo.

145580. La. Purple × Hind's Special.

145581. Manjav  $\times$  CP 1165.

145582. P.O.J. 2940 × CP 1165.

145583. S.C. 1214 × CP 1165.

145584. Yellow Caladonia Imp. 769  $\times$  CP 1165.

#### 145585. CALLICARPA AMERICANA L. Verbenaceae.

From Florida. Seeds presented by James B. McFarlin, National Parks Service, through Robert G. Wilson, Miami. Numbered December 22, 1942.

Variety Lactea. A white-fruited form.

#### 145586 to 145589.

From Guatemala. Seeds collected by Dr. David Fairchild. Received November 12, 1941.

Collected on the place of Mrs. Robert Hempstead at Coban.

145586. OMANTHE sp. Phoenicaceae.

Palm.

No. 1149. A handsome, tall, cluster palm with pinnate leaves and black round fruits on a one-branched fruit stalk, the branches of which are much curled and twisted. It strongly resembles the *Capuco* of Antigua.

145587. OMANTHE sp.

No. 1155. A handsome cluster palm very similar to the *Capuco* of Antigua. It is apparently related to the Pacaya (*Chamaedorea* sp.), but its inflorescences are not eaten. The fruits, round and black when ripe, are produced on slender and slightly tortuous one-branched inflorescences.

145588. CUPRESSUS BENTHAMI Endl. Pinaceae. Bentham cypress.

No. 1127. Collected on the shore of Lake Atitlan at an altitude of 5,200 ft., October 19, 1941. A cypress of elegant habit, often up to 90 feet high, with regularly pinnate, flattened branchlets. Native to southern Mexico and Central America at altitudes of 4,000 to 10,000 feet.

145589. Olmediella betschleriana (Goepp.) Loes. Flacourtiaceae.

No. 1150. Manzanote. A very attractive tree of pyramidal habit, with large, spiny-margined leaves; it is used quite extensively as a street tree in the cities of Antigua and Guatemala. Its fruits are tomato-shaped, flattened, with an extremely hard shell. The seeds are small, ovate, thin.

# 145590. Phaeomeria speciosa (Blume) Koord. Zingiberaceae.

From Puerto Rico. Plants presented by T. B. McClelland, Puerto Rico Agricultural Experiment Station, Mayagüez. Received May 31, 1934. Numbered December 22, 1942.

A perennial herb up to 11 feet high with a thick rhizome and with handsome gingerlike leaves often more than 2 feet long and 5 to 6 inches broad. The flower heads, subtended by numerous, showy, waxy bracts and borne on separate stalks up to 3 feet high, are often 6 inches across. The individual flowers are small, carmine with a narrow yellow margin, and are less conspicuous than the bracts, which are waxlike in appearance and up to 4

#### 145590—Continued.

inches across. The inflorescence is excellent as a cut flower. The plant does well in moist conditions, as along the banks of streams. Native to Java.

For previous introduction see 137979.

#### 145591. Solanum Hirsutissimum Standl. Solanaceae.

From Ecuador. Seeds presented by Dr. R. B. Harvey of General Mills, Inc. Numbered December 22, 1942.

Fruits better flavored than those of the Naranjilla (Solanum quitoense Lam.), and plant spiny. From Loja Mountains.

# 145592. Dovyalis caffra (Hook. & Harv.) Warb. (Aberia caffra Hook. & Harv.) Flacourtiaceae. Kei-apple.

From Florida. Seeds presented by Hubert Buckley, Saint Petersburg. Numbered December 23, 1942.

A very prickly shrub or small tree, native to tropical Africa, where it is used as a hedge. The pale-green leaves are over 1 inch long and nearly as wide. The edible fruit resembles a small yellow apple and is so exceedingly sour when fresh that it is said to be used as a pickle without adding vinegar. The present seeds are from a tree about 20 feet high, growing alone near Saint Petersburg, that is reported to have borne a good crop of fruit, although the species is supposed to be dioecious. Excellent jelly and fruit butter are said to have been made from the fruit.

For previous introduction see 101085.

# 145593. LYCOPERSICON ESCULENTUM Mill. Solanaceae. Tomato.

From South America. Seeds presented by Dr. T. H. Goodspeed, Andes Expedition of the University of California. Received December 16, 1942.

No. 39.2238. Received as L. peruvianum, but seeds were not of that species.

# 145594. CUCUMIS MELO L. Cucurbitaceae. Muskmelon.

From India. Seeds presented by P. H. Rama Reddi, Director of Agriculture, Madras. Received December 16, 1942.

Received as *C. pubescens* Willd., which is considered to be a synonym of *C. melo.* It may be a distinct horticultural strain.

#### 145595 to 145613.

From Uruguay. Seeds received through Herbst Brothers, New York, N. Y. Received December 2, 1942.

145595. ACANTHOSYRIS sp. Santalaceae.

145596. BAUHINIA CANDICANS Benth. Caesalpiniaceae.

A thorny shrub, native to Uruguay and Argentina, with leaves heart-shaped at the base and cleft nearly to the middle at the apex. The creamy-white flowers are borne in whitish tomentose racemes and the petals are nearly 3 inches long.

For previous introduction see 94766.

#### 145597. BERBERIS LAURINA Thunb. Berberidaceae.

A barberry with leathery, entire, ovate-elliptic leaves, mostly over 2 inches long, dense lax racemes of yellow flowers, followed by small black fruits. Native to southern Brazil.

For previous introduction see 130546.

