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Pesticides DOCUMENTATION BULLETIN

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Volume 4 Number 18
AUGUST 30, 1968



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PESTICIDES DOCUMENTATION BULLETIN

Volume 4
August 30, 1968
Number 18

A Bi-Weekly Publication of U.S. Department of Agriculture

OBJECTIVES AND SCOPE

The *Pesticides Documentation Bulletin* is compiled by the National Agricultural Library's Pesticides Information Center to facilitate national research efforts in all aspects of pest control. This bi-weekly index to the literature includes coverage of diseases, insects, nematodes, parasites, weeds and other pests affecting plants, animals, man, our natural resources and other values in man's environment. Special emphasis is given to the literature on toxicological, physiological and epidemiological aspects of pests and their control by chemical biological and integrated methods.

For broader coverage of literature on agriculture and related subjects, please consult the *Bibliography of Agriculture*, a monthly publication of the National Agricultural Library.

FORMAT

The *Bulletin* is a categorized bibliography, with citations arranged alphabetically by author under the following major subjects:

- 10 Entomology
- 20 Crop Protection
- 30 Livestock Protection
- 40 Commodity Protection
- 50 Environmental Contamination
- 55 Residues
- 60 Toxicology
- 65 Plant Physiology & Biochemistry
- 70 Chemistry
- 80 Engineering
- 90 Industry

Citations: Each citation consists of an accession number assigned serially with the last two digits representing the Bulletin's issue year, i.e. 3286-67. The citation number (minus the year) is used in all indices. Following the accession number is the full title of the article; all personal authors; an abbreviated journal title; volume, issue and inclusive page numbers; date of publication; language abbreviation, if other than English; and the National Agricultural Library's call number. Subject descriptors, patent or grant numbers, bibliographer's notes, and abstracts or extracts may follow each citation when appropriate.

Subject Index: Subject descriptors appear in the index followed by title arranged numerically by accession number. The Agricultural/Biological Vocabulary developed by the National Agricultural Library is used as a basic thesaurus of descriptors.

Biographical Index: Names of first authors are arranged alphabetically, followed by organizational affiliation and accession number.

Author Index: Names of personal authors are arranged alphabetically, followed by accession numbers of pertinent citations.

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The Intredis Register is a system of electronic data retrieval for the field of forest pathology. It is composed of two elements: (1) a set of punchcards each containing a reference to an abstracted article on some phase of forest pathology; and (2) a system for sorting or electronically scanning these cards so that references may be printed out either by subject breakdown, by country to which the reference is germane, by the host plant genus or species, by the organism causing the disease, or by the abstracting journal consulted. Print-outs can be provided consisting of all references in the card register that deal with subjects, countries, hosts, plants, or causal organism.

The Herbicides Data File consists of reports on field tests conducted by the Crops Protection Research Branch, Agriculture Research Service. Each test record contains the following items of information:

- Compound Tested
- Company furnishing the compound
- Author or Investigator
- Test Sponsor
- Date
- Location
- Mode of Application
- Rates of Application
- Soil Types
- Carriers
- Crops or Weeds tested with phytotoxicity ratings
- Associated documentation

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ACKNOWLEDGMENT

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ENTOMOLOGY

16974-68

TO THE METHODS OF STUDYING THE ENVIRONMENTAL TEMPERATURE OF THE TICK IXODES RICINUS L.

M Daniel V Cerny
Folia Parasitol 14(2):177-183
1967 436.8 C33

Environment, Insect ecology, Insect vectors, Ixodes ricinus, Ixodidae, Microclimate, Temperature.

16975-68

VECTOR CONTROL PROGRAMS IN COLORADO.

T Davis Jr
Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:33-34
1966 420 UT1

Agricultural policies, Culex tarsalis, Gambusia affinis, Insect control, Insect vectors, Research.

16976-68

SOME PROBLEMS CONNECTED WITH THE USE OF LIGHT TRAPS.

D J DeJong
Entomophaga Mem Hors Ser 3:25-32 REF
1967 421 EN835M

Biology, Ecology, Hymenoptera, Insect diseases, Insect traps, Lepidoptera, Light traps, Trichoptera. Germany summary

16977-68

A COMPARISON OF ANIMAL- AND DRY-ICE-BAITED TRAPS FOR THE COLLECTION OF TABANIDS.

R Everett J L Lancaster
J Econ Entomol 61(3):863-864
Jun 1968 421 J822

Animals, Attractants, Baits, Dry ice, Equipment, Insect collecting equipment, Insect traps, Tabanidae, Temperature, Time, Weather.

16978-68

OBSERVATIONS OVER RESTRAINING THE STINK BUG (PERILLUS BIOCULATUS (FABR.)) (PENTATOMIDAE) FACING ITS PREY LEPIDOTARSA DECEMLINEATA (SAY) (CHRYSOMELIDAE). (GER)

J M Franz
Z Pflanzkrankh (pflanzenpathol) Pflanzenschutz 74(1):1-13
Jan 1967 464.8 Z3

Larvae, Lepidotarsa decemlineata, Natural control (insects), Pentatomidae, Perillus bioculatus, Predaceous insects, Research. English summary

16979-68

A BRIEF REVIEW OF THE PRINCIPLES OF LIGHT TRAP DESIGN WITH A DESCRIPTION OF AN EFFICIENT TRAP FOR COLLECTING NOCTUID MOTHS.

D F Hardwick
Lepidopterists Soc J 22(2):65-75 REF
31 May 1968 421 L554

Insect collecting equipment, Insect traps, Light traps, Moths, Noctuidae.

16980-68

COLLECTING PUPAE OF THE FALL ARMYWORM FROM REARING CONTAINERS.

E A Harrell W W Hare R L Burton
J Econ Entomol 61(3):873-876
Jun 1968 421 J822

Equipment, Insect collecting equipment, Insect rearing, Methodology, Pupae, Spodoptera frugiperda.

16981-68

INDIVIDUAL EGGING DEVICE FOR TEPHRIID FLIES.

R A Hart R Y Miyabara
J Econ Entomol 61(3):881
Jun 1968 421 J822

Ceratitis capitata, Dacus cucurbitae, Dacus dorsalis, Equipment, Insect eggs, Ovulation, Temperature, Tephritidae, Time.

16982-68

SMALL CAGES FOR OBSERVING LEAF LICE. (GE)

A Hein
Z Pflanzkrankh (pflanzenpathol) Pflanzenschutz 75(3):160-161
Mar 1968 464.8 Z3
Anoplura, Insect cages, Leaves, Research.

16983-68

A FURTHER NOTE ON SAMPLE SIZE FOR CHI-SQUARE TEST: THE RxC TABLE.

W R Holt
J Econ Entomol 61(3):853-854
Jun 1968 421 J822
Entomology, Mathematics, Tables (data).

16984-68

SOME PARAMETERS IN THE ROLE OF ENEMIES IN THE NATURAL CONTROL OF INSECT ABUNDANCE.

C B Huffaker C E Kennett B Matsumoto E G White
Roy Entomol Soc London Symp 4:59-75 REF
1968 420 R81
Correlation, Ecology, Environment, Insect control, Insects, Natural control (insects), Parameters, Parasitism, Population statistics.

16985-68

EXPERIMENTS ON SIMULTANEOUS INFECTIONS OF THE COMMON COCKCHAFER, MELOLONTHA MELOLONTHA.

B Hurpin P Robert
J Invertebrate Pathol 11(2):203-213 REF
Aug 1968 421 J826
Bacillus popilliac, Bacteria, Insect diseases, Laboratories, Larvae, Melolontha melolontha, Microorganisms, Mortality, Temperature.

16986-68

EIGHTH SEMINAR ON TRYPANOSOMIASIS, ABSTRACT OF PAPERS.

W E Kershaw
Roy Soc Trop Med Hyg Trans 62(1):120-140
1968 448.9 R813

Antigens, Biochemistry, Chemical control (insects), Digestion, Drug therapy, Glossina, Immunology, Insect cultures, Insect ecology, Insect vectors, Myocarditis, Reproduction, Research, Trypanosomiasis.

16987-68

CONTROLLED MATING, KARYOLOGY, MORPHOLOGY, AND SEX-RATIO IN THE DENDROCTONOS PONDEROSAE COMPLEX.

G N Lanier D L Wood
Entomol Soc Amer Ann 61(2):517-526 REF
15 Mar 1968 420 EN82
Dendroctonus jeffreyi, Dendroctonus monticolae, Dendroctonus ponderosae, Frequency distribution, Insect genetics, Mitosis, Morphology, Pinus ponderosa, Sex behavior.

16988-68

RADIATION-INDUCED STERILIZATION. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

L E LaChance C H Schmidt R C Bushland
147-196 REF NEW YORK, ACADEMIC PRESS
1967
Cochliomyia hominivorax, Pest control, Radiation, Research, Sterilization.

16989-68

WATERFOWL INTERESTS IN RELATION TO VECTOR CONTROL PROGRAMS.

J B Low
Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:25-30 REF
1966 420 UT1
Agricultural outlook, Aquatic birds, Chemical control (insects), Culicidae, Insect control, Pesticides, Water, Wildlife management.

16990-68

URBAN MOSQUITO CONTROL IN LOS ANGELES COUNTY.

G C McFarland
Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:35-36
1966 420 UT1
Agricultural outlook, Breeding, Crop yields, Culex quinquefasciatus, Insect control, Weather.

16991-68

A DIGESTIVE DISTURBANCE IN GLOSSINA.

A R Mews
Roy Soc Trop Med Hyg Trans 62(1):125-126
1968 448.9 R813
Blood coagulation, Digestion, Feeding, Glossina morsitans, Guinea pigs, Insect cages, Insect cultures, Insect diseases, Salivary glands (insects).

16992-68

A METHOD OF COLLECTING PLANTHOPPERS AND LEAFHOPPERS IN THE FIELD IN WINTER. TRANSL. 16921.

H Santa T Nambu
4 P.
Cicadellidae, Hibernation, Insects, Larvae, Physiology, Potassium cyanate, Research, Sampling (statistics). Translation from Kanto-Tosan Plant Protect. Soc. Proc. 8:42 translated by Kenji Nishimura

16993-68

A MECHANISM OF RESISTANCE TO ORGANOPHOSPHORUS ACARICIDES IN A STRAIN OF THE CATTLE TICK BOOPHILUS MICROPLUS.

C A Schuntner W J Roulston H J Schnitzlering
Australian J Biol Sci 21(1):97-109 REF
Feb 1968 442.8 AU72
Acaricides, Boophilus annulatus microplus, Enzymes, Immunity, Immunochemistry, Organic compounds, Parasitology, Phosphorus.

16994-68

A RESISTANCE MECHANISM IN ORGANOPHOSPHORUS-RESISTANT STRAINS OF SHEEP BLOWFLY (LUCILIA CUPRINA).

C A Schuntner W J Roulston
Australian J Biol Sci 21(1):173-176 REF
Feb 1968 442.8 AU72
Acetylcholinesterases, Biochemistry, Chemical control (insects), Immunology, Insecticide resistance, Insects, Lucilia cuprina, Organophosphorus.

16995-68

RADIOACTIVE STUDIES ON THE FEEDING OF LARVAE, NYMPHS, AND ADULTS OF THE CATTLE TICK, BOOPHILUS MICROPLUS (CANESTRINI).

G W Seifert P H Springell J Tatchell
Parasitology 58(2):415-430 REF
May 1968 448.8 P21
Blood, Boophilus microplus, Cattle, Erythrocytes, Injections, Insect behavior, Larvae, Nymphs, Radioactivity.

16996-68

THE ROLE OF COLLEMBOLA (APTERYGOTA) IN THE NUTRITIONAL SYSTEM OF TERRESTRIAL ENVIRONMENT. (GER)

H R Simon
Z Pflanzkrankh (pflanzenpathol) Pflanzenschutz 74(6):354-366 REF
Jun 1967 464.8 Z3
Collembola, Ecology, Environment, Insect biology, Insect nutrition, Predaceous insects.

16997-68

INSECT ABUNDANCE.

T R E Southwood
Roy Entomol Soc London Symp 4,160P REF
1968 420 R81
Environment, Insect control, Insect dissemination, Insect population, Insects, Research, Symposia.

16998-68
MARKING TOBACCO HORNWORM MOTHS FOR NIGHT RECOVERY WITH A BLACKLIGHT LAMP.
P A Stewart J J Lam
J Econ Entomol 61(3):864-865
Jun 1968 421 J822
Equipment, Infrared rays, Insect collecting equipment, Insect pests, Labeling, Lamps, Light, Manduca sexta, Tobacco.

16999-68
A RACK FOR HOLDING MALE GYPSY MOTHS DURING LABORATORY BIOASSAYS OF AIRBORNE ATTRACTANTS.
R M Waters M Jacobson
J Econ Entomol 61(3):873
Jun 1968 421 J822
Attractants, Biological assay, Equipment, Experimental insects, Insect collecting equipment, *Porthetria dispar*, Research.

17000-68
ABOUT THE INFLUENCE OF WEATHER ON APPLE-LEAF MOTHS FROM THE TIME OF FIRST APPEARANCE TO THAT OF FREQUENCY. (GE)
T Wildboltz
Entomophaga Mem Hors Ser 3:71
1967 421 EN835M
Apples, *Carpocapsa pomonella*, Insect behavior, Insect control, Larvae, Leaves, Weather.

SYSTEMATICS

17001-68
THE CRANE FLIES OF CALIFORNIA.
C P Alexander
Calif Insect Surv Bull 08(0):1-269 MAPS, REF
27 Nov 1967 420 C12
Insect behavior, Insect taxonomy, Tipulidae, Zoogeography.

17002-68
A TECHNIQUE FOR REARING CHORISTONEURA PINUS ON ARTIFICIAL DIET.
D C Allen F B Knight J L Foltz
Entomol Soc Amer Ann 61(2):362-364
15 Mar 1968 420 EN82
Choristoneura pinus, Experimental insects, Insect nutrition, Insect rearing.

17003-68
NEW ORIBATIDS (ACARI) FROM VIETNAM. (GE)
J Balogh S Mahunka
Acta Zool (budapest) 13(1-2):39-74 REF
1967 410 AC85
Acarina, Insect taxonomy, Oribatei, Russian summary

17004-68
NEW ORBATIDS (ACARI) FROM NEW GUINEA.
J Balogh
Acta Zool (budapest) 14(3-4):259-285
29 Jun 1968 410 AC85
Insect taxonomy, Oribatei, Russian summary

17005-68
THE SCIENTIFIC RESULTS OF THE HUNGARIAN SOIL ZOOLOGICAL EXPEDITIONS TO SOUTH AMERICA. 7. ARACHNOIDEA. DESCRIPTION OF BRAZILIAN SPIDERS OF THE FAMILY SYMPHYTOGNATHIDAE.
J Balogh I Loksa
Acta Zool (budapest) 14(3-4):287-294
29 Jun 1968 410 AC85
Insect taxonomy, Spiders, Russian summary

17006-68
PSEUDOSCORPIONS FROM CONTINENTAL SOUTH EAST ASIA. (GE)
M Von Beier

Pacific Insects 9(2):341-369 REF
20 Jun 1967 421 P11
Chelonethida, Insect taxonomy, English summary
Abstract

17007-68
CHIRONOMIDEN LARVA AND PUPAE FROM THE HAMORI LAKE. (GE)
A Berecik
Acta Zool (budapest) 13(1-2):75-82 MAP, REF
1967 410 AC85
Aquatic insects, Chironomidae, Insect taxonomy, Larvae, Pupae, Russian summary

17008-68
LIST OF NEW AMPHIPYRINAE FROM FRENCH EQUATORIAL AFRICA WITH NOTES ON SYNONYMIES (LEPIDOPTERA: NOCTUIDAE). (IT)
E Berio
Soc Entomol Ital Boll 96(1-2):31-34
20 Feb 1966 420 IT1
Insect taxonomy, Noctuidae.

17009-68
THE PTEROPHORIDAE OF IRAN. (LEP.). (FR)
L Bight
Arkiv Zool 20(3-4):243-251
24 Jun 1968 410.9 SV22
Insect taxonomy, Pterophoridae, Zoogeography, French summary

17010-68
REVISION OF THE TRIBE CHALEPINI OF AMERICA NORTH OF MEXICO. I. GENUS XENOCHALEPUS WEISE. (COLEOPTERA: CHRYSOMELIDAE).
J G Butte
Coleopt Bull 22(2):45-62 MAP REF
Jun 1968 421 C674
Chrysomelidae, Insect taxonomy, Nearctic Region, *Xenochalepus*, Zoogeography.

17011-68
SIX NEW SPECIES OF MEMBRACIDAE (HEMIPTERA: HOMOPTERA) FROM SOUTH AFRICA.
A L Capener
Entomol Soc Southern Afr J 31(1):197-207
Mar 1968 420 EN86
Homoptera, Insect identification, Insect taxonomy, Membracidae. The six new species are: *Oxyrbachis hoffmanni*, *Tiberianus platoni*, *Distantobelus hibernus*, *Distantobelus natalensis*, *Distantobelus electus*, *Distantobelus comatus*.

17012-68
A MONOGRAPH OF THE FAMILY HETEROCERIDAE (COLEOPTERA) OF THE NOTOGEN REGION.
R Charpentier
Arkiv Zool 20(3-4):205-241 MAP REF
24 Jun 1968 410.9 SV22
Heteroceridae, Insect taxonomy, Zoogeography.
Abstract

17013-68
SECOND CONTRIBUTION TO THE KNOWLEDGE OF THE AFRICAN COCCOIDEA (HOMOPTERA).
G DeLotto
Entomol Soc Southern Afr J 31(1):83-86
Mar 1968 420 EN86
Coccoidea, Entomology, Homoptera, Insect identification, Insect taxonomy.

17014-68
THE SARCOPHAGIDAE OF BARRO COLORADO ISLAND, PANAMA (DIPTERA).
H R Dodge
Entomol Soc Amer Ann 61(2):421-450 REF
15 Mar 1968 420 EN82
Diptera, Insect taxonomy, Sarcophagidae.

17015-68
COMPLETION OF MY MONOGRAPH OF THE DYNASTINAE: CYCLOCEPHALINI (COLEOPTERA). (GE)

S Endrodi
Acta Zool (budapest) 13(1-2):83-91
1967 410 AC85
Coleoptera, Dynastinae, Insect taxonomy, Nitidulidae, Russian summary

17016-68
NOTES ON NEOTROPICAL TABANIDAE (DIPTERA). X. THE SPECIES DESCRIBED BY J. R. SCHINER AND OTHERS.
G B Fairchild
Pacific Insects 9(2):243-256 REF
20 Jun 1967 421 P11
Insect taxonomy, Neotropical Region, Tabanidae.
Abstract

17017-68
DYNASTINAE OF THE NATURHISTORISKA RIKSMUSEET, STOCKHOLM.
M C Ferreira
Arkiv Zool 18(5):413-435
1967 410.9 SV22
Dynastinae, Insect taxonomy.

17018-68
A NEW SPECIES OF METAXAGLAEA. (LEPIDOPTERA, NOCTUIDAE, CUCULIINAE).
J G Franclemont
Entomol News (philadelphia) 79(3):57-63
Mar 1968 421 EN88
Insect taxonomy, Metaxaglaea semitaria, Noctuidae. Compared with *M. viatica*, with which it has been confused.

17019-68
A TAXONOMIC REVISION OF THE GENUS ASTEROMYIA (DIPTERA: CECIDOMYIIDAE).
R J Gagne
Diss Abstr Sect B 28(9):3738B
Mar 1968 Z5055.U49D53
Asteromyia, *Cecidomyiidae*, Diptera, Taxonomy.

17020-68
ON A NEW SPECIES OF NEUROPTERA (FAMILY OSMYLIDAE) FROM INDIA.
S K Ghosh S Sen
Zool Anz 180(1-2):107-109
Jan 1968 410 Z7
Insect taxonomy, Neuroptera.

17021-68
THREE TINEID COLLECTIONS (LEPIDOPTERA) FROM AFRICA. (GE)
L A Gozmany
Acta Zool (budapest) 13(1-2):93-124
1967 410 AC85
Ethiopian Region, Insect taxonomy, Tineidae, Russian summary

17022-68
CHRYSOMELID BEETLES FROM THE PAPUAN SUBREGION, 4 (EUMOLPINAE, 2).
J L Gressitt
Pacific Insects 9(2):295-340
20 Jun 1967 421 P11
Cacao, Chrysomelidae, Insect pests, Insect taxonomy, Plant injuries.
Abstract

17023-68
INDIAN SPECIES OF LISTROGNATHUS TSCHKE (HYMENOPTERA: ICHNEUMONIDAE).
V K Gupta M K Kamath
Pacific Insects 9(2):369-397 REF
20 Jun 1967 421 P11
Ichneumonidae, India, Insect taxonomy.
Abstract

17024-68
BIOLOGY AND NATURAL CONTROL OF THE WHITE-PINE WEEVIL IN VIRGINIA.
D M Harman H M Kulman
Entomol Soc Amer Ann 61(2):280-285 REF
15 Mar 1968 420 EN82

Insect hiology, Natural control (insects), *Pinus strobus*, *Pissodes strobi*.

17025-68

INFRARED AERIAL COLOR PHOTOGRAPHY FOR DETECTION OF POPULATIONS OF BROWN SOFT SCALE IN CITRUS GROVES.

W G Hart V I Myers

J Econ Entomol 61(3):617-624

Jun 1968 421 J822

Aerial photography, Citrus, *Coccus hesperidum*, Color, Infrared photography, Leaves, Population, Surveys.

17026-68

FRASS OF SOME WOOD-BORING INSECTS IN LIVING OAK (COLEOPTERA: CERAMBYCIDAE; LEPIDOPTERA: COSSIDAE AND AGERIIDAE).

C J Hay

Entomol Soc Amer Ann 61(2):255-258 REF

15 Mar 1968 420 EN82

Ageriidae, Cerambycidae, Coleoptera, Cossidae, Frass, Insect control, Lepidoptera, Quercus, Wood-destroying insects.

17027-68

SOME PULVINARIA SPECIES (HOMOPTERA: COCCIDAE) OF THE ETHIOPIAN REGION.

C J Hodgson

Entomol Soc Southern Afr J 30(2):198-211

30 Sep 1967 420 EN86

Coccidae, Homoptera, Insect identification, Insect taxonomy, Pulvinaria.