145598. BLEPHAROCALYX TWEEDIEI (Hook. & Arn.) Berg. Myrtaceae.

#### 145595 to 145613—Continued.

A subtropical tree, native to Uruguay, with lanceolate-acute leaves and axillary flowers in pairs.

For previous introduction see 101510.

145599. Butia eriospatha (Mart.) Becc. (Cocos eriospatha Mart.). Phoenicaceae. Apricot palm.

A handsome pinnate-leaved palm with violet-colored stems, creamy flowers, and edible yellow fruits the size of a small plum. Native to Brazil. For previous introduction see 133015.

145600. CELTIS TALA Gillies. Ulmaceae.

Nettle tree.

Tala. A small tree with a short, stout, branched trunk; suitable for street planting. The wood is yellowish white, moderately hard, and easily worked.

For previous introduction see 48663.

145601. CITHAREXYLUM BARBINERVE Cham. Verbenaceae.

A magnificent ornamental tree, with fragrant flowers, red fruits, and flexible vibrant wood that is used in the manufacture of guitars. Native to the cool and subtropical regions of Argentina.

For previous introduction see 42533.

145602. Enterologium timbouva Mart. Mimosaceae.

Timbo.

A large tree with bipinnate leaves made up of 2 to 5 pinnae, each bearing 10 to 20 pairs of falcate-oblong leaflets, and large heads of greenish flowers, followed by coriaceous kidney-shaped pods. Native to Brazil.

For previous introduction see 124029.

145603. Eugenia strigosa (Berg) Arechav. Myrtaceae.

145604. GUETTARDA URUGUENSIS Cham. & Schlecht. Rubiaceae.

A small tree up to 20 feet high, with twisted branches. The membranous leaves, of varied forms ranging from ovate to lanceolate, are about 3 inches long and 1 inch across. The axillary, long-stalked cymes of white flowers have salver-shaped corollas and are followed by cylindrical, ovoid drupes ½ inch in diameter. Native to Uruguay.

For previous introduction see 101515.

145605. JACARANDA CHELONIA Griseb. Bignoniaceae.

An Argentinian tree, sometimes as much as 90 feet high, with a rounded habit and attractive fernlike foliage. The large blue flowers are in terminal panicles a foot long. The wood is valued in Argentina for cabinet work.

For previous introduction see 124032.

145606. LUEHEA DIVARICATA Mart. Tiliaceae.

145607. MYRCIANTHES APICULATA Berg. Myrtaceae.

145608. PIPTADENIA RIGIDA Benth. Mimosaceae.

An unarmed tree or shrub with axillary heads of small white flowers and small, stiff, linear, shining-green leaflets. The long, slender, stiff winged pods are rich in tannin and the wood is used in shipbuilding.

For previous introduction see 104122.

145609. Prosopis Nigra Hieron. Mimosaceae.

A shrub, or tree up to 40 feet high, with a short, twisted trunk, an umbrellalike crown, pinnate leaves, and clusters of yellow flowers. The handsome wood is used for furniture, carriages, etc.

For previous introduction see 50098.

#### 145595 to 145613—Continued.

145610. QUILLAJA BRASILIENSIS (St. Hil. & Tul.) Mart. Rosaceae.

A Brazilian tree up to 25 feet high, with alternate oblong-lanceolate leaves and corymbs of white flowers. The symmetrical habit and very leafy crown of the tree make it a striking ornamental when in flower. The bark and wood contain saponin.

For previous introduction see 104124.

145611. RAPANEA LAETEVIRENS Mez. Myrsinaceae.

A shrub or small tree with entire, oblong, papery leaves nearly 3 inches long and small whitish flowers in dense axillary clusters. Native to Tucumán, Argentina.

For previous introduction see 88250.

145612. SCHINUS POLYGAMUS (Cav.) I. M. Johnst. (S. dependens Ortega). Anacardiaceae.

An ornamental spiny shrub or small tree, with fragrant pinnate leaves and dense racemes of small yellow flowers. Native to Chile.

For previous introduction see 144908.

145613. Sebastiania klotzschiana Muell. Arg. Euphorbiaceae.

A shrub 16 to 20 feet high, with narrowly elliptic leaves. Native to Uruguay.

# 145614. HIBISCUS CANNABINUS L. Malvaceae. Ambari hemp.

From Brazil. Seeds presented by Cecil M. P. Cross, American Consul General, São Paulo. Received December 24, 1942.

Papoula de São Francisco.

For previous introduction see 144727.

# 145615. SAPIUM TOLIMENSE Jumelle. Euphoriaceae.

From Colombia. Seeds presented by Marshall G. Carlton. Received July 10, 1942.

#### 145616 and 145617.

From Argentina. Seeds presented by Isidoro Weil & Cia., Buenos Aires, through B. B. Robinson, United States Department of Agriculture. Received December 23, 1942.

145616. Corchorus capsularis L. Tiliaceae.

Jute.

For previous introduction see 118770.

145617. Corchorus olitorius L.

For previous introduction see 144997.

# 145618 to 145638. SORGHUM VULGARE Pers. Poaceae. Sorghum.

From Africa. Seeds presented by the Director of the Sugar Experiment Station, Mount Edgecombe, Natal. Received December 28, 1942.

145618. G-4. Sweet sorghum; Uganda.

145619. Isidomba. Sweet sorghum; South Africa.

145620. Isinyembane. Grain sorghum; South Africa.

145621. Jiba. Red sorghum; South Africa.

145622. Jiba. White sorghum; South Africa.

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