17028-68

THE SUBGENUS *PERSICARGAS* (IXODOIDEA, ARGASIDAE, ARGAS). 4. ARGAS (P.) ROBERTSI, NEW SPECIES, A PARASITE OF AUSTRALIAN FOWL, AND KEYS TO AUSTRALIAN ARGASID SPECIES.

H Hoogstraal M N Kaiser G M Kohls

Entomol Soc Amer Ann 61(2):535-539 REF

15 Mar 1968 420 EN82

Argas persicus, Argas robertsi, Insect taxonomy, Parasitic insects.

17029-68

A MIGRATION OF VANESSA CARDUI (NYMPHALIDAE) IN OHIO.

L A Hoving

Lepidopterists Soc J 22(2):118-119

31 May 1968 421 L554

Insect migration, Nymphalidae, *Vanessa cardui*, Zoogeography.

17030-68

MEGASTIGMUS SPP. (HYMENOPTERA: TORNYMIDAE) ASSOCIATED WITH THE SEEDS OF PINUS SPP.

N W Huscay

Entomol Mon Mag 103(1238-1240):168

Jul 1967 421 EN86

Chalcididae, Insect ecology, Insect identification, Megastigmus, *Pinus contorta*, *Pinus ponderosa*, *Pinus strobus*, Radiography, Seeds.

17031-68

SEASONAL ABUNDANCE AND DISTRIBUTION OF SUGARCANE STEM BORERS IN NIGERIA.

M L Jerath

J Econ Entomol 61(3):593-596

Jun 1968 421 J822

Chiloptera, *Eldana saccharina*, Insect dissemination, Insect ecology, Population, *Sesamia nonagriodes* hotanephaga, Sugarcane, Temperature, Weather.

17032-68

SEASONAL FLUCTUATIONS IN ABUNDANCE OF VARIOUS RICE STEM BORERS ON LUZON ISLAND, PHILIPPINES.

M A Kamran E Raros

J Econ Entomol 61(3):650-656 MAP

Jun 1968 421 J822

Chilo suppressalis, Chiloptera polychrysa, Insect pests, Population, Rice, *Sesamia inferens*, Temperature, Tryporyza incertulas, Tryporyza innotata, Weather.

17033-68

CONCLUSION OF THE ZOOLOGICAL INVESTIGATIONS OF DR. Z. KASZAB IN MONGOLIA. 168 TENEBRIONIDAE (COLEOPTERA). (GE)

Z Kaszab

Acta Zool (budapest) 14(3-4):339-397 MAP REF

29 Jun 1968 410 AC85

Insect taxonomy, Tenebrionidae, Zoogeography, Russian summary

This is a report of an extensive taxonomic survey of Tenebrionidae in Mongolia by Z. Kaszab.

17034-68

DATA TO THE KNOWLEDGE OF CALLOGONIA VIRGO TR. AND THE DESCRIPTION OF A NEW SUBSPECIES (LEPIDOPTERA: NOCTUIDAE).

L Kovacs

Acta Zool (budapest) 14(3-4):399-405 REF

29 Jun 1968 410 AC85

Insect taxonomy, Light traps, Noctuidae, Zoogeography, Russian summary

17035-68

BIOSYSTEMATIC, CYTOLOGICAL, AND SEX RATIO STUDIES OF CLOSELY RELATED BARK BEETLES (COLEOPTERA: SCOLYTIDAE).

G N Lanier

Diss Abstr Sect B 28(10):6167B

Apr 1968 Z5055.U49D53

Coleoptera, Cytology, Insect genetics, Insect taxonomy, Polymorphism, Scolytidae, Sex.

17036-68

SYSTEMATIC STUDIES OF SOME PSEUDOSCORPIONS (ARACHNIDA: PSEUDOSCORPIONIDA) FROM THE SOUTHEASTERN UNITED STATES.

J E Lawson

Diss Abstr Sect B 28(10):4351B

Apr 1968 Z5055.U49D53

Arachnida, Chaetotaxy, Illustrations, Insect hiology, Insect identification, Kleptochthonius crosbyi, Kleptochthonius multispinosus, Leaves, Methodology, Microbisium confusum, Research.

17037-68

NATURAL REGULATION AND ARTIFICIAL CONTROL OF BROWN LOCUST NUMBERS.

A Lea

Entomol Soc Southern Afr J 31(1):97-111 REF

Mar 1968 420 EN86

Acrididae, Biological control (insects), Chemical control (insects), Entomology, Epidemiology, Experimental insects, Insect outbreaks, Population, Weather.

17038-68

COSMOPOLITAN AND PANTROPICAL SPECIES OF THERIDIID SPIDERS (ARANEAE: THERIDIIDAE).

H W Levi

Pacific Insects 9(2):175-186

20 Jun 1967 421 P11

Insect taxonomy, Reviews, Spiders.

Abstract

17039-68

REVIEW OF SOME RECENT RESEARCH ON ONCHOCERCA VECTORS.

D J Lewis

Roy Soc Trop Med Hyg Trans 62(1):19-21 REF

1968 448.9 R813

Chemical control (insects), Food, Insect dissemination, Insect flight, Insect migration, Insect physiology, Insect vectors, Onchocerciasis, Parasitic insects, Simuliidae, Taxonomy.

17040-68

PROBLEMS IN INSECT MORPHOLOGY. (JA)

R Matsuda

Kontyu 35(3):186-195

Sep 1967 421 K833

Entomology, Insect morphology, Insect taxonomy.

17041-68

ODONATA FROM VENETIA. (CONTRIBUTION TO THE KNOWLEDGE OF ODONATA). (IT)

A Minelli

Soc Entomol Ital Mem 45(0):111-134 REF

1966 420 IT1M

Insect taxonomy, Odonata, Zoogeography, Italian, German and French summaries

17042-68

RESULTS OF THE ZOOLOGICAL INVESTIGATION OF DR. Z. KASZAB IN MONGOLIA. 100 CHRYSIDIDAE (HYMENOPTERA). (GE)

L Moczar

Acta Zool (budapest) 13(1-2):183-190

1967 410 AC85

Chrysididae, Insect taxonomy, Russian summary

17043-68

CONCLUSIONS OF THE ZOOLOGICAL INVESTIGATIONS OF DR. Z. KASZAB IN MONGOLIA. 167. POMPILIDAE (HYMENOPTERA). (GE)

L Moczar

Acta Zool (budapest) 14(3-4):427-439 REF

29 Jun 1968 410 AC85

Insect taxonomy, Pompilidae, Russian summary

17044-68

REDESCRIPTION OF THE TYPE SPECIES OF THE PSEUDOSCORPION GENUS KEWOCHTHONIUS CHAMBERLIN.

W B Muchmore

Entomol News (philadelphia) 79(3):71-76 REF

Mar 1968 421 EN88

Chelonethida, Kewochthonius, Taxonomy.

17045-68

UTAH MOSQUITOES, THEIR PUBLISHED HISTORY: SUPPLEMENT II.

L T Nielsen J H Linam

Utah Mosquito Abatement Ass Proc 18-19 ANNU.

MEETING:21-23

1966 420 UT1

Bibliography, Culicidae, Histology, Indexes.

17046-68

THE GENERA OF THE PALEARCTIC TORTRICIDAE. II THE SUBFAMILY OLETHREUTINAE. EIGHT PARTS AND CONCLUSION WITH A TOTAL INDEX OF ALL PARTS. (GER)

N S Obraztsov

Tijdschr Entomol 111(1):1-48

21 Jun 1968 421 T21

Insect taxonomy, Palearctic Region, Tortricidae.

Abstract

17047-68

RESULTS OF THE ZOOLOGICAL INVESTIGATION OF DR. Z. KASZAB IN MONGOLIA. 101. BRACONIDAE (HYMENOPTERA). 1. (ge)

J Papp

Acta Zool (budapest) 13(1-2):191-226 REF

1967 410 AC85

Braconidae, Insect taxonomy, Russian summary

17048-68

POMPILIDAE AND SPHECIDAE (HYMENOPTERA) FROM STRASSFURT (SACHSEN-ANHALT). (GE)

F Parre

Entomol Z 78(11):121-124

01 Jun 1968 421 EN85

Insect taxonomy, Pompilidae, Sphecidae, German summary

17049-68

THE PERIODICAL CICADA, BROOD. VII. (HYMENOPTERA: CICADIDAE: MAGICICADA).

L L Pechuman

Amer Entomol Soc Trans 94(2):137-153 REF

Jun 1968 420 P53

Cicadidae, Homoptera, Insect taxonomy, Time, Zoogeography.

17050-68

ADDENDA TO THE LIST OF THE BUTTERFLIES OF MICHIGAN.

O A Perkins

Lepidopterists Soc J 22(2):119-120

31 May 1968 421 L554

Butterflies, Insect dissemination, Insect names, Insect taxonomy, Zoogeography.

17051-68

NEW NORTH AMERICAN TABANIDAE. XIX. FOUR NEW SPECIES FROM MEXICO, HONDURAS, AND ARIZONA.

C B Philip

Entomol Soc Amer Ann 61(2):380-383

15 Mar 1968 420 EN82

Insect taxonomy, Tabanidae.

17052-68

MOLECULAR SIEVING OF HYDROPHILIC MOLECULES BY THE RECTAL INTIMA OF THE DESERT LOCUST (SCHISTOCERCA GREGARIA).

J E Phillips A A Dockrill

J Exp Biol 48(3):521-532 REF

Jun 1968 442.8 B77

Cuticle, Insect physiology, Molecules, Radioisotopes, Schistocerca gregaria.

17053-68

THE TAXONOMIC GROUPING OF PALEARCTIC GNORIMOSCHEMA SPECIES (LEPIDOPTERA: GELECHIIDAE) INCLUDING A DESCRIPTION OF A NEW SPECIES. (GE)

D Povolny

Arkiv Zool 18(5):393-404

1967 410.9 SV22

Gelechiidae, Insect taxonomy, German summary

17054-68

THE GENUS PSITTACOBROSUS (MALLOPHAGA: MENOPONIDAE) OF THE NEOTROPICAL PSITTACIFORMES.

R D Price J R Beer

Entomol Soc Amer Ann 61(2):261-276

15 Mar 1968 420 EN82

Insect taxonomy, Mallophaga, Menoponidae, Psittacobrosus.

17055-68

ON HISTOPATHOLOGY AND HISTOCHEMISTRY OF INSECTICIDE-TREATED INSECTS. I. NON-SPECIFIC PHOSPHATASES IN THE MIDGUT AND CAECA OF PYRETHRINS TREATED PERIPLANETA AMERICANA L.

S C Saxena J P Srivastava

Pyrethrum Post 9(3):9-13 REF

Apr 1968 421 P99

Histochemistry, Insect diseases, Insect histology, Insecticides, Periplaneta americana, Phosphatases, Pyrethrum, Research.

17056-68

ALARM, DEFENSE, AND CONSTRUCTION BEHAVIOR RELATIONSHIPS IN TERMITES (ISOPTERA).

A M Stuart

Science 156(3778):1123-1125

27 May 1967 470 SC12

Insect behavior, Insect rearing, Nymphs, Research, Social insects, Termites.

17057-68

BEDELLIA EHIKELLA SP. N. (LEPIDOPTERA: LITHOCOLLETIDAE).

J Szocs

Acta Zool (budapest) 13(1-2):231-236 REF

1967 410 AC85

Bedellia ehikella, Gracillariidae, Insect morphology, Leaf miners, Lepidoptera. Russian summary

17058-68

LEPIDOPTERA FROM MOREA. A VAST CONTRIBUTION FOR FAUNA OF THE PELOPONNESUS (GREECE). (GE)

J Thurner

Wien Entomol Ges Z 52(1):5-23

15 Mar 1967 421 OS7

Indexing, Insect ecology, Insect taxonomy, Lepidoptera.

17059-68

LEPIDOPTERA FROM MOREA. A VAST CONTRIBUTION FOR FAUNA OF THE PELOPONNESUS (GREECE). (GE)

J Thurner

Wien Entomol Ges Z 52(6):50-58 REF

01 Dec 1967 421 OS7

Indexing, Insect ecology, Insect taxonomy, Lepidoptera, Zoogeography.

17060-68

REVISION OF THE WORLD SPECIES OF EUPHUMOSIA (DIPTERA: CALLIPHORIDAE). R L Torgerson M T James

Pacific Insects 9(2):205-242

20 Jun 1967 421 P11

Calliphoridae, Insect taxonomy, Zoogeography.

Abstract

17061-68

A DECADE OF INSECT POPULATION ECOLOGY IN JAPAN. (JA)

S Utiada

Kontyu 35(3):196-204

Sep 1967 421 K833

Entomology, Insect dissemination, Insect ecology, Population statistics.

17062-68

REVIEW OF SOUTH AMERICAN GENUS BELOPOEUS SCHOENHERR (COLEOPTERA, CURCULIONIDAE, RHYNCHOPHORINAE).

P Vaurie

Coleopt Bull 22(2):39-44

Jun 1968 421 C674

Curculionidae, Insect taxonomy, Neotropical Region.

17063-68

PROBLEMS OF INSECT TAXONOMY WITH SPECIAL REFERENCE TO THE INTERNATIONAL CODE OF ZOOLOGICAL NOMENCLATURE. (JA)

C Watanabe

Kontyu 35(3):155-163

Sep 1967 421 K833

Entomology, Insect taxonomy, Nomenclature, Zoology.

17064-68

THE ZOOLOGICAL RESULTS OF GY. TOPAL'S COLLECTINGS IN SOUTH ARGENTINA. 21. COLEOPTERA: ANTHICIDAE.

F G Werner

Acta Zool (budapest) 13(1-2):237-243

1967 410 AC85

Anthicidae, Insect taxonomy. Russian summary

17065-68

THE PHYLOGENY AND ZOOGEOGRAPHY OF THE ENDEMIC GENERA OF THE HAWAIIAN PTEROMALIDAE (HYMENOPTERA: CHALCIDOIDEA).

C M Yoshimoto

Pacific Insects 9(2):197-203 REF

20 Jun 1967 421 P11

Insect evolution, Insect taxonomy, Pteromalidae, Zoogeography.

Abstract

PHYSIOLOGY AND BIOCHEMISTRY

17066-68

SELECTIVE INSECT CONTROL. SB931.0S4.

81 P. REF. MASSACHUSETTS, NIMROD

PRESS INCORPORATED

1966

Agricultural outlook, Biological control (insects), Insect control, Insect repellents, Integrated control (insects), Research, Sterilization.

17067-68

THE REPRODUCTIVE BIOLOGY OF HIPPELATES COLLUSOR. III. EFFECT OF TEMPERATURE ON OOGENESIS.

T S Adams M S Mulla

Entomol Soc Amer Ann 61(2):368-372 REF

15 Mar 1968 420 EN82

Chloropidae, Hippelates collusor, Insect morphology, Metamorphosis, Oogenesis, Reproduction, Temperature.

17068-68

VARIATION IN TOXICITY OF MALTHION WHEN APPLIED TO CERTAIN BODY REGIONS OF SCHISTOCERCA GREGARIA (FORSK.).

H Ahmed B G Gardiner

Bull Entomol Res 57(4):651-659 REF

Jun 1968 421 B87

Chemical control (insects), Insect metabolism, Insect physiology, Insecticides, Malathion, Schistocerca gregaria, Toxicology.

17069-68

FINAL TECHNICAL REPORT ON THE PL. 480 PROJECT. SYSTEMATIC AND BIOLOGICAL STUDIES ON INDIAN THRIPS. Q1.503.0T50A5.

T N Ananthakrishnan

42 P.

1968

Biology, Insect morphology, Research, Surveys, Thysanoptera, Zoogeography.

17070-68

A COMPARISON OF THE TOXICITY OF SOME VARIETIES OF BACILLUS THURINGIENSIS BERLINER FOR SILKWORM LARVAE.

T A Angus J R Norris

J Invertebrate Pathol 11(2):289-295 REF

Aug 1968 421 J826

Bacillus thuringiensis, Bombyx mori, Culture media, Larvae, Mortality, Toxicology.

17071-68

OBSERVATIONS ON OVIPOSITION AND LIFE HISTORY OF AN AQUATIC BUG, SPHAERODEMA RUSTICUM FABR. (HEMIPTERA).

J Bahadur

Zool Pol 18(1):107-115

1968 410 Z712

Aquatic insects, Hemiptera, Insect behavior, Insect morphology, Oviposition, Sphaerodema rusticum. English, Polish and Russian summaries

Abstract

17072-68

INSECTICIDES IN DRY SUGAR BAITS AGAINST TWO STRAINS OF HOUSE FLIES.

D L Bailey G C LaBrecque D W Meifert P M Bishop

J Econ Entomol 61(3):743-747

Jun 1968 421 J822

Baits, Biochemistry, Chemical control (insects), Experimental insects, Immunity, Insect collecting equipment, Insect genetics, Insecticides, Musca domestica, Sugar, Trichlorfon.

17073-68

MODE OF ACTION OF ORGANIC THIOCYANATES AS INSECTICIDES AND CARBAMATE SYNERGISTS.

N M S Bakry

Diss Abstr Sect B 28(10):3938B

Apr 1968 Z5055.U49D53

Benzyl cyanide, Biochemistry, Carbamates, Chromatography, Electrons, Insecticides, Metabolism, Musca domestica, Mushrooms, Organic compounds, Thiocyanates, Toxicology.

17074-68

BIONOMIC NOTES ON THE HEXAPODOUS PARASITES OF ACROBASIS RUBRIFASCIOLA.

W V Balduf

Entomol Soc Amer Ann 61(2):463-476 REF

15 Mar 1968 420 EN82

Acrobasis ruhrifasciella, Caterpillars, Insect ecology.

17075-68

THE LONGEVITY OF THE PARASITIC STAGES AND THE DYNAMICS OF EGG PRODUCTION OF THE NEMATODE SYNGAMUS TRACHEA (MONTAGU, 1811) IN CHICKEN AND TURKEYS.

V Barus

Folia Parasitol 13(3):274-277

1966 436.8 C33

Animal diseases, Chickens, Longevity, Nematodes, Parasitism, Syngamus trachea, Turkey.

Abstract. Production of eggs by the female worm is in direct correlation with the female's growth and physiological aging.

17076-68

DETERMINANTS OF ABUNDANCE IN A POPULATION OF THE QUEENSLAND FRUIT FLY.

M A Bateman

Roy Entomol Soc London Symp 4:119-131 REF

1968 420 R81

Chemical control (insects), Dacus tryoni, Physiology, Research, Weather.

17077-68

NUTRITION OF EUROPEAN CORN BORER, OSTRINIA NUBILALIS. VI. A LARVAL REARING MEDIUM WITHOUT CRUDE PLANT FRACTIONS.

S D Beck G M Chippendale D E Swinton

Entomol Soc Amer Ann 61(2):459-462 REF

15 Mar 1968 420 EN82

Culture media, Insect nutrition, Insect rearing equipment, Larvae, Ostrinia nubilalis.

17078-68

THE EFFECTS OF INTER-SPECIES COPULATION ON THE FECUNDITY AND FERTILITY OF TRIBOLIUM (COLEOPTERA, TENEBRIONIDAE).

J F Belshe

Diss Abstr Sect B 28(9):3921B

Mar 1968 Z5055.U49D53

Coleoptera, Fertility, Insect genetics, Reproduction, Tenebrionidae, Tribolium castaneum, Tribolium confusum.

17079-68

BIOLOGICAL STUDIES ON CHIRONOMIDS WITH EMPHASIS ON THE TEMPERATURE RELATIONS OF THE DEVELOPMENTAL STAGES.

K D Biever

Diss Abstr Sect B 28(10):4342B

Apr 1968 Z5055.U49D53

Chironomidae, Experimental insects, Insect biology, Insect physiology, Insect rearing, Metamorphosis, Temperature. Species used were: Goeldichironomus holoprasinus, C. monochromus, Pentaneura pilosella, Tanypus grodhausi, and Micropsectra nigripilis.

17080-68

STERILIZATION OF THE AZUKI BEAN WEEVIL, CALLOSOBROCHUS CHINENSIS, BY METEPA AND HEMPA.

A B Borkovec S Nagasawa H Shinohara

J Econ Entomol 61(3):695-698

Jun 1968 421 J822

Biochemistry, Biological assay, Callosobruchus chinensis, Chemical control (insects), Chemosterilants, Dipping, Dosage, Fumigation, Hempa, Insecticide application, Metepa, Ovulation.

17081-68

COCKROACHES (PERIPLANETA AMERICANA (L.)) AS PREDATORS.

J Bowden J Phipps

Entomol Mon Mag 103(1238-1240):175-176

Jul 1967 421 EN86

Beneficial insects, Blattidae, Insect behavior, Insect nutrition, Periplaneta americana, Predaceous insects.

17082-68

PROPERTIES OF AN ACETYLCHOLINESTERASE FROM THE FACE FLY, MUSCA AUTUMNALIS.

T A Bratkowski C O Knowles

Entomol Soc Amer Ann 61(2):397-402 REF

15 Mar 1968 420 EN82

Acetylcholinesterases, Biochemistry, Cattle, Esterases, Insect pests, Insect vectors, Musca autumnalis.

17083-68

A CONVENIENT SYNTHESIS OF MIXED ISOMERS OF JUVENILE HORMONE.

B H Braun M Jacobson M Schwarz P E Sonnet N

Wakahayashi

J Econ Entomol 61(3):866-869

Jun 1968 421 J822

Biochemistry, Chemical reactions, Epoxy resins, Hormones, Hyalophora cecropia, Insect physiology, Isomerism, Metabolism, Tenebrio molitor.

17084-68

LOCALIZATION OF NUCLEOLI OF TOW PERICARDIAL NERVES OF DICTYOPTERA, BLABERIDAE AND BLATTIDAE. (FR)

P Brousse-Gaury

Acad Sci Compt Rend Ser D Sci Nat

266(19):1972-1975

06 May 1968 505 P21

Blaheridae, Blattidae, Cell nucleus, Dictyoptera, Insect physiology, Nervous system, Periplaneta americana.

17085-68

CONTROL OF THE GREATER AND LESSER WAX MOTHS (GALLERIA MELLONELLA AND ACHROIA GRISELLA) WITH BACILLUS THURINGIENSIS.

H D Burges L Bailey

J Invertebrate Pathol 11(2):184-195 REF

Aug 1968 421 J826

Achroia grisella, Bacillus thuringiensis, Biological assay, Culture media, Galleria mellonella, Insect control, Laboratories, Lethal factors, Research.

17086-68

INSECT PESTS OF COTTON. VII. EVALUATION STUDIES ON INSECTICIDES.

D K Butani

Indian J Entomol 29(4):360-369 REF

Dec 1967 420 IN23

Agricultural economics, Cotton, Insect control, Insect pests, Insecticides.

17087-68

SUGAR FOR THE SURVIVAL OF LYGUS HESPERUS ON ALFALFA.

G D Butler

J Econ Entomol 61(3):854-855

Jun 1968 421 J822

Alfalfa, Culture media, Food, Greenhouse culture, Insect pests, Lygus hesperus, Nymphs, Research, Sugar, Therapeutics.

17088-68

EFFECT OF RELATIVE HUMIDITY ON THE DEVELOPMENTAL STAGES OF TRIBOLIUM CASTANEUM (COLEOPTERA: TENEBRIONIDAE).

H S Chaudhry R P D Kapoor

Entomol Soc Amer Ann 61(2):290-292 REF

15 Mar 1968 420 EN82

Coleoptera, Humidity, Insect metabolism, Metamorphosis, Temperature, Tenebrionidae, Tribolium castaneum.

17089-68

BIOASSAY TECHNIQUE FOR INSECT VIRUSES.

A R Chauthani

J Invertebrate Pathol 11(2):242-245

Aug 1968 421 J826

Granuloses, Heliothis, Polyhedroses, Prodenia ornithogalli, Spodoptera exigua, Trichoplusia ni, Virus diseases (insects).

17090-68

THE EFFECT OF A LOW PROTEIN DIET AND A GLUCOSE AND FILTER PAPER DIET ON THE COURSE OF INFECTION OF NIPPOS-TRONGYLUS BRASILIENSIS.

K R Clarke

Parasitology 58(2):325-339 REF

May 1968 448.8 P21

Acanthocephala, Diet, Filter paper, Glucose, Larvae, Nippostrongylus brasiliensis, Parasitology, Proteins, Rats.

17091-68

FIELD EVALUATION OF INSECTICIDES FOR CONTROL OF THE ALFALFA WEEVIL IN MARYLAND, 1962-66.

R M Coan V E Adler C C Blickenstaff A L

Steinhauer

World Health Organ WHO/VECTOR Contr

33(127):20 P.

Mar 1968 A420 R31

Alfalfa, Chemical control (insects), Hypera postica, Insecticides, Pesticide application, Time.

17092-68

SOME EFFECTS OF PHOTOPERIOD, TEMPERATURE, AND FOOD ON THE INDUCTION OF DIAPAUSE IN THE BOLL WEEVIL.

P P Cogh M H Bass

J Econ Entomol 61(3):624-625

Jun 1968 421 J822

Anthonomus grandis, Diapause, Experimental insects, Food, Insect physiology, Photoperiodism, Temperature.

17093-68

STUDY OF THE BEHAVIOR OF TWO BACTERIAL PATHOGENS (PSEUDOMONAS PHASEOLICOLA: ERWINIA CAROTOVORA F.SP. PHYTOPHTHORA) IN SOIL TREATED BY STEAM. (FR)

A Coleno F Rapilly

Phytophthora 16(3):157-164 REF

Sep 1967 464.8 P564

Antibiotics, Bacteria, Erwinia carotovora, Pseudomonas phaseolicola, Soil testing, Steam.

17094-68

PROGRESS IN MOSQUITO CONTROL IN UTAH COUNTY.

T Davis

Utah Mosquito Abatement Ass Proc 18-19 ANNU.

MEETING:15-16

1966 420 UT1

Aedes dorsalis, Aerial spraying, Breeding, Chemical control (insects), Insect control.

17095-68

THE EFFECT OF TEMPERATURE AND MOISTURE ON THE DEVELOPMENT OF FANNIA CANICULARIS (L.) AND FANNIA FEMORALIS (STEIN) (DIPTERA: MUSCIDAE).

A S Deal

Diss Abstr Sect B 28(9):3737B

Mar 1968 Z5055.U49D53

Diptera, Fannia canicularis, Fannia femoralis, Humidity, Insect eggs, Insect morphology, Insect temperature, Muscidae.

17096-68

SAMPLING METHODS FOR RED SPIDER MITES.

G H L Dicker

Entomophaga Mem Hors Ser 3:57-58

1967 421 EN835M

Eggs, Larvae, Mites, Pigmentation, Tetranychidae, Tetranychus urticae.

17097-68

THE SPIDERS OF MISSISSIPPI.

P R Dorris

Diss Abstr Sect B 28(9):3586B

Mar 1968 Z5055.U49D53

Habitats, Insect ecology, Insect taxonomy, Spiders, Zoogeography. The families of spiders with the largest number of species in Mississippi are: Salticidae, Araneidae, Theridiidae, Lycosidae, and Thomisidae.

17098-68
EFFECTS OF THE CHEMOSTERILANT
HEMPA ON GYPSY MOTH METAMORPHOSIS.
J E Downey

J Econ Entomol 61(3):846

Jun 1968 421 J822

Biochemistry, Chemical control (insects),
Chemosterilants, Diet, Experimental insects, Hem-
pa, Insect rearing, Metamorphosis, Porthetria
dispar.

17099-68

ONCHOCERCA-SIMULIUM COMPLEXES. V.
THE INTAKE AND SUBSEQUENT FATE OF
MICROFILARIAE OF A GUATEMALAN
STRAIN OF ONCHOCERCA VOLVULUS IN
FOREST AND SUDAN-SAVANNA FORMS OF
WEST AFRICAN SIMULIUM DAMNOSUM.

B O L Duke P J Moore J R De Leon

Ann Trop Med Parasitol 61(3):332-337

Sep 1967 448.9 L75A

Biological transport, Filariasis, Forest insects, Im-
munization, Larvac, Monkeys, Onchocerca volvu-
lus, Parasitism, Simulium damnosum.

17100-68

STUDIES ON THE MORPHOLOGY AND
BIOLOGY OF LECANIUM FLETCHERI CKLL.
(HOMOPTERA, COCCOIDEA) AND RELATED
SPECIES.

A Dziedzicka

Zool Pol 18(1):125-165 REF

1968 410 Z712

Coccoidea, Insect biology, Insect diseases, Insect
morphology, Lecanium fletcheri, Parthenogenesis,
Plant discuses, Zoogeography. Polish, Russian and
English summaries

Abstract

17101-68

SOME ILLUSTRATIONS OF MICROSCULP-
TURE IN THE HYMENOPTERA.

R D Eady

Roy Entomol Soc London Proc Ser A Gen Entomol
43(4-6):66-72

12 Jul 1968 420 L84PA

Hymenoptera, Illustrations, Insect anatomy,
Microscopy.

17102-68

THE INFLUENCE OF REPELLENCY ON THE
EFFICACY OF BLATTICIDES. III. FIELD EX-
PERIMENTS WITH GERMAN COCKROACHES
WITH NOTES ON THREE OTHER SPECIES.

W Ebeling D A Reiersen R E Wagner

J Econ Entomol 61(3):751-761 REF

Jun 1968 421 J822

Biochemistry, Blattella germanica, Blatticides,
Boric acid, Chemical control (insects), Diazinon,
Dichlorvos, Dosage, Insect repellents, Insecticides,
Spraying.

17103-68

INSECT OXIDASES AND DETOXICATION OF
CARBAMATE INSECTICIDES.

S A E S A El-Aziz

Diss Abstr Sect B 28(10):4164B

Apr 1968 Z5055.U49D53

Aging, Biochemistry, Carbamates, Chemical con-
trol (insects), Cytochromes, Enzymes, Immunity,
Insect nutrition, Insecticide application, Insecti-
cides, Musca domestica, Oxidases, Phenolases,
Sex, Toxicology. Insecticides used were: MIP,
MPPC, Baygon, Mcsuroil, and Zectran.

17104-68

ENDOCRINE CONTROL OF FEMALE RECEP-
TIVITY IN LEUCOPHAEA MADERAE (BLAT-
TARIA).

F Engelman R H Barth

Entomol Soc Amer Ann 61(2):503-505 REF

15 Mar 1968 420 EN82

Corpora allata, Endocrine glands, Hormones, In-
sect behavior, Leucophaea maderae, Reproduc-
tion, Sex attractants.

17105-68

RESISTANCE PATTERNS AND FECUNDITY
OF HOUSE FLIES (MUSCA DOMESTICA L.)
SELECTED WITH DIAZINON, DIMETILAN,
AND COMBINATIONS OF THE TWO INSECTI-
CIDES.

K J Ensing

Diss Abstr Sect B 28(10):4165B-4166B

Apr 1968 Z5055.U49D53

Biochemistry, Biological assay, Chemical control
(insects), Diazinon, Dimetilan, Fertility, Immunity,
Insect eggs, Insecticide application, Insecticides,
Musca domestica, Research.

17106-68

AN IMPROVED METHOD FOR EMBEDDING
AND SECTIONING EGGS OF THE MIGRATO-
RY GRASSHOPPER, MELANOPLUS SAN-
GUINIPES FAB. (ORTHOPTERA: ACRIDIDAE).

A B Ewen

Can J Zool 46(5):1084-1084-1085

Sep 1968 470 C16D

Biochemistry, Equipment, Insect eggs, Insect
migration, Melanoplus sanguinipes, Methodology,
Ovulation, Tissues.

17107-68

MITOTIC ACTIVITY OF THE CIRCULATING
HEMOCYTES OF THE LARGE MILKWEED
BUG, ONCOPELTUS FASCIATUS.

D Feir E McClain

Entomol Soc Amer Ann 61(2):413-416

15 Mar 1968 420 EN82

Blood cells, Mitosis, Oncopectus fasciatus.

17108-68

INDUCED CHANGES IN THE MITOTIC AC-
TIVITY OF HEMOCYTES OF THE LARGE
MILKWEED BUG, ONCOPELTUS FASCIATUS.

D Feir E McClain

Entomol Soc Amer Ann 61(2):416-421 REF

15 Mar 1968 420 EN82

Blood cells, Experimental insects, Mitosis, On-
copectus fasciatus.

17109-68

THE CONTROL OF POPULATIONS THROUGH
LIMITATION OF HABITAT DISTRIBUTION AS
EXEMPLIFIED BY TSETSE FLIES.

J Ford

Roy Entomol Soc London Symp 4:109-118 REF

1968 420 R81

Ecology, Environment, Geography, Glossina, In-
sect control, Insect flight, Insect migration, Popula-
tion statistics.

17110-68

THE PROTEIN COMPONENTS OF A LATENT
PHENOLOXIDASE SYSTEM IN THE PREPU-
PAE OF HOUSEFLY.

M Funatsu K Hayashi G Namihira

Agr Biol Chem 31(11):1379-1380

Nov 1967 385 AG8B

Enzymes, Larvac, Metamorphosis, Musca
domestica, Phenolases, Proteins, Pupae.

17111-68

CHOLINE ACTIVITY DURING THE DEVELOP-
MENT OF DROSOPHILA MELANOGASTER.

B W Geer G F Vovis M A Yund

Physiol Zool 41(3):280-292 REF

Jul 1968 410 P56

Choline, Drosophila melanogaster, Growth factors,
Insect physiology, Larvae, Metabolism.

Abstract

17112-68

SEXUAL COMPETITIVENESS OF MALE BOLL
WEEVILS STERILIZED WITH APHOLATE
UNAFFECTED BY DIET.

F R Gilliland T B Davich

J Econ Entomol 61(3):852-853

Jun 1968 421 J822

Anthonomus grandis, Apholate, Biochemistry,
Chemosterilants, Diet, Insect control, Insect eggs,
Sex.

17113-68

LOW VOLUME AIRPLANE SPRAYS FOR THE
CONTROL OF MOSQUITOES.

C M Gjullin G W Eddy

Utah Mosquito Abatement Ass Proc 18-19 ANNU.

MEETING:7-9

1966 420 UT1

Aedes nigromaculis, Aerial spraying, Chemical
control (insects), Culicidae, Insecticides,
Research.

17114-68

AN IMMUNOLOGICAL STUDY OF THE AN-
TIGENS OF ANTHONOMUS GRANDIS GRAN-
DIS AND ANTHONOMUS GRANDIS THUR-
BERIAE.

B Glick N Mitlin

Entomol Soc Amer Ann 61(2):548-550 REF

15 Mar 1968 420 EN82

Anthonomus grandis, Anthonomus grandis thur-
beriae, Antigens, Immunology, Insect morphology,
Insect taxonomy.

17115-68

ANAEROBIC INDUCTION OF PRIMARY
CHEMICAL ATTRACTANCY FOR AMBROSIA
BEETLES.

K Graham

Can J Zool 46(5):905-908 REF

Sep 1968 470 C16D

Attractants, Biochemistry, Metabolism, Oxygen,
Research, Temperature, Time, Trypodendron
lineatum.

17116-68

THE INSECTS AND OTHER INHABITANTS OF
SHELF FUNGI IN THE SOUTHERN BLUE
RIDGE REGION OF WESTERN NORTH
CAROLINA. III. ISOPTERA, LEPIDOPTERA
AND ANTS.

R C Graves A C F Graves

Entomol Soc Amer Ann 61(2):383-385 REF

15 Mar 1968 420 EN82

Formicidae, Insect physiology, Lepidoptera,
Termites, Wood destroying fungi.

17117-68

MICRO-POTENTIOMETRIC PH DETERMINA-
TIONS OF MUSCOID MAGGOT DIGESTIVE
TRACTS.

B Greenberg

Entomol Soc Amer Ann 61(2):365-368 REF

15 Mar 1968 420 EN82

Calliphoridae, Gastrointestinal system, Hydrogen-
ion concentration, Insect physiology, Maggots,
Musca domestica, Muscoidea, Phormia regina,
Potentiometry, Sarcophagidae.

17118-68

ADAPTATION OF INSECTS TO NOR-
NICOTINE.

F E Guthrie E Hodgson

Entomol Soc Amer Ann 61(2):545-547 REF

15 Mar 1968 420 EN82

Diptera, Epitrix hirtipennis, Excreta, Food habits,
Grasshoppers, Insect adaptation, Insect metabo-
lism, Manduca quinquemaculata, Nicotine,
Prodenia eridania.

17119-68

OBSERVATIONS ON THE INFECTION OF
JAPANESE BEETLE LARVAE WITH BACIL-
LUS POPILLIAE.

H H Hall G St. Julian G L Adams

J Econ Entomol 61(3):840-843

Jun 1968 421 J822

Bacillus popilliae, Equipment, Insect diseases, In-
sect eggs, Insect rearing, Larvac, Popillia japonica,
Sodium chloride, Temperature.

17120-68

LARCH SAWFLY SUPPRESSION WITH
MALATHION LV(OR) CONCENTRATE.

J B Hanson

J Econ Entomol 61(3):872

Jun 1968 421 J822

Biochemistry, Chemical control (insects), Defoliation, Insecticides, *Larix leptolepis*, Malathion, *Pristiphora erichsonii*.

17121-68

ACTIVE TRANSPORT BY THE CECROPIA MIDGUT. III. MIDGUT POTENTIAL GENERATED DIRECTLY BY ACTIVE K-TRANSPORT.

W R Harvey J A Haskell S Nedergaard

J Exp Biol 48(1):1-12 REF

Feb 1968 442.8 B77

Biochemistry, Biological transport, *Hyalophora cecropia*, Intestines, Ions, Potassium.

17122-68

ACTIVE TRANSPORT BY THE CECROPIA MIDGUT. V. LOSS OF POTASSIUM TRANSPORT DURING LARVAL-PUPAL TRANSFORMATION.

J A Haskell W R Harvey R M Clark

J Exp Biol 48(1):25-37 REF

Feb 1968 442.8 B77

Biological transport, Ecdysone, *Hyalophora cecropia*, Hydrogen-ion concentration, Intestines, Ions, Metamorphosis, Potassium.

17123-68

FATTY ACIDS OF THE MOSQUITO, ANOPHELES FREEBORNI.

K Hayashiya R F Harwood

Entomol Soc Amer Ann 61(2):278-280 REF

15 Mar 1968 420 EN82

Anopheles, *Anopheles freeborni*, Chromatography, Hexadecenoic acid, cis-9-, Insect morphology, Oleic acid, Palmitic acid, Photoperiodism, Unsaturated compounds.

Abstract: Palmitic, palmitoleic, and oleic acids collectively comprised at least 700 of total fatty acid. In both strains, aged females with identical temperature experience on short photoperiod had 11-150 greater levels of principal unsaturated fatty acids than did females on long photoperiod conditions.

17124-68

POSTEMBRYONIC REPRODUCTIVE SYSTEMS DEVELOPMENT IN EMPOASCA FABAE.

T J Helms

Entomol Soc Amer Ann 61(2):316-332 REF

15 Mar 1968 420 EN82

Empoasca fabae, Insect ecology, Morphology, Reproductive organs.

17125-68

SOME RECENT CHANGES IN THE APPROACH TO STUDIES OF CLIMATIC EFFECTS ON INSECT POPULATIONS.

W R Hewson

Roy Entomol Soc London Symp 18:37-46 REF

1968 420 R81

Biology, Climate, Correlation, Laboratories, Meteorology, Morphology, Population statistics, Research, *Zeiraphera griseana*.

17126-68

CADDIS LARVAE. LARVAE OF THE BRITISH TRICHOPTERA. QL517.4.0H5.

N E Hickin

476 P. LONDON, HUTCHINSON AND COMPANY LIMITED

1967

Economics, Insect biology, Insect evolution, Insect rearing, Insect taxonomy, Larvae, Metamorphosis, Trichoptera, Zoogeography.

17127-68

THE TACTICS OF A PREDATOR.

C S Holling

Roy Entomol Soc London Symp 4:47-58 REF

1968 420 R81

Ecology, Histology, Insect evolution, Laboratories, Pesticide residues, *Podisus maculiventris*, Population statistics, Predaceous insects, Research, Taxonomy.

17128-68

OVIPOSITION BEHAVIOR OF THE FACE FLY IN CAGED COW MANURE PATS.

A A Hower T H Cheng

J Econ Entomol 61(3):701-702

Jun 1968 421 J822

Insect behavior, Insect cages, Insect dissemination, Insect eggs, Manures, *Musca autumnalis*, Ovulation, Population.

17129-68

JUVENILE BOVINE LEUKOSIS; AN EPIZOOTIOLOGICAL, CLINICAL, PATHO-ANATOMICAL AND EXPERIMENTAL STUDY.

G Hugoson

Acta Vet Scand 22:108 P. REF

1967 41.8 AC87

Anatomy, Animal histology, Biochemistry, Bone marrow, Cattle, Cytology, Epidemiology, Epizootic diseases, Hematology, Injections, Laboratory animals, Leukemia, Livestock diseases, Microscopy, Research, Urine.

17130-68

THE HOST-FINDING BEHAVIOR OF THE HEN FLEA, CERATOPHYLLUS GALLINAE (SCHRANK) (SIPHONAPTERA).

D A Humphries

Parasitology 58(2):403-414 REF

May 1968 448.8 P21

Ceratophyllus gallinae, Hibernation, Insect behavior, Laboratories, Temperature, Vegetation.

17131-68

VARIATIONS IN GROWTH OF PLANTHOPPERS AND LEAFHOPPERS AMONG VARIETIES OF JAPANESE AND FOREIGN RICE PLANTS. TRANS. 16904.

H Inoue

4 P.

Cicadellidae, Immunity, Insect pests, Insect physiology, Plant injuries, Research, Rice, Seedlings. Translation from *Odokon-Chugoku*. 8:17-19, 1966 translated by Hideo Ueno

17132-68

METHOD OF PREDICTING THE MOST ACTIVE DAYS OF STEM BORER. TRANS. 16902.

N Isei S Yamashita

9 P.

Insect biology, Insect outbreaks, Insect pests, Methodology, Temperature, Weather. Translation from *Shikoku Nogyo Kenkyu*. 9:27-29, Feb., 1964. translated by Hideo Ueno

17133-68

RECENT ADVANCES IN NUTRITIONAL PHYSIOLOGY OF INSECTS. (JA)

S Ishii

Kontyu 35(3):240-247

Sep 1967 421 K833

Acids, Amylases, Biochemistry, Insect nutrition, Insect physiology.

17134-68

NEUROPHYSIOLOGY OF INSECT CHEMICAL SENSES. (JA)

S Ishikawa

Kontyu 35(3):231-239 REF

Sep 1967 421 K833

Chemoreceptors, Entomology, Insect physiology, Nervous system.

17135-68

STUDIES ON THE PROCESS OF THE OCCURRENCE OF WHITE-BLACK AND BROWN PLANTHOPPERS UP TO THEIR PRIMARY OUTBREAK.

S Itoga Y Ouchi

8 P.

Breeding, Insects, Larvae, Physiology, Research. Translation from *Assoc. Plant Protect, Kyushu*. Proc. 8: 9-11 translated by Kazuko Nagatomi

17136-68

CROWDING EFFECTS ON PLUM CURCULIOS REARED AT SEVERAL DENSITIES ON TWO SIZES OF GREEN APPLES.

S W Jacklin C E Yonce J P Hollon

J Econ Entomol 61(3):816-819

Jun 1968 421 J822

Apples, *Conotrachelus nenuphar*, Density, Insect rearing, Larvae, Ovulation.

17137-68

ALCOHOL DEHYDROGENASE FROM DROSOPHILA: INTERCONVERSION OF ISOENZYMES. (ABSTRACT).

K B Jacobson J A Knopp J B Murphy

Fed Amer Soc Exp Biol Fed Proc 27(2):590

Mar 1968 442.9 F31P

Alcohol dehydrogenase, Biochemistry, *Drosophila*, Electrophoresis, Insect physiology, Naphthaleneacetic acid dehydrogenase, Spectrophotometry.

17138-68

NOTES ON THE BIOLOGY OF SOME SHORT-HORNED GRASSHOPPERS FROM EASTERN NIGERIA (ORTHOPTERA: ACRIDOIDEA).

M L Jerath

Roy Entomol Soc London Proc Ser A Gen Entomol

43(1-3):27-38

03 May 1968 420 L84PA

Grasshoppers, Insect behavior, Insect biology, Insect taxonomy, Metamorphosis, Plant pests.

Abstract: The ovarian stages found in females of these species are recorded.

17139-68

THE ULTRASTRUCTURE OF THE LARVAL OCELLI IN THE MOSQUITO, AEDES AEGYPTI, AS AFFECTED BY A VITAMIN A DEFICIENCY.

M A Jolie A J Pappelis

Diss Abstr Sect B 28(11):4425B

May 1968 Z5055.U49D53

Aedes aegypti, Carotenes, Deficiency diseases, Diet, Electron microscopes, Insect rearing, Larvae, Sterilization, Vitamin a.

17140-68

ULTRASTRUCTURAL CHARACTERS OF ACTIVE AND INACTIVE CORPORA ALLATA IN LOCUSTA MIGRATORIA. (FR)

L Jolly A Porte A Girardic

Acad Sci Compt Rend Ser D Sci Nat

265(21):1633-1635

20 Nov 1967 505 P21

Biochemistry, *Corpora allata*, Glands (insects), Insect histology, Insect physiology, *Locusta migratoria*, Secretion.

17141-68

THE EFFECTS OF VARIOUS OXYGEN TENSIONS ON EMBRYOGENY AND LARVAL RESPONSES OF AEDES AEGYPTI.

C L Judson H A N Gojrati

Entomol Exp Appl 10(2):181-188

1967 421 EN895

Aedes aegypti, Embryology, Insect eggs, Insect morphology, Larvae, Oxygen, Tension, Time, Water.

17142-68

REMARKS ON BLACK WIDOW SPIDERS, WITH AN ACCOUNT OF SOME ANOMALIES.

B J Kaston

Entomol News (philadelphia) 79(5):113-124 REF

May 1968 421 EN88

Insect behavior, Insect biology, Insect morphology, *Latrodectus mactans*.

17143-68

STUDIES ON THE OBSERVATION OF THE RICE STEM BORER ABOUT THE RELATION BETWEEN THE WEIGHT AND THE GROWTH OF OVERWINTERING LARVAE. (REPORT 1). TRANS. 16792.

H Kibata H Inoue

9 P.

Fungi, Insect ecology, Insect pests, Insect physiology, Larvae, Parasitic insects, Parasitic plants, Plant injuries, Research, Rice, Rice stem borer, Tables (data). Translation from *Hokuno*. 31(3):1-6, 1964 translated by Kazuko Nagatomi.

17144-68

17144-68

BIOCHEMICAL ASPECTS OF INSECT METAMORPHOSIS. (JA)

M Kobayashi

Kontyu 35(3):248-258 REF

Sep 1967 421 K833

Biochemistry, Deoxyrihonucleic acid, Insect physiology, Manduca quinquemaculata, Metamorphosis, Rihonucleic acid.

17145-68

HISTOLOGICAL CHANGES PRODUCED BY A RUBY LASER IN NEODIPRION CERTIFER GEOFF.

R W Kobylnyk W H A Wilde

Can J Zool 46(5):947-949 REF

Sep 1968 470 C16D

Insect eggs, Insect histology, Insect morphology, Larvae, Neodiprion sertifer, Ovulation, Pinus sylvestris.

17146-68

ANALYSIS OF THE INJURY OF BROWN PLANTHOPPER ON THE RICE PLANT. TRANSL. 16905.

M Kono S Soma M Ishikawa M Murakami

3 P.

Insect outbreaks, Insect pests, Plant injuries, Rice, Surveys, Tahles (data). Translation from Kanto-Tosan Plant Protect. Proc. Soc. 8:431, 1961 translated by Dr. Ozawa

17147-68

ANALYSIS OF INSECTICIDAL ACTION OF DIAZINON GRANULES AGAINST GREEN RICE LEAFHOPPERS. TRANSL. 16910.

T Koshihara

5 P.

Biochemistry, Chemical control (insects), Cicadellidae, Diazinon, Insecticides, Rice, Temperature. Translation from Odokon-Chugoku. 8:13-15, 1966. translated by Hideo Veno.

17148-68

RHIPICEPHALUS SANGUINEUS: MOUTH PARTS. SF991.0K6.

F R Koutz

22 P. OHIO, OHIO STATE UNIVERSITY

1968

Anatomy, Dorsal vessel, Mouth parts, Research, Rhipicephalus sanguineus.

17149-68

CONTROL METHODS FOR INSECTS AND DISEASES BY SPRAYING OF INSECTICIDES. TRANSL. 16909.

T Kozaka

17 P.

Aerial spraying, Biochemistry, Chemical control (insects), Insect control, Insect vectors, Insecticides, Methodology, Plant diseases, Tahles (data). Translation from Agr. Hort. 39(9):1398-1402, 1964 translated by Kenji Nishimura

17150-68

INTERACTIONS BETWEEN A MICROSPORIDIAN PATHOGEN OF THE LAWN-ARMY WORM AND HYMENOPTEROUS PARASITE APANTELES MARGINIVENTRIS.

F M Laigo M Tamasairo

J Invertebrate Pathol 9(4):546-554 REF

Dec 1967 421 J826

Apanteles marginiventris, Insect behavior, Insect diseases, Nosema, Spodoptera mauritia acronyctoides.

Abstract

17151-68

EFFECT OF FOOD ON THE SUSCEPTIBILITY OF TROGODERMA GRANARIUM EVERTS (DERMESTIDAE: COLEOPTERA) TO INSECTICIDES.

R Lal B S Atri

Indian J Entomol 29(4):329-338 REF

Dec 1967 420 IN23

Food, Insecticide resistant insects, Insecticides, Nutrition, Tribolium castaneum, Trogoderma granarium.

17152-68

BIOLOGY AND CONTROL OF THE ONION THRIPS IN INDIA.

B S Lall L M Singh

J Econ Entomol 61(3):676-679

Jun 1968 421 J822

Biochemistry, Breeding, Chemical control (insects), Fertility, Insect biology, Insect morphology, Insect pests, Insect rearing, Insecticides, Parathion, Population, Soil series, Spraying, Thrips tahaci.

17153-68

DUAL INFECTIONS OF AEDES AEGYPTI WITH ARBOVIRUS. II. SALIVARY-GLAND DAMAGE BY SEMLIKI FOREST VIRUS IN RELATION TO DUAL INFECTIONS.

K S K Lam I D Marshall

Amer J Trop Med Hyg 17(4):637-644

Jul 1968 448.8 AM326

Aedes aegypti, Arboviruses, Cells, Histology, Salivary glands (insects), Semliki forest virus, Virus diseases (insects).

17154-68

SEXUAL DIFFERENTIAL IN TIME OF HATCH OF EGGS OF THE GYPSY MOTH.

D E Leonard

J Econ Entomol 61(3):698-700 REF

421 J822

Experimental insects, Hatch, Insect eggs, Insect physiology, Insect rearing, Larvae, Mortality, Porthetria dispar, Sex, Time.

17155-68

DIAPAUSE IN GYPSY MOTH.

D E Leonard

J Econ Entomol 61(3):596-598

Jun 1968 421 J822

Diapause, Hydrochloric acid, Insect eggs, Insect physiology, Insect rearing, Mortality, Ovulation, Porthetria dispar, Temperature.

17156-68

A THREE-YEAR STUDY OF PARASITES OF THE BOLLWORM AND THE TOBACCO BUDWORM IN MISSISSIPPI.

W J Lewis J R Brazzel

J Econ Entomol 61(3):673-676

Jun 1968 421 J822

Biological control (insects), Cardiochiles nigriceps, Heliothis virescens, Heliothis zea, Insect rearing, Larvae, Microplitis croceipes, Parasitic insects, Research.

17157-68

GEL FILTRATION OF INSECT HAEMOLYMPH PROTEINS.

B G Loughton A S West

Can J Zool 46(4):625-628 REF

Jul 1968 470 C16D

Assay, Blood, Electrophoresis, Enzymes, Esterases, Filters, Gels, Insect physiology, Locusta migratoria, Malacosoma americanum, Nymphs, Phenolases, Proteins.

17158-68

LIPID CHANGES DURING THE LIFE CYCLE OF SARCOPHAGA BULLATA.

R H Lumb

Diss Abstr Sect B 28(9):3857B

Mar 1968 Z5055.U49D53

Biochemistry, Chromatography, Glycerides, Insect physiology, Larvae, Oleic acid, Palmitic acid, Phospholipids, Sarcophaga bullata.

17159-68

THE DIFFERING EFFECTIVENESS OF PURIFIED AND NONPURIFIED SUSPENSIONS OF THE NUCLEAR-POLYHEDROSIS VIRUS OF PORTHETRIA DISPAR.

A Magnoler

J Invertebrate Pathol 11(2):326-328

Aug 1968 421 J826

Heliothis zea, Insect control, Laboratories, Larvae, Mortality, Polyhedrosis, Population statistics, Porthetria dispar, Quercus suher, Research, Toxicology, Trichoplusia ni, Virus diseases (insects). The article is a note

17160-68

DEGRADATION OF INSECTICIDES BY ESTERASES OF THE AMERICAN COCKROACH.

F Matsumura K Sakai

J Econ Entomol 61(3):598-605 REF

Jun 1968 421 J822

Agar, Alpha-naphthyl acetate, Carbamates, Electrophoresis, Esterases, Hydrolysis, Insecticides, Organic compounds, Periplaneta americana, Phosphates, Starches.

17161-68

THE NATURAL HISTORY OF THREE OAK-FEEDING TORTRICIDS: PTYCHOLOMA LECHEANA (L.), PANDEMIS CERASANA (HB.) AND BATODES ANGUSTIORANA (HAW.).

W Matthe

Entomologist (london) 100(1248):115-120 REF

May 1967 421 EN8

Batodes angustiorana, Forest insects, Insect biology, Pandemis cerasana, Parasitic insects, Ptycholoma lecheana, Quercus.

17162-68

CARBAMATE CROSS RESISTANCE IN A CARBARYL-RESISTANT STRAIN OF THE GERMAN COCKROACH.

I C McDonald D G Cochran

J Econ Entomol 61(3):670-673 REF

Jun 1968 421 J822

Blattella germanica, Carbamates, Carharyl, Immunity, Insecticide application, Insecticides, Mortality, Nymphs, Therapeutics. Insecticides used were: Baygon, UC-10854, dimetilan, isolan, UC-21149, matacil, MC-A-600.

17163-68

DIEL PERIODICITY IN SPERMATOPHORE FORMATION IN THE HOUSE CRICKET, ACHETA DOMESTICUS (L.).

J E McFarlane

46(4):695-698

Jul 1968

Acheta domesticus, Experimental insects, Insect rearing, Photoperiodism, Reproduction, Research, Spermatophores, Stridulation, Temperature.

17164-68

MOSQUITO CONTROL AGENTS DERIVED FROM PETROLEUM HYDROCARBONS. II. LABORATORY EVALUATION OF A NEW PETROLEUM DERIVATIVE, FLIT MLO.

D W Micks G V Chambers J Jennings K Barnes

J Econ Entomol 61(3):647-650

Jun 1968 421 J822

Aedes aegypti, Anopheles quadrimaculatus, Biochemistry, Chemical control (insects), Culex pipiens quinquefasciatus, Experimental insects, Hydrocarbons, Insecticides, Mortality, Petroleum, Temperature.

17165-68

COMMUNITY STUDIES ON HYMENOPTERA FOUND ON BRASSICA NAPUS C. V. CYNIPIDS (CYNIPIDEA). (POL)

B Miczulski

Pol Pismo Entomol 37(4):787-796 REF

1967 421 P76

Cynipidae, Hymenoptera, Insect behavior, Parasitism, Rape, Research. English summary

17166-68

A DEVICE FOR OBTAINING FLIES OF KNOWN AGE.

T A Miller R E Treece

Entomol Soc Amer Ann 61(2):548

15 Mar 1968 420 EN82

Diptera, Insect rearing equipment, Musca autumnalis.

17167-68

PRESENT STATE OF INSECT TISSUE CULTURE. TRANSL. 16704.

J Mitsuhashi

32 P. REF

1966

Anatomy, Bacteriophages, Culture media, Insects, Morphology, Research, Tissue culture. Translation from Shokubutsu boeki, 18(9-10):359-366. translated by G. Nishimura

17168-68

PUPATION OF WINTERING LARVAE OF THE RICE STEM BORER, CHILO SUPPRESSALIS WALKER, REARED AT 25 C. TRANSL. 16919. K Miyahara B Hashizume 7 P.

Chilo suppressalis, Insect hology, Insect pests, Insect rearing, Larvae, Pupae, Rice, Temperature. Translation from Assoc. Plant Protect. Kyushu Proc. 8: 1-3, 1962 translated by Kenji Nishimura

17169-68

EXPERIMENTAL PREDICTION OF OCCURRENCE OF LEAFHOPPER. 5. OVARY MATURING CONDITION AND EGG-LAYING IN THE WEEDS OF LEAFHOPPER HIBERNATED IMAGO. TRANSL. 16901.

K Miyahara

5 P.

Cicadellidae, Environment, Hibernation, Light traps, Ovaries, Physiology, Research, Weeds. Translation from Kyushu Agri Res. 25:168-169 translated by Hideo Ueno

17170-68

EFFECT OF COMMERCIAL PROTEINS ON HOUSE FLY REPRODUCTION.

R E Monroe N J Lamh

Entomol Soc Amer Ann 61(2):456-459

15 Mar 1968 420 EN82

Insect nutrition, Musca domestica, Proteins, Reproduction.

17171-68

UPTAKE AND PERSISTENCE OF METEPA AND HEMPA IN THE HOUSE FLY.

P B Morgan M C Bowman G C LaBrecque

J Econ Entomol 61(3):805-808

Jun 1968 421 J822

Absorption, Baits, Biochemistry, Chemosterilants, Feed, Hempa, Insect control, Metepa, Musca domestica, Time.

17172-68

MORPHOLOGY, BIOLOGY, AND PHYTOPATHOLOGICAL SIGNIFICANCE OF THE GENUS APPELIA C.B (APHIDOIDEA: APHIDIDAE). (GE)

M Mostafawy

Z Angew Zool 54(4):439-515 REF

1967 449.8 Z36

Aphididae, Appelia, Biology, Insect morphology, Phytopathology.

17173-68

EFFECTS OF SEVERAL INSECTICIDES ON BLACK RICE BUG. TRANSL. 16917.

M Murakami

4 P.

Biochemistry, Chemical control (insects), Chlorine, Insect pests, Insecticides, Plant injuries, Research, Rice. Translation from Kanto-Tosan Plant Protection Society. proceedings. 11: 1964 translated by Ayako Iimura.

17174-68

BROOD REARING BY CAGED HONEY BEES IN RESPONSE TO INOSITOL AND CERTAIN POLLEN FRACTIONS IN THEIR DIET.

J L Nation F A Robinson

Entomol Soc Amer Ann 61(2):514-517

15 Mar 1968 420 EN82

Apis mellifera, Insect nutrition, Insect rearing, Metamorphosis, Pollen.

17175-68

ACTIVE TRANSPORT BY THE CECROPIA MIDGUT. IV. SPECIFICITY OF THE TRANSPORT MECHANISM FOR POTASSIUM.

S Nedergaard W R Harvey

J Exp Biol 48(1):13-24

Feb 1968 442.8 B77

Biological transport, Hyalophora cecropia, Intestines, Ions, Larvae, Potassium, Ruhidium.

17176-68

SYMBIOSIS; EFFECTS OF A MUTUALISTIC FUNGUS UPON THE GROWTH AND REPRODUCTION OF XYLEBORUS-FERRUGINEUS.

D M Norris J K Bakcr

Science 156(3778):1120

27 May 1967 470 SC12

Bacteria, Diet, Fungi, Injections, Insect morphology, Sterility, Symbiosis, Xyleborus ferrugineus.

17177-68

EFFECTS OF SUB-LETHAL HIGH TEMPERATURE ON AN INSECT, RHODNIUS PROLIXUS (STAL.). III. METABOLIC CHANGES AND THEIR BEARING ON THE CESSATION AND DELAY OF MOULTING.

A Y K Okasha

J Exp Biol 48(3):475-486 REF

Jun 1968 442.8 B77

Amino acids, Blood, Feeding, Insect physiology, Larvae, Lethal factors, Metabolism, Molting (insects), Rhodnius prolixus, Temperature.

17178-68

EFFECTS OF SUB-LETHAL HIGH TEMPERATURE ON AN INSECT, RHODNIUS PROLIXUS (STAL.). I. INDUCTION OF DELAYED MOULTING AND DEFECTS.

A Y K Okasha

J Exp Biol 48(3):455-463 REF

Jun 1968 442.8 B77

Feeding, Insect physiology, Larvae, Lethal factors, Rhodnius prolixus, Temperature.

17179-68

EFFECTS OF SUB-LETHAL HIGH TEMPERATURE ON AN INSECT, RHODNIUS PROLIXUS (STAL.). II. MECHANISM OF CESSATION AND DELAY OF MOULTING.

A Y K Okasha

J Exp Biol 48(3):465-473 REF

Jun 1968 442.8 B77

Cells, Feeding, Insect physiology, Larvae, Lethal factors, Rhodnius prolixus, Temperature.

17180-68

A SEX PHEROMONE IN THE PACIFIC COAST WIREWORM.

J A Onsager L M McDonough D A George

J Econ Entomol 61(3):691-693

Jun 1968 421 J822

Biochemistry, Biological assay, Carboxylic acids, Ethers, Limonium canus, Methylene chloride, Pheromones, Sex.

17181-68

REPELLENTS. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

R R Painter

267-285 REF NEW YORK, ACADEMIC PRESS

1967

Chromatography, Ecology, Insect repellents, Olfactometers, Research.

17182-68

VIRUSLIKE PARTICLES FROM HYALOPHORA CECROPIA LARVAE SUC-CUMBING FROM AN INTESTINAL DISEASE.

D Peters G B Staal

J Invertebrate Pathol 11(2):330-333

Aug 1968 421 J826

Centrifugation, Electron microscopy, Extracts, Hyalophora cecropia, Insect cages, Insect diseases, Intestines, Laboratories, Larvae, Mortality, Prunus serotina, Sedimentation, Spectrophotometry, Temperature, Ultraviolet rays.

17183-68

CONTRIBUTION TO THE STUDY OF REPRODUCTION AND THE EVOLUTIONARY CYCLE OF GLOSSINA MORSITANS WEST. (SP)

)

R C Pinhao

Inst Med Trop An 23(3-4):311-450 REF

Jul 1966 448.9 L68

Evolution, Glossina morsitans, Insect physiology, Reproduction, Research.

17184-68

SYNTHESIS AND DISTRIBUTION OF RNA IN CECROPIA OOCYTE DIFFERENTIATION.

S B Pollack

Diss Abstr Sect B 28(10):4354B

Apr 1968 Z5055.U49D53

Autoradiography, Biochemistry, Extracts, Glycogen, Histochemistry, Hyalophora cecropia, Insect eggs, Insect physiology, Perchloric acid, Ribonucleic acid, Uridine.

17185-68

THE EFFECTS OF GAMMA RADIATION ON THE NAVEL ORANGEWORM, PARAMYELOIS TRANSITIDAE (WALKER) (LEPIDOPTERA: PHYCITIDAE) AND THE FEASIBILITY OF CONTROL WITH IRRADIATED ADULTS.

F I Proshold

Diss Abstr Sect B 28(10):4168B

Apr 1968 Z5055.U49D53

Dosage, Gamma rays, Greenhouse culture, Insect cages, Insect control, Insect eggs, Insect physiology, Paramyelois transitella, Research, Sterilization.

17186-68

ROLE OF THE HOST PLANT CONCERNING THE SEXUAL ATTRACTIVENESS OF ACROLEPIA ASSECTELLA ZELLER. (LEP. PLUTELLIDAE). (FR)

R Rahn

Acad Sci Compt Rend Ser D Sci Nat

266(19):2004-2006

06 May 1968 505 P21

Acrolepia assectella, Insect ecology, Insect eggs, Insect physiology, Parasitic insects, Plutellidae, Reproduction, Sex attractants.

17187-68

RELATIVE TOXICITY OF INSECTICIDES TO ADULT LOCUSTA MIGRATORIA LINNAEUS.

B K Rai

Indian J Entomol 29(4):317-324

Dec 1967 420 IN23

Dusting, Injections, Insecticides, Locusta migratoria, Poisons, Spraying, Toxicology.

17188-68

FURTHER NOTES ON AYPERA POSTICA (GYLLENHAL) AND ITS NATURAL ENEMIES.

B R S Rao B Parshad A Ram R P Singh M L

Srivastava

Indian J Entomol 29(4):370-379

Dec 1967 420 IN23

Alfalfa, Feed, Hypera postica, Natural control (insects), White sweetclover.

17189-68

THE ABUNDANCE OF INSECTS: INTRODUCTION.

O W Richards T R E Southwood

Roy Entomol Soc London Symp 4:1-7 REF

1968 420 R81

Ecology, Environment, Insect migration, Insects, Population statistics, Research.

17190-68

FATTY ACIDS IN HONEY BEES (APIS MELLIFERA) INFECTED WITH THE PROTOZOAN NOSEMA APIS.

M D Roberts

J Invertebrate Pathol 11(2):234-236

Aug 1968 421 J826

Apis mellifera, Chromatography, Extracts, Fatty acids, Lipids, Nosema apis.

17191-68

AMINO ACID SYNTHESIS FROM GLUCOSE-U-14 C IN ARGYROTAENIA VELUTINANA (LEPIDOPTERA: TORTRICIDAE) LARVAE.

G C Rock K W King

J Nutr 95(3):369-373 REF

Jul 1968 389.8 J82

Amino acids, Argyrotaenia velutinana, Biochemistry, Carbon isotopes, Chemicals, Diet, Glucose compounds, Insects, Larvae.

17192-68

THE OCCURRENCE OF THE FUNGUS ENTOMOPHTHORA GRYLLI FRESENIUS ON LOCUSTS AND GRASSHOPPERS IN THAILAND.

J Roffey

J Invertebrate Pathol 11(2):237-241 REF

Aug 1968 421 J826

Acrididae, Biological control (insects), Entomophthora, Fungus diseases (insects), Grasshoppers, Lethal factors, Weather.

17193-68

PHOTOPERIOD IN RELATION TO DIAPAUSE IN HYPERA POSTICA FROM CALIFORNIA.

S S Rosenthal C S Koehler

Entomol Soc Amer Ann 61(2):531-534 REF

15 Mar 1968 420 EN82

Hypera postica, Insect rearing, Metamorphosis, Photoperiodism.

17194-68

BIOLOGY OF THE MUSTARD APHID, LIPAPHIS ERYSIMI, IN INDIA.

G Rout B Senapati

Entomol Soc Amer Ann 61(2):259-261

15 Mar 1968 420 EN82

Aphididae, Hyadaphis pseudohrassicae, Insect biology, Insect morphology, Insect pests, Lipaphis erysimi.

17195-68

OSCILLATORY MECHANISM IN FIBRILLAR INSECT FLIGHT MUSCLE.

J C Ruegg

Experientia 24(6):529-536 REF

15 Jun 1968 475 EX7

Insect biochemistry, Insect flight, Insect physiology, Muscles. German and English summary

Abstract

17196-68

LOSS OF HOSTPLANT SPECIFICITY BY MANDUCA SEXTA AFTER REARING ON AN ARTIFICIAL DIET.

L M Schoonhoven

Entomol Exp Appl 10(2):270-272

555555421 EN895

Cabbage, Diet, Insect morphology, Insect physiology, Insect rearing, Manduca sexta, Plantago, Taraxacum, Tobacco, Tomatoes.

17197-68

THE STRUCTURE OF A PREGENITAL ABDOMINAL GANGLION OF THE DESERT LOCUST SCHISTOCERCA GREGARIA (FORMSKAL).

W D Seahrook

Can J Zool 46(5):965-980 REF

Sep 1968 470 C16D

Abdomen, Cells, Insect anatomy, Insect physiology, Nervous system, Neurology, Periplaneta, Schistocerca gregaria.

17198-68

PHEROMONES. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL; BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

H H Shorey L K Gaston

241-265 REF NEW YORK, ACADEMIC PRESS

1967

Biology, Chemistry, Environment, Insect behavior, Insect control, Pheromones, Population statistics.

17199-68

WINTER ACTIVITIES OF VESPULA MACULIFRONS.

R P Simon A N Benton

Entomol Soc Amer Ann 61(2):542-544

15 Mar 1968 420 EN82

Insect behavior, Vespidae, Vespula maculifrons.

17200-68

CHARACTERIZATION OF CARDIO-ACCELERATORS FROM NERVES AND TISSUES ASSOCIATED WITH THE HEART OF THE COCKROACH, PERIPLANETA AMERICANA LINNE.

N A Smith

Diss Abstr Sect B 28(10):4357B

Apr 1968 Z5055.U49D53

Centrifugation, Dialysis, Enzymes, Heart, Heat, Nerves, Periplaneta americana, Research, Sucrose, Tissues.

17201-68

URATE ACCUMULATION AND LIFE SPAN IN TWO SPECIES OF HABROBRACON.

R E Smith

Diss Abstr Sect B 28(10):4358B

Apr 1968 Z5055.U49D53

Bracon hebetor, Braconidae, Diet, Fertility, Insect morphology, Insect physiology, Irradiation, Temperature, Urate oxidase.

17202-68

LACQUERS CONTAINING DIELDRIN, MALATHION, OR DIAZINON AS CONTROLS FOR GERMAN COCKROACH.

B J Smittle G S Burden

J Econ Entomol 61(3):702-705

Jun 1968 421 J822

Biochemistry, Blattella germanica, Chemical control (insects), Diazinon, Dieldrin, Insecticide application, Insecticide residues, Insecticides, Malathion, Plywood, Time.

17203-68

MUTATIONS AS POSSIBLE AIDS FOR ESTABLISHING GENITALIC HOMOLOGIES IN THE SEXES IN TRIBOLIUM CASTANEUM.

A Sokoloff M A Hoy

Entomol Soc Amer Ann 61(2):550-553 REF

15 Mar 1968 420 EN82

Insect morphology, Insect mutation, Insect taxonomy, Reproductive organs, Tribolium castaneum.

17204-68

EVIDENCE FOR PHONORECEPTION IN THE LUBBER GRASSHOPPER ROMALEA MICROPTERA).

S L Sparks H D Patton

Fed Amer Soc Exp Biol Fed Proc 27(2):583

Mar 1968 442.9 F31P

Insect behavior, Insect physiology, Nervous system, Research, Romalea microptera.

17205-68

DRIED TORULA YEAST AS A SUBSTITUTE FOR BREWER'S YEAST IN THE LARVAL REARING MEDIUM FOR THE MEXICAN FRUIT FLY.

L M Spishakoff J G Hernandez Davila

J Econ Entomol 61(3):859-860

Jun 1968 421 J822

Anastrepha ludens, Carrots, Culture media, Insect rearing, Larvae, Yeasts.

17206-68

THE PHYSIOLOGY OF LABELLAR ELECTROLYTE RECEPTORS OF THE BLOWFLY, PHORMIA REGINA.

R A Steinhart

Diss Abstr Sect B 28(9):3932B

Mar 1968 Z5055.U49D53

Chemoreceptors, Electrophysiology, Hydrocarbons, Insect behavior, Phormia regina, Salivary glands (insects).

17207-68

DISTRIBUTION OF THE NEMATODE HETEROTYLENCHUS AUTUMNALIS, A PARASITE OF THE FACE FLY, IN NEW ENGLAND WITH NOTES ON ITS ORIGIN.

J G Stoffoland

J Econ Entomol 61(3):861-863

Jun 1968 421 J822

Heterotylenchus autumnalis, Musca autumnalis, Nematodes, Parasitism, Zoogeography.

17208-68

INCLUSIONS IN ADULTS OF THE EUROPEAN PINE SAWFLY, NEODIPRION SERTIFER (GEOFF.).

C R Sullivan D R Wallace

Can J Zool 46(5):959-963 REF

Sep 1968 470 C16D

Experimental insects, Inclusion bodies, Insect diseases, Insect rearing, Larvae, Neodiprion sertifer, Pinus resinosa, Temperature.

17209-68

VARIATIONS IN THE PHOTOPERIODIC RESPONSE OF NEODIPRION SERTIFER.

C R Sullivan D R Wallace

Can J Zool 46(5):1082-1083

Sep 1968 470 C16D

Experimental insects, Insect rearing, Neodiprion sertifer, Photoperiodism, Population, Reproduction, Research, Temperature.

17210-68

RELATIVE TOXICITY OF SOME INSECTICIDES AS CONTACT POISONS TO THE LARVAE OF EARIAS FABIA STOLL.

T P S Teotia P M Nigam

Indian J Entomol 29(4):391-392

Dec 1967 420 IN23

Chemical control (insects), Cotton, Earias fabia, Insecticides, Larvae, Okra, Poisons, Toxicology.

17211-68

TRANS-ALDRIN GLYCOL AS A METABOLITE OF DIELDRIN IN LARVAE OF THE SOUTHERN HOUSE MOSQUITO.

A D Tomlin

J Econ Entomol 61(3):855-857

Jun 1968 421 J822

Aldrin, Biochemistry, Chemical control (insects), Culex pipiens quinquefasciatus, Dieldrin, Glycols, Insecticides, Larvae, Metabolites.

17212-68

AN ANATOMICAL AND HISTOLOGICAL STUDY OF THE MALE MYRMICINE ANT, MYRMICA RUBRA, L. (HYMENOPTERA: FORMICIDAE).

W B Trakimas

Diss Abstr Sect B 28(10):4360B

Apr 1968 Z5055.U49D53

Gastrointestinal system, Insect anatomy, Insect histology, Insect physiology, Myrmica rubra, Reproductive organs, Research, Salivary glands (insects).

17213-68

HAEMOLYMPH ESTERASES IN THE FEMALE LARVAL HONEYBEE, APIS MELLIFERA L., DURING CASTE DEVELOPMENT.

R K Tripathi S E Dixon

Can J Zool 46(5):1013-1017 REF

Sep 1968 470 C16D

Apis mellifera, Electrophoresis, Enzymes, Esterases, Hemolymph, Hemolysis, Insect morphology, Larvae, Polymorphism.

17214-68

MERMITHID PARASITES OF THE MOSQUITO AEDES VEXANS MEIGEN IN BRITISH COLUMBIA.

M Trpis W O Haufe J A Shemanchuk

Can J Zool 46(5):1077-1079

Sep 1968 470 C16D

Aedes vexans, Biological control (insects), Experimental insects, Feeding, Morphology, Mortality, Nematodes, Parasitism, Research, Temperature.

17215-68

POPULATION SAMPLE COUNTS ON SPIDER MITES.

M Van De Vrie

Entomophaga Mem Hors Ser 3:55

1967 421 EN835M

Apples, Leaves, Panonychus ulmi, Population statistics, Predaceous insects, Tetranychidae.

17216-68

POPULATION MODELS FOR THE WINTER MOTH.

G C Varley G R Gradwell

Roy Entomol Soc London Symp 4:132-142 REF
1968 420 R81

Biological control (insects), Ecology, Mortality, Opcrophtera brumata, Population statistics, Research.

17217-68

UNDULATORY LOCOMOTION OF THE PLANT PARASITIC NEMATODE MELOIDOGYNE JAVANICA.

H R Wallace

Parasitology 58(2):377-391 REF

May 1968 448.8 P21

Eggs, Environment, Insect physiology, Larvae, Meloidogyne javanica, Research.

17218-68

PRESENT STATUS OF BIOLOGICAL CONTROL OF THE PEAR PSYLLA IN SOUTHERN OREGON.

P H Westgard L G Gentner D W Berry

J Econ Entomol 61(3):740-743

Jun 1968 421 J822

Biological control (insects), Fruit, Insect eggs, Insect pests, Mortality, Nymphs, Parasitic insects, Pears, Plant injuries, Psylla pyricola, Research, Trachnites insidiosus.

17219-68

LARGE SCALE GRANULAR PARATHION PRE-TREATMENT OF A DUCK CLUB AREA IN THE COLUSA MOSQUITO ABATEMENT DISTRICT.

K G Whitesell

Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:14-15

1966 420 UT1

Aedes melanion, Aerial spraying, Chemical control (insects), Laboratories, Parathion, Research, Weather.

17220-68

SOME ASPECTS OF MOSQUITO CONTROL IN CALIFORNIA.

J D Willis

Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:13-14

1966 420 UT1

Aerial spraying, Culex pipiens pipiens, Culicidae, Histology, Insect control, Insecticides, Population statistics, Research, Weather.

17221-68

REDUCTION OF TABANID POPULATIONS ON CATTLE WITH STICKY TRAPS BAITED WITH DRY ICE.

B H Wilson

J Econ Entomol 61(3):827-829

Jun 1968 421 J822

Baits, Cattle, Dry ice, Insect control, Insect pests, Insect traps, Population, Tabanidae, Temperature, Weather.

17222-68

INSECT ABUNDANCE: PROSPECT.

F Wilson

Roy Entomol Soc London Symp 4:143-158 REF

1968 420 R81

Environment, Insect outbreaks, Insects, Laboratories, Population statistics, Research.

17223-68

THE INTERNAL MORPHOLOGY OF THE REPRODUCTIVE SYSTEMS OF SOME PSOCID SPECIES.

S K Wong I W B Thornton

Roy Entomol Soc London Proc Ser A Gen Entomol 43(1-3):1-12 REF

03 May 1968 420 L84PA

Insect morphology, Psocoptera, Reproductive organs.

17224-68

LABORATORY STUDIES WITH THE MOSQUITO IRIDESCENT VIRUS (MIV).

D B Woodard H C Chapman

J Invertebrate Pathol 11(2):296-301

Aug 1968 421 J826

Aedes sollicitans, Aedes taeniorhynchus, Culicidae, Insect rearing, Laboratories, Larvae, Mosquito iridescent virus.

17225-68

BIOLOGIES OF THREE SPECIES OF ALYDUS IN WISCONSIN.

T R Yonke J T Medler

Entomol Soc Amer Ann 61(2):526-531 REF

15 Mar 1968 420 EN82

Alydus conspersus, Alydus curinus, Alydus pilosulus, Insect biology, Insect morphology.

GENETICS

17226-68

INHERITED MELANISM IN THE LARGE MILKWEED BUG, ONCOPELTUS FASCIATUS (HETEROPTERA: LYGAEDIDAE).

C E Abbott

Entomol Soc Amer Ann 61(2):542

15 Mar 1968 420 EN82

Heredity, Insect genetics, Melanosis, Oncopeltus fasciatus.

17227-68

THE DEVELOPMENTAL GENETICS OF THE EYELESS-DOMINANT MUTATION IN DROSOPHILA MELANOGASTER (MEIG.).

R Arking

Diss Abstr Sect B 28(10):4003B

Apr 1968 Z5055.U49D53

Blindness, Chromosomes, Drosophila melanogaster, Eyes, Insect genetics, Insect morphology, Larvae, Mutation, Sex.

17228-68

TEMPERATURE-SENSITIVE MUTATIONS IN DROSOPHILA MELANOGASTER. II. FREQUENCY AMONG SECOND CHROMOSOME RECESSIVE LETHALS INDUCED BY ETHYL METHANESULFONATE.

D Baille D T Suzuki M Tarasoff

Can J Genet Cytol 10(2):412-420 REF

Jun 1968 443.8 C16

Chromosomes, Drosophila melanogaster, Ethyl methanesulfonate, Insect genetics, Lethal factor, Mutation, Temperature.

17229-68

POLYMORPHISM IN THE AUSTRALIAN ACRIDIDAE. I. INHERITANCE OF COLOUR PATTERNS IN THE PLAGUE LOCUST, CHORTICETES TERMINIFERA.

O R Byrne

Heredity 22(4):561-568 REF

Nov 1967 443.8 H42

Acrididae, Chortocetes terminifera, Color, Inheritance, Insect genetics, Polymorphism.

17230-68

THE INHERITANCE OF FERTILITY IN DROSOPHILA MELANOGASTER.

W Chapco

Diss Abstr Sect B 28(10):4004B-4005B

Apr 1968 Z5055.U49D53

Breeding, Chromosomes, Drosophila melanogaster, Fertility, Genes, Heredity, Insect eggs, Insect genetics, Mutation, Research.

17231-68

TRANSFORMATION OF INSEMINATED FEMALES OF APHYTIS LINGNANENSIS INTO FACTITIOUS VIRGINS BY LOW-TEMPERATURE TREATMENT.

P DeBach S V Rao

Entomol Soc Amer Ann 61(2):332-337 REF

15 Mar 1968 420 EN82

Aphytis lingnanensis, Artificial insemination, Insect rearing, Sex behavior, Sterilization, Temperature.

17232-68

THE EFFECT OF LINKAGE ON GENETIC VARIANCE.

I R Franklin

Diss Abstr Sect B 28(10):4006B

Apr 1968 Z5055.U49D53

Breeding, Chromosomes, Genes, Insect genetics, Population, Tribolium castaneum, Variance analysis.

17233-68

A COMPARATIVE STUDY OF INDUCED INCREASES IN PROXIMAL RECOMBINATION IN DROSOPHILA MELANOGASTER FEMALES.

S Hayashi D T Suzuki

Can J Genet Cytol 10(2):276-282 REF

Jun 1968 443.8 C16

Actinomycin d, Breeding, Chromosomes, Drosophila melanogaster, Insect genetics, Radiation, Research, Temperature.

17234-68

RATES OF SPONTANEOUS MUTATION IN CERTAIN GENES OF AN ARRHENOTOKOUS MITE, TETRANYCHUS PACIFICUS.

W Helle A Q Van Zon

Entomol Exp Appl 10(2):189-193

1967 421 EN895

Genes, Insect genetics, Mites, Mutation, Pigmentation, Tetranychus pacificus.

17235-68

A STUDY OF RADIATION-INDUCED DOMINANT LETHALS AND TRANSLOCATIONS IN DROSOPHILA VIRILIS IN AN OXYGEN ATMOSPHERE AT 4 C.

G E Omundson

Diss Abstr Sect B 28(10):4353B

Apr 1968 Z5055.U49D53

Atmosphere, Cold, Drosophila virilis, Insect eggs, Insect genetics, Irradiation, Lethal factor, Oxygen, Reproduction, Sex, Temperature, Therapeutics.

17236-68

A STUDY OF ISOENZYME POLYMORPHISM IN EXPERIMENTAL POPULATIONS OF DROSOPHILA MELANOGASTER.

M Rasmuson B Rasmuson L R Nilson

Heredity 57(1-2):263-274

1967 442.8 H42

Drosophila melanogaster, Enzymes, Experimental insects, Heterogenesis, Insect genetics, Insect rearing, Polymorphism.

17237-68

EFFECT OF INSECTICIDES AND INSECTICIDE TREATED COCKROACH BLOOD ON THE HEART BEAT OF PERIPLANETA AMERICANA L.

P Sudershan M B Naidu

Indian J Exp Biol 5(4):215-218 REF

Oct 1967 442.8 IN2

Blattidae, Heart rate, Insecticide application, Insecticides, Malathion, Periplaneta americana, Pyrethrum, Ventral nerve cord.

17238-68

A COMPARISON OF BANDING PATTERNS IN SALIVARY GLAND CHROMOSOMES OF TWO SPECIES OF DROSOPHILA.

F M A Van Breugel A Ray H Gloor

Genetica 39(2):165-192 REF

1968 442.8 G282

Chromosomes, Cytogenetics, Drosophila hydei, Drosophila melanogaster, Insect genetics, Salivary glands (insects).

Abstract

MEDICAL ENTOMOLOGY

17239-68

SUMMARY OF RECENT ABSTRACTS. IV. TRYPANOSOMIASIS. AFRICAN TRYPANOSOMIASIS. HUMAN.

Anonymous

Trop Dis Bull 64(5):441-455

May 1967 448.8 T752

Epidemiology, Glossina, Human diseases, Insect vectors, Reports, Trypanosomiasis.

17240-68

SUMMARY OF RECENT ABSTRACTS. VII. RICKETTSIAL DISEASES.

Trop Dis Bull 65(8):961-968

Aug 1968 448.8 T752

Anoplura, Human diseases, Insect vectors, Mites, Q fever, Rickettsial diseases, Siphonaptera, Typhus. Summary compiled from abstracts of Tropical Diseases Bulletin, 1967, v. 64.

17241-68

KEY TO RAPID IDENTIFICATION OF AN-TROPOPHILIC PHLEBOTOMUS IN THE CU-TANEUS AREA OF LEISHMANIASIS IN MEX-ICO. (SP)

A M De Biagi

Rev Invest Salud Publica 26(4):367-373

Oct 1966 449.9 M572

Ecology, Insect identification, Insect vectors, Leishmaniasis, Phlebotomus, Skin. English summa-ry

17242-68

APPLICATION OF IMMUNODIFFUSION METHODS TO THE ANTIGENIC ANALYSIS OF DENGUE VIRUSES.

A N Ibrahim

Diss Abstr Sect B 28(10):4216B

Apr 1968 Z5055.U49D53

Aedes aegypti, Antigens, Assay, Dengue (man), Electrophoresis, Immunization, Serological tests, Serum, Viruses.

17243-68

DEVELOPMENT OF STUDIES IN CZECHOSLOVAKIA ON NATURAL FOCI OF DISEASES. (JPRS 44,874) TRANSL. 16897.

B Rositskiy

16 P

01 Apr 1968

History, Human diseases, Insect vectors, Wildlife. Translation from Parazitologiya 5:378-389, 1967 issued by CFSTI.

17244-68

TREATMENT AND CONTROL OF SCABIES, LICE AND FLEA INFESTATION OF MAN. (SP)

H Schenone H Reyes

Bol Chileno Parasitol 22(2):56-59 REF

Apr 1967 436.9 C43

Chemical control (insects), Epidemiology, Hu-mans, Insect biology, Pediculus humanus, Phthirus pubis, Sarcoptes scabiei, Siphonaptera. English ab-stract

Abstract: Life-cycle, bionomics and epidemiologi-cal characteristics of ectoparasites are the main factors in their treatment and control. Sarcoptes scabiei, Pediculus humanus and Phthirus pubis are highly specific to man. They are permanent ec-toparasites through their complete life-cycle. Therapeutic and preventive measures must be car-ried out on the infested person. Fleas are ec-toparasites only during the blood meal, are highly non-specific in host selection, and develop in the environment. Thus, flea control must be carried out in their environmental breeding or shelter places, and the measures on the human or animals hosts are only complementary. The principal methods of treatment and control are described.

17245-68

FIVE YEARS' EXPERIENCE MAINTAINING COLONIES OF PEDICULUS HUMANUS IN THE LABORATORY. (SP)

G Varela

Rev Invest Salud Publica 27(4):317-320

Oct 1967 449.9 M572

Experimental insects, Insect rearing, Insect vectors, Laboratories, Pediculus humanus, Rabbits, Research, Rickettsial diseases. English summary

17246-68

GENETICS OF INSECT VECTORS OF DIS-EASE. RA639.0W7.

J W Wright R Pal

794 P. NEW YORK, ELSEVIER PUBLISHING COMPANY

1967

Aedes aegypti, Anopheles, Arthropoda, Blattidae, Breeding, Culex pipiens, Cytology, Immunity, In-sect evolution, Insect genetics, Insect physiology, Insect vectors, Insecticides, Musca domestica, Population, Public health, Research, Triatoma.

CROP PRODUCTION

17247-68

PROCEEDINGS INTERNATIONAL SYMPOSI-UM ON PLANT DISEASES AND PESTS IN A DEVELOPING EUROPE.

Anonymous

Neth J Plant Pathol 73(SUP-1), 172 P. REF

1967 464.8 T44

Agricultural outlook, International cooperation, Phytopathology, Plant disease control, Plant pest control, Symposia, World agricultural situation.

17248-68

MICROORGANISMS AND THE INORGANIC NUTRITION OF HIGHER PLANTS.

D A Barber

Annu Rev Plant Physiol 19:71-88

1968 450 AN78

Ions, Microorganisms, Plant nutrition, Plant physiology, Soils, Tissues.

17249-68

EFFECT OF B-GROUP VITAMINS AND ETHYL ALCOHOL ON AFLATOXIN PRODUCTION BY ASPERGILLUS ORYZAE.

S C Basappa A Jayarman V Sreenivasamurthy H A B Parpia

Indian J Exp Biol 5(4):262-263

Oct 1967 442.8 IN2

Aflatoxin, Aspergillus oryzae, Ethyl alcohol, Metabolites, Thiamine, Toxins, Vitamins.

17250-68

PHYTOPATHOLOGICAL DEVELOPMENTS IN AN INTEGRATING EUROPE.

B W Bieshuvel

Neth J Plant Pathol 73(SUP-1):3-12

1967 464.8 T44

Agricultural economics, Agricultural research, In-ternational cooperation, Phytopathology, Plant protection, World agricultural situation.

17251-68

AN INHERITANCE STUDY OF TOLERANCE TO ATRAZINE IN A CROSS OF FLAX (LINUM USITATISSIMUM L.).

V E Comstock R N Andersen

Crop Sci 8(4):508-509

Aug 1968 64.8 C883

Atrazine, Corn, Greenhouses, Inheritance, Quan-titative analysis, Research.

17252-68

THE BIOLOGY AND ECOLOGY OF SICKLEPOD (CASSIA OBTUSIFOLIA L.).

J M Jr Creel

Diss Abstr Sect B 28(10):3969B

Apr 1968 Z5055.U49D53

Cassia obtusifolia, Cotton, Light, Nutrient solu-tions (plants), Plant ecology, Plant physiology, Research, Rhizoctonia, Seed germination, Seedlings, Temperature.

17253-68

SOME EFFECTS OF ENVIRONMENTAL AND CHEMICAL TREATMENTS ON GROWTH IN-DUCTION AND METABOLISM: I. EFFECTS OF LIGHT ON PHOSPHATE AND NUCLEIC ACID METABOLISM IN TOBACCO LEAF DISCS. II. GROWTH INDUCTION AND METABOLISM IN CARROT PHLOEM EXPLANTS.

N Degani

Diss Abstr Sect B 28(10):4263B

Apr 1968 Z5055.U49D53

Biochemistry, Carrots, Culture media, Drug therapy, Indoleacetic acid, Light, Nucleic acids, Oxygen, Phloem, Phosphates, Plant ecology, Plant metabolism, Plant physiology, Plant regulators, Tobacco.

17254-68

DIPLOIDIZATION OF INDUCED TETRAPLOID HYBRIDS OF DACTYLIS GLOMERATA BY MEANS OF X-RAY IRRADIATION.

T E Devine

Diss Abstr Sect B 28(11):4385B

May 1968 Z5055.U49D53

Aschersoniana, Breeding, Chromosomes, Dactylis glomerata, Irradiation, Lusitanica, Plant genetics, Polyploidy, Seedlings, X-rays.

17255-68

SPERMIOGENESIS IN LACCIFER LACCA (KERR) (LACCIFERIDAE COCCOIDEA).

T S S Dikshith

Cytologia 31(3):302-308

Sep 1966 442.8 C99

Cell nucleus, Cells, Chromatin, Chromosomes, Cysts, Cytology, Laccifer lacca, Plant genetics, Plants, Reproduction, Research, Spermatozoa.

17256-68

CERTAIN EFFECTS OF BENZIMIDAZOLE ON YOUNG TOBACCO PLANTS.

J J Dyar

Plant Physiol 43(3):477-478

Mar 1968 450 P692

Benzimidazole, Mottle (tobacco), Plant hormones, Plant physiology, Plant regulators, Potassium, Tobacco.

17257-68

A NOTE ON THE RELATIVE SUSCEPTIBILITY OF SOME GROUNDNUT (ARACHIS HYPOGAEA) VARIETIES TO CERCOSPORA PERSONATA.

E El Nur G Ibrahim

Plant Dis Rep 52(5):405

May 1968 1.9 P69P

Breeding, Cercospora arachidicola, Cercospora personata, Copper, Crop yields, Peanuts, Spraying, Sulfur, X-rays.

17258-68

CHROMOSOMAL NUMBER AND MITOTIC DIVISION IN PIRICULARIA ORYZAE. (AB-STRACT).

P Giatgong A Frederiksen

Phytopathology 58(6):728

Jun 1968 464.8 P56

Chromosomes, Cytology, Genetics, Piricularia oryzae.

17259-68

THE TRANSPORT OF AUXIN.

M H M Goldsmith

Annu Rev Plant Physiol 19:347-360

1968 450 AN78

Ethylene, Indoleacetic acid, Plant hormones, Triiodobenzoic acid, 2,3,5-.

17260-68

CONTROL OF NEMATODES IN HORTICUL-TURAL CROPS IN GREAT BRITAIN.

G M Hague

Agr Vet Chem 8(2):37-44 REF

Mar 1967 382 AG82

Fungi, Fungicides, Mushrooms, Narcissus pseudo-narcissus, Plant nematodes, Root rot, Thionazin, Tomatoes, Tulipa, Virucides, Viruses.

17261-68

METABOLIC CHANGES IN OXYGEN-DEFI-CIENT TOMATO ROOTS.

M G Huck

Diss Abstr Sect B 28(10):3967B

Apr 1968 Z5055.U49D53

Measurement, Nitrogen, Nutrient solutions (plants), Oxygen, Plant injuries, Plant nutrition, Plant translocation, Roots, Tissues, Tomatoes, Water.

17262-68

ON THE USE OF LOW TOXIC HERBICIDES IN PADDY FIELD. TRANSL. 16690.

H Hyakutake T Inoue S Chikura S Kojima

14 P.

Chemicals, Herbicides, Plant injuries, Plant morphology, Research, Rice, Toxicology, Water. Translation from Fukuoka Agricultural Experiment station, Report No. 2. translated by Micko Nishimura

17263-68

DISINFECTION, STERILIZATION, AND PRESERVATION. RA761.L3.

C A Lawrence S S Block

808 P. PHILADELPHIA, LEA AND FEBIGER 1968

Antiseptics, Canning, Crop yields, Laboratories, Radiation, Sterilization.

17264-68

ANASTOMOSIS IN VENTURIA INAEQUALIS (CKE.) WINT.

L S Lev

Diss Abstr Sect B 28(11):4377B

May 1968 Z5055.U49D53

Anastomosis, Fungi, Plant ecology, Plant genetics, Reproduction, Seed germination, Temperature, Venturia inaequalis.

17265-68

ANNUAL REVIEW OF PLANT PHYSIOLOGY.

L Macblis W R Briggs R B Parks

Annu Rev Plant Physiol 19:555 P.

1968 450 AN78

Cells, Metabolism, Photosynthesis, Plant morphology, Plant nutrition, Plant physiology.

17266-68

A QUANTITATIVE STUDY OF THE EFFECTS OF GIBBERELLIC ACID ON THE GROWTH OF FESTUCA ARUNDINACEA.

D G Morgan

Australian J Agr Res 19(2):221-225 REF

Mar 1968 23 AU783

Festuca arundinacea, Gibberellin acid, Photosynthesis, Plant biochemistry, Plant physiology, Plant regulators.

Abstract: First effect of G acid was to change the distribution of dry matter between shoot and root and between tillers within the shoot without affecting total plant weight.

17267-68

THE ROLE OF MIXED FUNCTION OXIDASES IN DITERPENE METABOLISM.

P J Murphy

Diss Abstr Sect B 28(11):4416B

May 1968 Z5055.U49D53

Diterpenes, Gibberellins, Hormones, Liver, Metabolism, Oxidases, Plant physiology, Plant regulators, Rats.

17268-68

STOMATAL CONDUCTIVITIES IN K-DEFICIENT LEAVES OF MAIZE (ZEA MAYS, L.).

D E Peaslee D N Moss

Crop Sci 8(4):427-430 REF

Aug 1968 64.8 C883

Corn, Leaves, Phenylmercuric acetate, Photosynthesis, Plant nutritional deficiencies, Potassium, Research, Spraying, Stomata.

17269-68

NATURAL INFECTION OF SCOTS PINE BY LODGEPOLE PINE DWARF MISTLETOE IN CANADA.

J M Powell

Plant Dis Rep 52(5):409-410

May 1968 1.9 P69P

Arceuthobium americanum, Pinus sylvestris, Plant disease control, Stems, Tree diseases, Trees.

17270-68

FORMATION OF GROWTH INHIBITORS IN WILTING APRICOT LEAVES.

T N Pustovoitova

Soviet Plant Physiol 14(1):77-83 REF

Jan 1967 450 F580AE

Apricots, Droughts, Plant hormones, Plant physiology.

17271-68

THE ADSORPTION OF ATRAZINE BY SOILS AND SOIL COLLOIDAL COMPONENTS.

R O Radkc

Diss Abstr Sect B 28(11):4383B-4384B

May 1968 Z5055.U49D53

Assay, Atrazine, Bentonite, Centrifugation, Colorimetry, Culture media, Herbicides, Hydrogen-ion concentration, Soil adsorption, Soil colloids.

17272-68

METABOLIC CHANGES IN BIOTIN-DEFICIENT ASPERGILLUS NIDULANS.

K K Rao V V Modi

Can J Microbiol 14(7):813

Jul 1968 448.8 C162

Aspergillus nidulans, Biotin, Carbohydrates, Culture media, Deficiency diseases, Fatty acids, Lipids, Metabolism, Mitochondria, Proteins, Vitamins.

17273-68

EFFECT OF GENETIC RECOMBINATION ON THE PATHOGENICITY OF PHYTOPHTHORA INFESTANS.

S Romero-Cova

Diss Abstr Sect B 28(10):3962B-3963B

Apr 1968 Z5055.U49D53

Agar, Culture media, Fungi, Light, Phytophthora infestans, Plant genetics, Plant physiology, Reproduction, Seed germination, Temperature.

17274-68

PERMEABILITY TO METHYL BROMIDE OF WRAPPERS FOUND ON SHIPMENTS OF IMPORTED PLANTS.

H Roth H H Richardson

J Econ Entomol 61(3):776-778

Jun 1968 421 J822

Foreign trade, Freight transportation, Fumigation, Methyl bromide, Packing, Permeability, Plants.

17275-68

FURTHER OBSERVATIONS OF DWARF MISTLETOE ON EASTERN LARCH IN MINNESOTA.

F H Tainter D W French

Phytopathology 58(6):880-881

Jun 1968 464.8 P56

Arceuthobium, Larix, Parasitism, Picea glauca, Picea mariana, Research.

17276-68

SALT DAMAGE TO VEGETATION IN THE WASHINGTON, D. C. AREA DURING THE 1966-67 WINTER.

H V Wester E E Cohens

Plant Dis Rep 52(5):350-354

May 1968 1.9 P69P

Grasses, Growth factors, Meteorology, Silver nitrate, Sodium chloride, Soil analysis, Toxins, Trees, Vegetation.

DISEASES

17277-68

SOME PROBLEMS IN STUDYING THE INFECTION MECHANISM. (JA)

S Akai

Phytopathol Soc Jap Ann 33(3):121-123

Jun 1967 464.9 P562

Mechanics, Phytopathology, Plant diseases, Research.

17278-68

EFFICACY OF SCREENING FUNGICIDAL AND FUNGISTATIC PROPERTIES AGAINST SOIL-BORNE PATHOGENS. (ABSTRACT).

W R Arnold R W Toler

Phytopathology 58(6):725

Jun 1968 464.8 P56

Fungicides, Fusarium oxysporum, Rhizoctonia solani, Sclerotium rolfsii, Soil-borne plant diseases, Thielaviopsis basicola.

17279-68

CONCERNING THE EVIDENCE OF TOBACCO MOSAIC VIRUS IN GRAPE VINES. (GER)

R Bercks

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz

74(6):346-349

Jun 1967 464.8 Z3

Grape vineyards, Injections, Mosaic (tobacco), Plant diseases, Serological tests, English summary

17280-68

ACCUMULATION OF PHENOLS IN RESISTANT PLANT-FUNGUS INTERACTIONS.

W L Biehn

Diss Abstr Sect B 28(11):4374B

May 1968 Z5055.U49D53

Fungus diseases (plants), Helminthosporium carbonum, Injections, Kidney beans, Lima beans, Phenol compounds, Phenols, Seedlings, Soybeans, Time.

17281-68

MORPHOLOGICAL AND NUCLEAR PHENOMENA OF FUSICLADIUM EFFUSUM. (ABSTRACT).

D J Blasingame C H Jr. Graves

Phytopathology 58(6):725

Jun 1968 464.8 P56

Fungus diseases (plants), Fusicladium effusum, Pecans, Plant morphology, Radiochemistry.

17282-68

MODE OF ENTRY OF DIPLODIA NATALENSIS AND PHOMOPSIS CITRI INTO FLORIDA ORANGES.

G E Brown W C Wilson

Phytopathology 58(6):736-739 REF

Jun 1968 464.8 P56

Diplodia natalensis, Fungus diseases (plants), Oranges, Phomopsis citri, Tissues.

17283-68

STUDIES ON THE NECROTIC FLECK DISEASE OF EASTER LILY, LILIUM LONGIFLORUM.

E L Civerolo

Diss Abstr Sect B 28(10):3959B

Apr 1968 Z5055.U49D53

Centrifugation, Hydrogen-ion concentration, Lilium longiflorum, Mosaic (cucumbers), Necrotic fleck, Nucleic acids, Particle size determination, Plant disease transmission, Research, Seedlings, Spectrophotometry, Sucrose, Virus diseases (plants).

17284-68

EPIDEMIOLOGY OF TOMATO CURLY TOP IN THE YAKIMA VALLEY.

R L Clark

Phytopathology 58(6):811-813 REF

Jun 1968 464.8 P56

Curly top (tomatoes), Epidemiology, Rainfall, Temperature, Tomatoes, Virus diseases (plants).

17285-68

THE IDENTIFICATION OF SOME CYTOPLASMIC-POLYHEDROSIS VIRUSES.

J C Cunningham J F Longworth

J Invertebrate Pathol 11(2):196-202 REF

Aug 1968 421 J826

Cytoplasm, Electron microscopy, Extracts, Guinea pigs, Polyhedroses, Sedimentation, Serological tests, Virus diseases (insects).

17286-68

A CANKER CONDITION IN PEACH (PRUNUS PERSICA (L.) BATSCH) INDUCED BY CHILLING AND ITS RELATIONSHIP TO BACTERIAL CANKER (PSEUDOMONAS SYRINGAE VAN HALL).

J R Davis

Diss Abstr Sect B 28(11):4375B-4376B

May 1968 Z5055.U49D53

Bacteria, Canker (peaches), Culture media, Leaves, Peaches, Plant diseases, Plant histology, Plant physiology, Pseudomonas syringae, Seedlings, Temperature.

17287-68

17287-68
INVESTIGATIONS ON THE MYCOTROPHY OF THE SPRUCE-PECEA EXCELSA (LAM.) L.K. IN POLAND. (TT 65-50356) TRANSL. 16788.
T Dominik

24 P.

1967

Anatomy, Fungus diseases (plants), Mycorrhiza, Picea abies, Plant physiology, Research, Tables (data). Translation from Prace Instytutu Badawczego Lesnictwa 209:59-102, 1961. issued by USDA/ONSF

17288-68

OCCURRENCE OF FOMES ANNOSUS IN INTENSIVELY MANAGED YOUNG-GROWTH WESTERN HEMLOCK STANDS.

C H Driver R E Wood

Plant Dis Rep 52(5):370-374

May 1968 1.9 P69P

Fomes annosus, Fungus diseases (plants), Growth factors, Plant disease control, Tsuga heterophylla, Wood decay.

17289-68

SUBTERRANEAN SPORULATION BY TWO GRAMINICOLOUS SMUT FUNGI.

R Duran

Phytopathology 58(3):390 REF

Mar 1968 464.8 P56

Plant reproduction, Soil fungi, Soil profiles, Spores, Ustilaginales.

17290-68

DIALLEL ANALYSES OF THE INHERITANCE OF RESISTANCE IN COTTON, GOSSYPIMUM HIRSUTUM L. TO RACES OF XANTHOMONAS MALVACEARUM (E.F.S.M.) DOWSON.

K M El-zik

Diss Abstr Sect B 28(10):3959B-3960B

Apr 1968 Z5055.U49D53

Assay, Bacteria, Diallel, Environment, Frequency distribution, Genes, Heredity, Immunity, Injections, Leaves, Plant diseases, Plant genetics, Upland cotton, Xanthomonas malvacearum.

17291-68

A BIOCHEMICAL DIFFERENCE BETWEEN HEALTHY BEAN LEAVES RESISTANT AND SUSCEPTIBLE TO THE HALO-BLIGHT DISEASE CAUSED BY PSEUDOMONAS PHASEOLICOLA.

H A S Epton B J Deverall

Ann Appl Biol 61(2):255-268 REF

Apr 1968 442.8 AN72

Beans, Biochemistry, Halo blight (beans), Leaves, Linoleic acid, Linolenic acid, Lipids, Plant disease resistance, Pseudomonas phaseolicola.

17292-68

POPULATION DEVELOPMENT OF XIPHINEMA AMERICANUM IN RELATION TO ITS ROLE AS A VECTOR OF TOBACCO RING-SPOT VIRUS.

H Flores R A Chapman

Phytopathology 58(6):814-817 REF

Jun 1968 464.8 P56

Cucumbers, Grapes, Nematode vectors, Nematodes, Population, Ring spot (tobacco), Rosa, Tobacco, Virus diseases (plants), Xiphinema americanum.

17293-68

RESEARCH INTO THE OCCURENCE OF ERGOT, CLAVICEPS PURPUREA (FR.) TUL., ON THE MEADOW PANICLE POA PRATENSIS L. (GER)

K Frauenstein

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 74(7-8):443-459 REF

Jul 1967 464.8 Z3

Claviceps purpurea, Plant pest control, Poa pratensis, Research.

17294-68

EUTYPELLA CANKER ON SPECIES OF ACER IN NEW YORK STATE.

W J French

Diss Abstr Sect B 28(10):3960B

Apr 1968 Z5055.U49D53

Acer, Cytospora, Eutypella parasitica, Host indexing (plants), Humidity, Plant anatomy, Reproduction, Temperature, Tree injuries.

17295-68

COCCOMYCES HETEROPHYLLAE N.SP., HYPODERMATACEOUS FUNGUS FROM THE PERIDERM OF WESTERN HEMLOCK.

A Funk

Can J Bot 45(12):2263-2266

Dec 1967 470 C16C

Bark, Coccomyces heterophyllae, Fungus diseases (plants), Tsuga heterophylla. English and French summaries.

Abstract

17296-68

TRANSMISSION OF BARLEY YELLOW DWARF VIRUS ISOLATES FROM MANITOBA BY FIVE SPECIES OF APHIDS.

C C Gill

Phytopathology 57(7):713-718 REF

Jul 1967 464.8 P56

Acyrtosiphon dirhodum, Agropyron repens, Aphididae, Bromus inermis, Grain, Macrosiphum avenae, Plant disease transmission, Rhopalosiphum maidis, Rhopalosiphum padi, Schizaphis graminum, Yellow dwarf (barley).

Abstract

17297-68

SEASONAL DEVELOPMENT AND EMERGENCE OF TWO SPECIES OF GALL-FORMING APHIDS, PEMPHIGUS BURSARIUS AND P. NORTONI, ASSOCIATED WITH POPLAR TREES IN CALIFORNIA.

A A Grigarick W H Lange

Entomol Soc Amer Ann 61(2):509-514 REF

15 Mar 1968 420 EN82

Aphididae, Pemphigus bursarius, Pemphigus nortoni, Plant galls, Populus, Populus fremonti, Populus nigra.

17298-68

BACTERIAL WILT, PSEUDOMONAS SOLANACEARUM (ERW. SMITH 1896) ERW. SMITH 1914 OF TOMATO IN THE NORTHERN TERRITORY.

J B Heaton C W Benson

Australian Inst Agr Sci J 34(1):37-38

Mar 1968 23 AU74

Bacterial diseases (plants), Bacterial wilt (tomatoes), Plant disease resistance, Pseudomonas solanacearum, Tomatoes.

17299-68

CONTROL OF AERIAL CROWN-GALL DISEASE IN CHERRY TREES WITH SPRAY-APPLIED SYSTEMIC FUNGICIDES.

A W Helton R E Williams

Phytopathology 58(6):782-787

Jun 1968 464.8 P56

Bacterial diseases (plants), Cherries, Crown galls (fruit), Fungicides, Plant protection, Spraying, Trees.

17300-68

MOVEMENT OF TOBACCO MOSAIC VIRUS WITHIN NICOTIANA GLUTINOSA PLANT GRAFTED WITH TOBACCO. (JA)

T Hino H Yoshii

Phytopathol Soc Jap Ann 34(1):61-68 REF F

Jan 1968 464.9 P562

Culture media, Leaves, Mosaic (tobacco), Necrosis, Nicotiana glutinosa, Phloem, Plant disease transmission, Plant diseases, Plant physiology, Plant translocation, Tissue grafting. Abstract in English

17301-68

STUDIES ON THE CHEMOTHERAPY FOR PLANT VIRUS DISEASES. XII. METHODS OF APPLYING ANTIVIRAL CHEMICALS AGAINST INFECTED PLANTS. (JA)

T Hirai T G Yun

Phytopathol Soc Jap Ann 24(2):109-113 REF

Mar 1968 464.9 P562

Biochemistry, Chemicals, Drug therapy, Injections, Mosaic (tobacco), Plant physiology, Roots, Seedlings, Spraying, Tomatoes, Virucides, Virus diseases (plants), Virus x (potatoes). Abstract in English

17302-68

ANTAGONISTIC EFFECTS OF ASPERGILLUS NIGER ON MACROPHOMINA PHASEOLI. (ABSTRACT).

D C N Hsi

Phytopathology 58(6):729

Jun 1968 464.8 P56

Aspergillus niger, Competition, Fungi, Macrophomina phaseoli, Sorghum.

17303-68

THE DEVELOPMENT OF A SET OF UPLAND COTTON LINES FOR DIFFERENTIATING RACES OF XANTHOMONAS MALVACEARUM.

R E Hunter L A Brinkerhoff L S Bird

Phytopathology 58(6):830-832 REF

Jun 1968 464.8 P56

Bacterial diseases (plants), Cotton, Plant breeding, Xanthomonas malvacearum.

17304-68

A PYRENOPHORA-COCHLIOBOLUS (HELMINTHOSPORIUM) DISEASE COMPLEX IN BARLEY.

J A Hutchison J F Schafer

Plant Dis Rep 52(5):395

May 1968 1.9 P69P

Bacterial diseases (plants), Barley, Climate, Cochliobolus sativus, Leaves, Microorganisms, Net blotch (barley), Plant diseases, Pyrenophora teres.

17305-68

ON THE DAMAGE OF CERCOSPORA LEAF SPOT OF SUGAR BEETS CAUSED BY CERCOSPORA BETICOLA SACC. (JA)

W Iida K Kudo T Kimigafukuro

Phytopathol Soc Jap Ann 34(1):1-6

Jan 1968 464.9 P562

Biochemistry, Cercospora beticola, Copper, Fungicides, Leaf spot (sugar beets), Plant diseases, Plant injuries, Plant physiology, Spraying. Abstract in English.

17306-68

HEAT-INDUCED SUSCEPTIBILITY OF BEANS TO RUST.

H Ikegami

Phytopathology 58(6):773-775

Jun 1968 464.8 P56

Fungus diseases (plants), Heat, Lima beans, Plant disease resistance, Rust (beans).

17307-68

PROBLEMS OF CAUSTIC GRAIN IN SCANDINAVIA. (GER)

E A Jamalain

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 74(5):302-311

1967 464.8 Z3

Fusarium nivale, Grain, Helminthosporium gramineum, Plant diseases, Tilletia caries, Ustilago avenae, Ustilago hordei.

17308-68

ISOLATION OF POLYRIBOSOME FROM TOBACCO PLANTS INFECTED WITH TOBACCO MOSAIC VIRUS.

Y Kiho

Jap J Microbiol 12(2):211-217 REF

Jun 1968 448.8 J273

Mosaic (tobacco), Plant biochemistry, Plant genetics, Ribosomes, Tobacco.

Abstract

17309-68

STUDIES ON VIRUS DISEASES OF STONE FRUITS. I. PEACH NECROTIC RINGSPOT AND PRUNE DWARF VIRUS IN JAPAN. (JA)

K Kishi K Takanashi K Abiko

Phytopathol Soc Jap Ann 34(2):143-150 REF

Jul 1968 464.9 P562

Chenopodium amaranticolor, Dwarf disease (prunus), Fruit, Host indexing (plants), Necrosis, Plant disease transmission, Research, Ring spot (peaches), Sap, Temperature, Virus diseases (plants). Abstract in English

17310-68

OCCURRENCE OF RUST ON THE ALEPPO PINE IN ISTRIA. (TT 67-51309) TRANSL. 16915.

J Kispatic
15 P. MAP REF
1967

Cronartium, Fungus diseases (plants), Pinus halepensis, Plantations, Rust (trees), Taxonomy, Tree diseases, Uredinales. Translation from Sumarski List 1(3):26-38, 1959. issued by USDA/ONSF.

17311-68

THE INHERITANCE OF RESISTANCE TO STEM RUST RACES 56 AND 15B-IL (CAN.) IN THE WHEAT VARIETIES HOPE AND H-44.

D R Knott
Can J Genet Cytol 10(2):311-320 REF
Jun 1968 443.8 C16

Breeding, Chromosomes, Hereditary diseases, Immunity, Plant genetics, Stem rust (wheat), Wheat.

17312-68

SURVIVAL OF FOMES ANNOSUS IN THE PRESENCE OF COMPETING FUNGI IN LOBLOLLY PINE ROOTS. (ABSTRACT).

E G Kuhlman
Phytopathology 58(6):729
Jun 1968 464.8 P56

Competition, Decomposition, Fomes annosus, Peniophora gigantea, Pinus taeda, Roots, Soil fungi.

17313-68

HISTOCHEMICAL OBSERVATION OF THE HALO ON THE EPIDERMAL CELL WALL OF BARLEY LEAVES ATTACKED BY ERYSIPE GRAMINIS VAR. HORDEI. (ABSTRACT).

H Kunoh S Akai
Phytopathology 58(6):729-730
Jun 1968 464.8 P56

Barley, Cell wall, Chemistry, Enzymes, Erysiphe graminis, Fungus diseases (plants), Histology, Leaves.

17314-68

THE ASSOCIATION OF FREE AMINO ACIDS OF COTTON LEAVES WITH RESISTANCE TO XANTHOMONAS MALVACEARUM CAUSED BY THE B4 GENE AND THE INFLUENCE OF NITROGEN AND POTASSIUM NUTRITION.

W G Lipke
Diss Abstr Sect B 28(10):4022B
Apr 1968 Z5055.U49D53

Amino acids, Genes, Immunity, Injections, Leaves, Nitrogen, Plant diseases, Plant hardiness, Plant nutrition, Potassium, Reproduction, Upland cotton, Xanthomonas malvacearum.

17315-68

EFFECT OF SOIL TEMPERATURE ON PATHOGENICITY OF PYTHIUM APHANIDERMATUM AND P. MYRIOTYLUM TO RYE AND TOMATO SEEDLINGS. (ABSTRACT).

R H Littrell S M McCarter
Phytopathology 58(6):730
Jun 1968 464.8 P56

Fungus diseases (plants), Pythium aphanidermatum, Pythium myriotylum, Rye, Soil temperature, Tomatoes.

17316-68

RESISTANCE TO BROWN SPOT IN FLUE-CURED TOBACCO. (ABSTRACT).

C E Main J F Chaplin
Phytopathology 58(6):730
Jun 1968 464.8 P56

Alternaria tenuis, Brown spot (tobacco), Flue-cured tobacco, Fungus diseases (plants), Plant disease resistance.

17317-68

SEROLOGICAL DIFFERENTIATION BETWEEN SPECIES OF RHIZOCTONIA AND CERATOBASIDIUM. (ABSTRACT).

W J Manning A C Runyan D J Morton
Phytopathology 57(7):647
Jul 1967 464.8 P56
Ceratobasidium, Rhizoctonia, Serological tests.

17318-68

THE NUCLEIC ACIDS OF CROWN-GALL TUMORS FROM PINTO BEAN LEAVES AND THEIR SIGNIFICANCE TO CROWN-GALL TUMOR INDUCTION BY AGROBACTERIUM TUMEFACIENS.

M W Meyer
Diss Abstr Sect B 28(9):3601B
Mar 1968 Z5055.U49D53
Agrobacterium tumefaciens, Bacterial diseases (plants), Crown galls (beans), Deoxyribonucleic acid, Kidney beans, Leaves, Nitrogen, Phosphorus, Radioactive tracers, Ribonucleic acid.

17319-68

AN INDIRECT ROLE OF CYTOCHROME OXIDASE IN LOSS OF PRUNE DWARF VIRUS INFECTIVITY IN SQUASH TISSUE HOMOGENATES.

G I Mink
Phytopathology 57(7):797-798
Jul 1967 464.8 P56
Cytochrome oxidase, Prune dwarf (squash), Squash, Tissues, Virus diseases (plants).

17320-68

INHIBITION OF TOBACCO MOSAIC VIRUS INFECTION BY COUMARIN.

M D Mishra A Ghosh S P Raychaudhuri
Acta Virol 12(2):173-176
May 1968 448.3 AC85
Chenopodium amaranticolor, Coumarin, Culture media, Datura stramonium, Injections, Mosaic (tobacco), Seedlings, Spraying, Virus diseases (plants).

17321-68

MORPHOLOGY OF STOMATA OF PEACH CULTIVARS DIFFERING IN RESISTANCE TO BACTERIAL SPOT. (ABSTRACT).

J F Moore D H Petersen
Phytopathology 58(6):730
Jun 1968 464.8 P56
Bacterial diseases (plants), Bacterial spot (peaches), Peaches, Plant disease resistance, Plant morphology, Stomata.

17322-68

SEROLOGICAL DIFFERENCES BETWEEN APPARENTLY TYPICAL PEPPER AND TOMATO ISOLATES OF XANTHOMONAS VESICATORIA. (ABSTRACT).

D J Morton L M O'Brien W J Manning
Phytopathology 57(7):647-648
Jul 1967 464.8 P56
Bacterial diseases (plants), Redpeppers (vegetable), Serological tests, Tomatoes, Xanthomonas vesicatoria.

17323-68

FIRST REPORT ON PLANT VIRUS DISEASES IN LEBANON, JORDAN, AND SYRIA.

F Nienhaus A T Saad
Z Pflanzkrankh (pflanzentopathol) Pflanzenschutz 74(7/8):459-471
Jul 1967 464.8 Z3
Agricultural economics, Citrus, Mosaic (alfalfa), Mosaic (cucumbers), Mosaic (tobacco), Vegetables, Virus diseases (plants).

17324-68

STUDIES OF THE SEED-TRANSMISSION OF TOBACCO RINGSPOT VIRUS.

G K Owusu N C Crowley R I B Francki
Ann Appl Biol 61(2):195-202 REF
Apr 1968 442.8 AN72
Biological transport, Ring spot (tobacco), Seed-borne plant diseases, Soybeans, Tobacco, Virus

diseases (plants).

Abstract: Age of plant at time of infection was most important factor determining amount of infected seed produced.

17325-68

INVESTIGATIONS OF PURE CULTURE OF MYCORRHIZAL FUNGI OF PINE, PINUS SILVESTRI L. QK608.0P70P3.

R Pachlewski
192 P. REF WARSAW, FOREST RESEARCH INSTITUTE
1967

Culture media, Fungus diseases (plants), Mycorrhiza, Pinus sylvestris, Plant morphology, Tree diseases.

17326-68

SURVIVAL OF ROOT-INFECTING FUNGI IN SOIL. VIII. DISTRIBUTION OF RHIZOCTONIA SOLANI IN VARIOUS PHYSICAL FRACTIONS OF NATURALLY AND ARTIFICIALLY INFESTED SOILS.

G C Papavizas
Phytopathology 58(6):746-751 REF
Jun 1968 464.8 P56
Fungus diseases (plants), Rhizoctonia solani, Roots, Soil fungi.

17327-68

THE AUTOECIOUS SPECIES OF PUCCINIA ON HELIANTHEAE IN NORTH AMERICA.

J A Parmelee
Can J Bot 45(12):2267-2327 REF
Dec 1967 470 C16C
Fungus diseases (plants), Helianthaceae, Plant taxonomy, Puccinia, Uredinales. Includes key
Abstract

17328-68

IRON COMPOUNDS AND PLANT NUTRITION.

C A Price
Annu Rev Plant Physiol 19:239-248 REF
1968 450 AN78
Chlorosis (plants), Iron compounds, Plant nutrition, Plant nutritional deficiencies, Plant physiology, Research.

17329-68

DUTCH ELM DISEASE FOUND IN SOUTH DAKOTA.

H Randall C M Nagel L S Wood
Plant Dis Rep 52(5):349,MAP
May 1968 1.9 P69P
Ceratocystis ulmi, Dieback (ulmus), Laboratories, Pathogen, Plant diseases, Ulmus americana, Wood decay.

17330-68

COMPARATIVE STUDIES CONCERNING TOXICITY AND SELECTIVITY OF STERILIZATION MEASURES FOR SOIL MICROORGANISMS. (GER)

H Reber
Z Pflanzkrankh (pflanzentopathol) Pflanzenschutz 74(7-8):414-426 REF
Jul 1967 464.8 Z3

Bactericides, Chemical control (plant diseases), Chloropicrin, Fungus diseases (plants), Methyl bromide, Methyl isothiocyanate, Soil microorganisms, Soil sterilization, Toxicology. English summaries

17331-68

COMPARATIVE STUDIES INTO THE RECOLONIZATION OF CHEMICALLY TREATED SOIL. (GER)

H Reber
Z Pflanzkrankh (pflanzentopathol) Pflanzenschutz 74(7-8):427-438
Jul 1967 464.8 Z3

Bactericides, Chemical control (plant diseases), Chloropicrin, Fungus diseases (plants), Soil microorganisms, Soil sterilization. English summary

17332-68

ECOLOGY OF FUNGI. QK601.0R6.

R K Robinson

116 P. LONDON. ENGLISH UNIVERSITIES

PRESS LIMITED

1967

Ecology, Fungi, Plant diseases, Roots, Saprophytes.

17333-68

RESPONSE OF RHIZOCTONIA BATATICOLA TO GROWTH REGULATORS, TRACE ELEMENTS AND VITAMINS.

H C Sankhla R L Mathur

Indian Phytopathol 20(2):142-145 REF

Jun 1967 464.8 IN2

Biochemistry, Culture media, Fungi, Micronutrients, Plant regulators, Rhizoctonia bataticola, Root rot (cotton), Vitamins.

17334-68

POSITION AND DEVELOPMENT OF THE CONTROL OF GRAIN DISEASES THROUGH SEED TREATMENT. (GER)

G Schuhmann

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz

74(3):155-167 REF

Mar 1967 464.8 Z3

Chemical control (plant diseases), Grain, Plant physiological diseases, Seed treatment, Seed-borne plant diseases. English summary

17335-68

ELECTRON MICROSCOPIC STUDIES ON PLANT VIRUSES. (JA)

E Shikata

Phytopathol Soc Jap Ann 33(3):124-125

Jun 1969 464.9 P562

Electron microscopy, Enation mosaic (peas), Phytopathology, Research, Virus diseases (plants), Wound tumor virus, Yellow dwarf (potatoes).

17336-68

BIOCHEMICAL PROPERTIES OF THE INCREASED PROTEINS IN DISEASED LEAVES OF RICE PLANTS IN THE EARLY STAGE OF INFECTION BY HELMINTHOSPORIUM ORYZAE. (JA)

J Shishiyama T Oguchi S Akai

Phytopathol Soc Jap Ann 34(1):23-27 REF

Jan 1968 464.9 P562

Amino acids, Aspartic acid, Beta-amylase, Biochemistry, Glutamic acid, Helminthosporium oryzae, Leaves, Plant diseases, Proteins, Rice, Seed germination, Starches. Abstract in English

17337-68

THE CHANGE OF PROTEIN FRACTIONS IN DISEASED LEAVES OF RICE PLANTS IN THE EARLY STAGE OF INFECTION BY HELMINTHOSPORIUM ORYZAE. (JA)

J Shishiyama T Oguchi S Akai

Phytopathol Soc Jap Ann 34(1):16-22 REF

Jan 1968 464.9 P562

Chromatography, Culture media, Electrophoresis, Helminthosporium oryzae, Injections, Leaves, Plant diseases, Plant morphology, Proteins, Rice, Temperature, Time. Abstract in English.

17338-68

HISTOPATHOLOGICAL STUDIES OF RED CLOVER ROOTS INFECTED BY FUSARIUM ROSEUM.

W M Siddiqui P M Halisky

Phytopathology 58(6):874-875

Jun 1968 464.8 P56

Fungus diseases (plants), Fusarium roseum, Histology, Red clover, Research, Roots.

17339-68

PATHOGENESIS IN DUTCH ELM DISEASE.

D Singh

Diss Abstr Sect B 28(11):4378B-4379B

May 1968 Z5055.U49D53

Amino acids, Dieback (ulmus), Injections, Ninhydrin reaction, Nitrogen compounds, Proline, Tree diseases, Xylem.

17340-68

MASS SELECTION FOR RESISTANCE TO SELENOPHOMA BROMIGENA IN NORTHERN AND SOUTHERN TYPES OF BROMUS INERMIS.

J D Smith R P Knowles

Can J Plant Sci 47(6):679-681

Nov 1967 450 C16

Bromus inermis, Fungus diseases (plants), Plant disease resistance, Plant genetics, Selenophoma bromigena.

Abstract

17341-68

HOT-WATER TREATMENT OF SUGARCANE SEED MATERIAL. A SIMPLE METHOD SUITABLE FOR RURAL AREAS.

K V Srinivasan J T Rao

Indian Farming 18(1):25-26,29

Apr 1968 22 IN283

Equipment, Fungicides, Plant disease control, Seed treatment, Sugarcane.

17342-68

FUNGICIDAL ACTION OF TRIPHENYL TIN HYDROXIDE TOWARD CERCOSPORA BETICOLA ON SUGAR BEET LEAVES.

G F Stallknecht L Calpouzos

Phytopathology 58(6):788-790

Jun 1968 464.8 P56

Cercospora heticola, Chemical reactions, Fungicides, Fungus diseases (plants), Leaves, Sugar beets, Triphenyltin hydroxide.

17343-68

A RAPID TEST FOR AN ANTIFUNGAL SUBSTANCE PRODUCED BY A WOODINHABITING FUNGUS IN CULTURE.

M A Stillwell W A Hodgson

Can J Microbiol 14(7):807-808

Jul 1968 448.8 C162

Betula alleghaniensis, Biological assay, Culture media, Fungicides, Fungus diseases (plants), Late blight (potatoes), Research, Seed germination.

17344-68

LIPID METABOLISM IN CLUBROOT OF CABBAGE.

J O Strandberg

Diss Abstr Sect B 28(11):4379B

May 1968 Z5055.U49D53

Brassica oleracea, Carbon isotopes, Chromatography, Clubroot (cabbage), Fatty acids, Glucose, Lipids, Metabolism, Plant diseases, Plasmodiophora brassicae.

17345-68

THE EFFECT OF SOIL MOISTURE ON CORN STALK ROT.

D R Sumner

Phytopathology 58(6):761-765 REF

Jun 1968 464.8 P56

Corn, Fungus diseases (plants), Soil moisture, Stem rot (corn), Trichoderma viride.

17346-68

FIELD TESTS FOR CONTROL OF RED PINE SEEDLING DISEASES.

J R Sutherland

Phytoprotection 48(2):58-67

Jun 1967 464.8 P566

Captan, Chemical control (plant diseases), Chemical control (weeds), Nematodes, Pinus resinosa, Plant diseases, Plant physiology, Seed germination, Seedlings, Soil fumigation, Trizone. French summary.

17347-68

EVIDENCE FOR MULTIPLICITY REACTIVATION OF ULTRAVIOLET LIGHT IRRADIATED RIBONUCLEIC ACID ISOLATED FROM TOBACCO MOSAIC VIRUS.

T Takahashi T Hayashi Y Kiho

Jap J Microbiol 12(2):187-193 REF

Jun 1968 448.8 J273

Mosaic (tobacco), Plant biochemistry, Plant genetics, Ribonucleic acid, Tobacco, Ultraviolet rays, Virology.

Abstract

17348-68

THE ULTRASTRUCTURE OF OLPIDIUM BRASSICAE. I. FORMATION OF SPORANGIA.

J H M Temmink R N Campbell

Can J Bot 46(8):951-956 REF

Aug 1968 470 C16C

Lettuce, Olpidium brassicae, Plant morphology, Plant physiology, Roots, Sporangia.

17349-68

EFFECTS OF MAIZE DWARF MOSAIC ON GRAIN SORGHUM PERFORMANCE. (ABSTRACT).

R W Toler A J Bockholt R H Leisy

Phytopathology 58(6):731

Jun 1968 464.8 P56

Dwarf disease (corn), Epidemiology, Mosaic (corn), Sorghum, Virus diseases (plants).

17350-68

A NEW STRAIN OF POTATO VIRUS Y ISOLATED BURLEY TOBACCO IN JAPAN. (JA)

K Tomaru A Udagawa

Phytopathol Soc Jap Ann 34(2):77-84 REF

Mar 1968 464.9 P562

Bush redpeppers (vegetable), Epidemiology, Injections, Leaves, Temperature, Time, Virus diseases (plants), Virus Y (tobacco). Abstract in English

17351-68

SOME PROPERTIES OF A CUCUMBER MOSAIC VIRUS STRAIN ISOLATED FROM PRUNUS SPP.

J H Tremaine

Phytopathology 58(6):797-801 REF

Jun 1968 464.8 P56

Cucumbers, Mosaic (cucumbers), Properties, Prunus, Virus diseases (plants).

17352-68

STIMULATION OF TOBACCO MOSAIC VIRUS-INDUCED LESIONS ON BEAN BY FLUORIDE.

M Treshow G Dehn F M Harner

Phytopathology 57(7):756-758

Jul 1967 464.8 P56

Beans, Fluorides, Mosaic (beans).

Abstract

17353-68

STUDIES AND OBSERVATIONS ON ARMILLARIA MELLEAE (VAHL.) QUEL. AS THE CAUSE OF MASS DYING-OFF OF FOREST STANDS. (TT 66-57031) TRANSL. 16925.

Z Twarowski I Twarowska

61 P. REF

1967

Armillaria mellea, Economics, Forests, Fungi, Fungus diseases (plants), Research, Tree injuries. Translation from Prace Instytutu Badawczego Lesnictwa 192:3-63 1959. issued by USDA/ONSF

17354-68

THE EFFECT OF HOT WATER TREATMENT ON A VIRUS OF OPUNTIA EXALTATA.

F A Van Der Meer

Neth J Plant Pathol 73(2):58-59

1967 464.8 T44

Hot water treatment (plants), Opuntia exaltata, Plant abnormalities, Virus diseases (plants). Dutch summary

17355-68

INHIBITION OF THE TRANSMISSION BY APHIDS OF SOME PLANT VIRUSES BY OIL PULVERIZATION. (FR)

J Vanderveken N Vilain

Ann Epiphyt 18:125-132

1967 464.9 F84AN

Aphididae, Emulsions, Insect vectors, Mosaic (beans), Mosaic (sugar beets), Myzus persicae,

Oils, Plant disease transmission, Virus diseases (plants), Virus y (potatoes), Yellow mosaic (beans). English and German summaries

17356-68

THE ELECTROPHORESIS AND HISTOCHEMICAL LOCALIZATION OF CERTAIN RESPIRATORY ENZYMES OF TOBACCO INFECTED BY PHYTOPHTHORA PARASITICA VAR. NICOTIANAE.

J A Veech

Diss Abstr Sect B 28(10):3964B

Apr 1968 Z5055.U49D53

Dehydrogenases, Electrophoresis, Enzymes, Fungus diseases (plants), Glucose, Histochemistry, Immunity, Peroxidases, Phytophthora parasitica, Plant respiration, Spectrophotometry, Tobacco.

17357-68

FACTORS LIMITING THE SURVIVAL OF ASCOCHYTA SPP. OF PEAS IN SOIL.

V R Wallen J Jeum

Can J Bot 46(10):1279-1286 MAP

Oct 1968 470 C16C

Ascochyta pinodella, Ascochyta pinodes, Ascochyta pisi, Fungus diseases (plants), Peas, Temperature, Time.

17358-68

VIRUS DISEASES IN ORNAMENTAL PLANTS. (GER)

B Weil

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 74(3):167-175

Mar 1967 464.8 Z3

Agricultural economics, Annual plants, Dianthus caryophyllus, Ornamental plants, Perennial plants, Phytopathology, Virus diseases (plants). English summary

17359-68

HYBELLE AND SANIBEL, MULTIPLE DISEASE RESISTANT FI HYBRID CABBAGES.

P H Williams J C Walker G S Pound

Phytopathology 58(6):791-796

Jun 1968 464.8 P56

Cabbage, Fusarium, Plant breeding, Plant disease resistance, Rhizoctonia.

17360-68

FUNGISTATIC PROPERTIES OF SOILS EXPOSED TO DIFFERENT ANTECEDENT ENVIRONMENTS.

G M Willis L E Williams

Can J Microbiol 14(7):755-761 REF

Jul 1968 448.8 C162

Agar, Assay, Bipolaris sorokiniana, Environment, Fungus diseases (plants), Nutrition, Oats, Roots, Soil fungi.

17361-68

DELAYED SYMPTOM EXPRESSION OF FOMES ANNOSUS ROOT ROT OF PINE. (ABSTRACT).

W Witcher C L Lane L W Baxter

Phytopathology 58(6):732

Jun 1968 464.8 P56

Fomes annosus, Fungus diseases (plants), Pinus, Root rot (pinus).

17362-68

BIOCHEMICAL EXAMINATION OF STRAINS OF TOBACCO MOSAIC VIRUS MUTANTS. (GER)

H G Wittmann

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 74(3):189-195

Mar 1967 464.8 Z3

Electrophoresis, Mosaic (tobacco), Proteins, Ribonucleic acid, Virus diseases (plants), Virus mutation. English summary

17363-68

WOOD INHABITING FUNGI IN A PINE PLANTATION IN AUSTRALIA.

O Yaartaja

Mycopathol Mycol Appl 34(1):81-89 REF

19 Jan 1968 450 M994

Fungi, Fungus diseases (plants), Pinus radiata, Stereum sanguinolentum. Fungi potentially control agents of S. sanguinolentum.

Abstract

17364-68

SUSCEPTIBILITY OF DARWIN HYBRID TULIPS TO TULIP BREAKING VIRUS.

A Yamaguchi

Phytopathology 58(6):878-879

Jun 1968 464.8 P56

Mosaic (tulipa), Plant breeding, Plant disease resistance, Tulipa, Virus diseases (plants).

17365-68

PENETRATION AND COLONIZATION OF RESISTANT AND SUSCEPTIBLE SOYBEAN PODS BY DIAPORTHE SOJAE. (ABSTRACT).

F A Yelen H W Crittenden

Phytopathology 57(7):649

Jul 1967 464.8 P56

Crop varieties, Diaporthe sojae, Fungus diseases (plants), Plant disease resistance, Soybeans.

17366-68

THE TERM HYPERSENSITIVE REACTION IS INADEQUATE TO EXPLAIN THE NECROTIC LESION FORMATION OF NICOTIANA GLUTINOSA INFECTED WITH TOBACCO MOSAIC VIRUS. (JA)

H Yoshii

Phytopathol Soc Jap Ann 34(1):69-72 REF

Jan 1968 464.9 P562

Colletotrichum lindemuthianum, Injections, Leaves, Mosaic (tobacco), Necrosis, Nicotiana glutinosa, Plant abnormalities, Plant cytology, Plant translocation, Puccinia graminis, Virus diseases (plants). Abstract in English.

17367-68

INTERNATIONAL DISPERSAL OF FUNGI.

J C Zadoks

Neth J Plant Pathol 73(SUP.1):61-80 REF

1967 464.8 T44

Fungi dissemination, Fungus diseases (plants), Phytopathology, Plant disease control, Plant quarantine, Plant translocation.

17368-68

A COMPARISON OF CELL WALL COMPOSITION IN BANANA PLANTS RESISTANT OR SUSCEPTIBLE TO FUSARIUM OXYSPORUM F. SP. CUBENSE.

G E Zarogian C H Beckman

Phytopathology 58(6):733-735 REF

Jun 1968 464.8 P56

Bananas, Biological assay, Fungus diseases (plants), Fusarium oxysporum, Plant disease resistance.

ARTHROPODS

17369-68

CONTROL OF THE WHITE MITE ON COTTON WITH VARIOUS POWDER AND DUST PRODUCTS. (POR)

P R Almeida R D Cavalcante A A Holanda

Biologico 33(11):251-253

Nov 1967 442.8 B529

Chemical control (insects), Cotton, Ddt, Mites, Pesticides.

17370-68

TOXICITY OF PETKOLIN AGAINST COTTON APHIDS (HEMIPTERA: APHIDIDAE).

M Anwarullah S S Qureshi S H Ashrafi

Pakistan J Sci Indus Res 10(4):251-253 REF

Oct 1967 475 P174

Aphis gossypii, Chemical control (insects), Cotton, Forests, Insecticides, Plant pest control, Vegetables.

Abstract

17371-68

THE AETIOLOGY AND DEVELOPMENT OF DAMAGE IN YOUNG FRUIT TREES INFESTED WITH FRUIT TREE RED SPIDER MITE, PANONYCHUS ULMI (KOCH).

D J Avery J B Briggs

Ann Appl Biol 61(2):277-288 REF

Apr 1968 442.8 AN72

Apples, Fruit, Panonychus ulmi, Photosynthesis, Plant injuries, Plums, Trees.

Abstract: Radioactivity was detected in the growing regions of plants remote from mature leaves on which ¹⁴C-labelled mites were confined.

17372-68

A COMPLEX OF FUNGI MUTUALISTICALLY INVOLVED IN THE NUTRITION OF THE AMBROSIA BEETLE XYLEBORUS FERRUGINEUS.

J M Baker D M Norris

J Invertebrate Pathol 11(2):246-250

Aug 1968 421 J826

Cephalosporium, Culture media, Fungi, Fungus diseases (insects), Fusarium solani, Injections, Insect nutrition, Platypodidae, Xylehorus ferrugineus.

17373-68

SOME OBSERVATIONS ON VECTORS AND TRANSMISSION OF TOBACCO ETCH VIRUS.

H R Boyce C D McKeen

Entomol Soc Ontario Proc 97:68-71

1966 420 ON8

Etch (tobacco), Insect pests, Insect vectors, Macrosiphum euphorbiae, Myzus persicae, Physalis heterophylla, Plant disease transmission, Tobacco.

17374-68

BIOLOGICAL CONTROL. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

R L Douth

3-30 REF NEW YORK, ACADEMIC PRESS

1967

Biological control (pests), Ecology, Insect histology, Insect pests, Parasitism, Taxonomy.

17375-68

A MONOGRAPH OF THE IMMATURE STAGES OF ORIENTAL TIMBER BEETLES (CERAMBYCIDAE) QL596.0C40D8.

E A J Duffy

434 P., LONDON, BRITISH MUSEUM (NATURAL HISTORY)

1968

Cerambycidae, Physiology, Plants, Pupae, Research.

17376-68

INSECTS ATTACKING ROSE HIPS IN EUROPE.

O Eichhorn

Commonwealth Inst Biol Contr Tech Bull 8:83-102, MAP REF

Mar 1967 423.92 C733T

Insect pests, Rosa rubiginosa, Rose hips. Possible agents of biological control of r. rubiginosa

Abstract

17377-68

COMPARATIVE APHID-TRANSMISSIBILITY OF BEAN YELLOW MOSAIC VIRUS FROM PEA AND BEAN CORRELATED WITH CYTOPLASMIC INCLUSIONS. (ABSTRACT).

I R Evans F W Zettler

Phytopathology 58(6):727-728

Jun 1968 464.8 P56

Aphis craccivora, Beans, Cytoplasm, Insect vectors, Myzus persicae, Peas, Virus diseases (plants), Yellow mosaic (beans).

17378-68

A COMPARISON OF SEASON-LONG COTTON-PEST-CONTROL PROGRAMS IN CALIFORNIA DURING 1966.

L. A. Falcon R. Van Den Bosch C. A. Ferris L. K. Stromberg L. K. Etzel R. E. Stinner T. F. Leigh
J Econ Entomol 61(3):633-642 REF
Jun 1968 421 J822
Biochemistry, Cotton, Insect pests, Insecticides, Pest control, Temperature, Weather. Species were: *Trichoplusia lygus hesperus*, *T. ni*, *Heliothis zea*, *Orius tristicolor*, *Collops vittatus*, *Nabis americanus*, *Chrysopa carnea*

17379-68

RESISTANCE OF BARLEY (*HORDEUM VULGARE* L. EMEND. LAM.) TO CEREAL LEAF BEETLE (*OULEMA MELANOPUS* L.).

S. K. Hahn

Crop Sci 8(4):461-464

Aug 1968 64.8 C883

Barley, Eggs, Genetics, Inheritance, Laboratories, *Oulema melanopus*, Research.

17380-68

THE ROLE OF SECONDARY PLANT SUBSTANCES IN THE FOOD SPECIFICITY OF THE COLORADO POTATO BEETLE.

T. H. Hsiao G. Fraenkel

Entomol Soc Amer Ann 61(2):485-493 REF

15 Mar 1968 420 EN82

Caterpillars, Chemical control (insects), Chrysomelidae, Insect adaptation, Insect morphology, Insect nutrition, Leptinotarsa decemlineata, Plant composition, Plant pest resistance, Solanaceae.

17381-68

SELECTION AND SPECIFICITY OF THE COLORADO POTATO BEETLE FOR SOLANACEOUS AND NONSOLANACEOUS PLANTS.

T. H. Hsiao G. Fraenkel

Entomol Soc Amer Ann 61(2):493-503 REF

15 Mar 1968 420 EN82

Asclepias syriaca, *Asclepias tuberosa*, *Capsella bursa-pastoris*, Caterpillars, Chrysomelidae, Insect adaptation, Insect morphology, Insect nutrition, *Lactuca sativa*, *Leptinotarsa decemlineata*, Plant composition, Solanaceae.

17382-68

ISOLATION OF PHAGOSTIMULATIVE SUBSTANCES FROM THE HOST PLANT OF THE COLORADO POTATO BEETLE.

T. H. Hsiao G. Fraenkel

Entomol Soc Amer Ann 61(2):476-484 REF

15 Mar 1968 420 EN82

Chemical control (insects), Chrysomelidae, Insect behavior, Insect nutrition, *Leptinotarsa decemlineata*, Potatoes, Stimulants.

17383-68

OCCURRENCE OF HARMFUL INSECTS IN DIRECT SOWN PADDY FIELD IN WARMER REGIONS AND THEIR CONTROL. MAINLY ON THE ECOLOGY OF INSECTS WHICH CARRY PADDY VIRUS. TRANSL. 16911.

T. Kayoji

17 P.

Field crops, Insect control, Insect ecology, Insect pests, Insect vectors, Rice, Transplanting, Virus diseases (plants). Translation from Agriculture horticulture. 39(5):785-790, 1964, translated by Kazuko Nagatomi.

17384-68

STUDIES ON THE ECOLOGY OF RICE GREEN CATERPILLAR. I. ON THE HABIT OF PROGRESS IN THE NORTH PART OF HOKKAIDO (KAMIKAWA AREA). II. ON THE ACTIVE TIME OF ADULTS BY NIGHT. III. ON THE RELATION BETWEEN THE ACTIVITY OF ADULTS BY NIGHT AND WEATHER. TRANSL. 16696.

H. Kihata H. Inoue

16 P.

Caterpillars, Insect behavior, Insect ecology, Insect pests, Light traps, Research, Rice, Tables (data), Weather. Translation from Ann. Rpt. Soc. Plant Protect. North Japan. 15:87-93, 1964, translated by Takashi Ogawa.

17385-68

ECOLOGY AND CONTROL OF SMALL BROWN PLANTHOPPER (*LAODELPHAX STRIATELLUS* FALLEN). TRANSL. 16695.

R. Kishimoto

12 P. REF

Chemicals, Ecology, Hibernation, Insect control, *Laodelphax striatellus*, Morphology, Research, Rice, Transplanting. Translation from Shokuhitsu Boki 20(3):126-130 translated by Takashi Ogawa

17386-68

MICROBES AND TOXIC CHEMICALS IN THE STRUGGLE AGAINST PLANT PESTS. (JPRS 44,489) TRANSL. 16903.

N. A. Krasil'nikov

14 P. REF

26 Feb 1968

Bacteria, Bacterial diseases (plants), Biochemistry, Biological control (pests), Chemical control (pests), Fungus diseases (plants), Insect pests, Insect vectors, Pesticides, Plants, Toxins. Translation from Sel'skokhozyaystvennaya biologiya 6:857-860, 1967, issued by CFSTI.

17387-68

SEASONAL ABUNDANCE OF INSECT PESTS AND VIRUS DISEASES IN THE RICE FIELD OF SEEDLING CULTIVATION. TRANSL. 16906.

K. Kumamoto

6 P.

Field crops, Insect pests, Plant injuries, Rice, Seedlings, Surveys, Temperature, Tillage, Virus diseases (plants), Weather. Translation from Assoc. Plant Protect. Kyushu Proc. 8: 33-35, 1962 translated by Takashi Ogawa

17388-68

EMERGENCE AND DAMAGE OF WHITE-BACK PLANTHOPPERS AND BROWN PLANTHOPPERS, AND DAMAGE-PREVENTING MEASURES. TRANSL. 16598.

E. Kuno

16 P.

Chemical control (insects), Cicadellidae, Ecology, Environment, Insecticides, Plant injuries, Rice, Surveys. Translation from Agriculture and Horticulture 39(9):1411-1415, 1965, translated by Mary Ellen Rhoades

17389-68

A COMPARISON OF PREDATOR POPULATIONS IN COTTON UNDER DIFFERENT CONTROL PROGRAMS IN MISSISSIPPI.

M. L. Laster J. R. Brazzel

J Econ Entomol 61(3):714-719 REF

Jun 1968 421 J822

Cotton, Crops, Dosage, Geocoris, Insect control, Insect pests, Insecticide application, Insecticides, *Oxyopes salticus*, Population, Predaceous insects, Research.

17390-68

FALL ARMYWORM RESISTANCE IN PEARL MILLET.

D. B. Leuck C. M. Taliaferro R. L. Burton G. W.

Burton M. C. Bowman

J Econ Entomol 61(3):693-695

Jun 1968 421 J822

Antibiosis, Breeding, Immunity, Pearlmillet, Plant extracts, Plant hardiness, Seedlings, Spodoptera frugiperda.

17391-68

EPIPHYTOLOGY OF ONION YELLOW DWARF.

R. Jr. Louie

Diss Abstr Sect B 28(10):3961B

Apr 1968 Z5055, U49D53

Apididae, Economics, Epiphytology, Hibernation, Insect control, Insect dissemination, Insect traps, Maleic hydrazide, Plant disease control, Plant disease transmission, Seedlings, Virus diseases (plants), Yellow dwarf (onions).

17392-68

EFFECTIVENESS AND PERSISTENCE OF LOW DOSAGES OF AZINPHOSMETHYL FOR CONTROL OF THE CODLING MOTH.

H. F. Madsen K. Williams

J Econ Entomol 61(3):878-879

Jun 1968 421 J822

Apples, Azinphosmethyl, Biochemistry, Carposcapa pomonella, Chemical control (insects), Dosage, Fruit, Insect pests, Insecticide application, Insecticides, Leaves, Spraying.

17393-68

OBSERVATIONS ON INSECTS ATTACKING WILD RICE IN MANITOBA.

J. C. E. Melvin

Entomol Soc Manitoba Proc 22:6-11

1966 420 EN88

Apamea apamiformis, Beneficial insects, Insect biology, Insect pests, Wildrice.

Abstract

17394-68

EFFECT OF AUTUMN INSECTICIDE APPLICATION ON THE CONTROL OF THE GREEN RICE LEAFHOPPER OF THE LAST GENERATION. TRANSL. 16918.

T. Miyazawa T. Yanagi

4 P.

Cicadellidae, Insect vectors, Insecticide application, Insecticides, Plant disease transmission, Rice, Temperature, Virus diseases (plants), Weather, Yellow dwarf (rice). Translation from Kanto-Tosan Plant Protect. Soc. Proc. 10:46, 1963

17395-68

ELECTROMAGNETIC ENERGY. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

S. O. Nelson

89-145 REF NEW YORK, ACADEMIC PRESS

1967

Electromagnetic waves, Lethal factors, Light traps, Pest control, Photoperiodism, Radiation, Ultraviolet rays.

17396-68

THE DISTRIBUTION OF RICE STEM BORER IN THE RICE STUBBLES, WITH SPECIAL REFERENCE TO THE POSSIBILITY OF ITS DISPERSION FROM THE FRAME FOR DESICCATING REAPED RICE PLANTS. TRANSL. 16893.

A. Otake S. Oda

9 P.

Hibernation, Insect dissemination, Insects, Laboratories, Larvae, Plant injuries, Research, Rice. Translation from Assoc. Plant Protect. Hukuriku Proc. 10:9-11 translated by Y. Ito

17397-68

CHANGES IN RELATIVE VIRUS CONCENTRATION IN ENDRIA INIMICA IN RELATION TO ITS ABILITY TO TRANSMIT WHEAT STRIATE MOSAIC VIRUS.

Y. C. Paliwal

Phytopathology 58(3):386-387

Mar 1968 464.8 P56

Endria inimica, Insect vectors, Striate mosaic (wheat), Temperature, Wheat.

17398-68

ESTABLISHMENT OF A NURSERY FOR EVALUATION OF RESISTANCE OF STRAINS OF WHEAT TO THE WHEAT STEM SAWFLY.

L. K. Peterson H. McKenzie N. D. Holmes

J Econ Entomol 61(3):836-838

Jun 1968 421 J822

Cephus cinctus, Immunity, Insect traps, Mortality, Nurseries, Plant hardiness, Temperature, Triticum aestivum, Weather, Wheat.

17399-68

A PRELIMINARY STUDY OF CORN STUNT VECTOR POPULATIONS IN RELATION TO CORN PLANTING DATES IN MISSISSIPPI. NOTES ON DISEASE INCIDENCE AND SEVERITY.

H. N. Pitre

J Econ Entomol 61(3):847-849 REF

Jun 1968 421 J822

Graminella nigrifrons, Insect vectors, Planting, Population, Research, Stunt (corn), Temperature, Virus diseases (plants), Weather.

17400-68

PRELIMINARY DATA ON THE ECOLOGY OF THE COFFEE WORM ARACERUS FASCICULATUS DE GEER. (POR)

D Puzzi H F Pereira

Biologico 33(5):97-101

May 1967 442.8 B529

Aracercus fasciculatus, Coffee, Curculionidae, Insect ecology.

17401-68

PERCENTAGE OF VIRULIFEROUS LEAFHOPPERS COLLECTED FROM RICE FIELDS AFFECTED WITH YELLOW DWARF. (CONT.) TRANSL. 16916.

A Shinkai

5 P.

Cicadellidae, Insecticides, Insects, Research, Rice, Sampling (statistics), Yellow dwarf (rice), Translation from Kanto-Tosan Plant Protect. Soc. Proc. 8:12 translated by Kenji Nishimura

17402-68

INTEGRATED CONTROL. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

R F Smith R Van Den Bosch

295-340 REF NEW YORK, ACADEMIC PRESS

1967

Crop yields, Ecology, Injuries, Insect evolution, Insecticides, Integrated control (insects), Population statistics.

17403-68

CONSTITUENTS OF THE COTTON BUD. XI. STUDIES OF A FEEDINGSTIMULANT COMPLEX FROM FLOWER PETALS FOR THE BOLL WEEVIL.

R F Struck J Frye Y F Shealy P A Hedin A C

Thompson

J Econ Entomol 61(3):664-667

Jun 1968 421 J822

Anthonomus grandis, Chromatography, Feeding, Lead acetate, Plant hudding, Plant extracts, Precipitation, Research, Stimulants, Upland cotton.

17404-68

STUDIES ON THE OPTIMUM CONCENTRATION OF SPRAY LIQUID OF DIPTEREX FOR SMALL RICE LEAF MINER CONTROL. TRANSL. 16728.

S Takano S Iwamoto

4 P.

Chemical control (insects), Insecticides, Research, Rice, Spraying, Surveys, Trichlorfon. Translation from Kanto-Tosan Plant Protect. Soc. 8:45 translated by h. Kazano

17405-68

MICROBIAL PESTICIDES. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

Y Tanada

31-88 REF NEW YORK, ACADEMIC PRESS

1967

Biological transport, Chemical control (insects), Environment, Parasitic insects, Pest control, Pesticides, Toxicology.

17406-68

MORPHOLOGICAL AND BIOLOGICAL STUDIES OF THYSANOPTEROUS INSECTS ON RICE PLANTS. TRANSL. 16727.

T Tanaka

11 P.

Biology, Food plants, Hibernation, Insect pests, Morphology, Plant injuries, Research, Rice, Thysanoptera. Translation from Oyo Konchu. 7(3):125-133

17407-68

INTRA-SPECIFIC MECHANISMS WITH SPECIAL REFERENCE TO APHID POPULATIONS.

M J Way

Roy Entomol Soc London Symp 4:18-36 REF

1968 420 R81

Aphididae, Crops, Hibernation, Insect behavior, Insect control, Insect migration, Laboratories, Physiology, Population statistics, Research.

17408-68

ANTIFEEDANTS. IN: KILGORE, W. W. AND DOUTT, R. L., PEST CONTROL: BIOLOGICAL, PHYSICAL, AND SELECTED CHEMICAL METHODS. SB950.0K5.

D P Wright

287-293 REF NEW YORK, ACADEMIC PRESS

1967

Carbamates, Crop yields, Extracts, Histology, Pest control.

17409-68

APPENDIX TO PEST OF CROPS IN WARM CLIMATES AND THEIR CONTROL. V. CONTROL MEASURES (APPENDIX TO SUPPLEMENT 7, 2ND ENLARGED AND REVISED EDITION). 423 W99AE.

R Wyniger

162P

1968

Chemicals, Climate, Crops, Insect control, Insect pests.

NEMATODES

17410-68

LESION NEMATODE INJURY TO CABBAGE. (ABSTRACT).

J R Acedo R A Rohde

Nematologica 14(1):1

1968 436.8 N342

Cabbage, Histology, Nematodes, Phenol compounds, Plant injuries, Pratylenchus penetrans.

17411-68

INHERITANCE OF RESISTANCE TO HETERODERA AVENAE IN BARLEY.

K Andersen S Andersen

Nematologica 14(1):128-130

1968 436.8 N342

Barley, Genes, Heterodera avenae, Nematodes, Plant genetics, Plant nematode resistance, German summary

17412-68

VARIATION IN INFECTION ABILITY OF CYSTS OF HETERODERA AVENAE.

K Andersen

Nematologica 14(1):149-150

1968 436.8 N342

Cysts, Heterodera avenae, Larvae, Nematodes, Soils.

17413-68

ELECTRON MICROSCOPIC OBSERVATIONS OF CATENARIA SP., A NEMATOPHAGOUS FUNGUS. (ABSTRACT).

S Badgett W Birchfield

Phytopathology 58(6):725

Jun 1968 464.8 P56

Catenaria, Electron microscopes, Fungi, Microscopy, Nematodes, Parasitism.

17414-68

ASSAYS OF NATURAL POPULATIONS OF CERTAIN PLANT-PARASITE NEMATODES AS INFLUENCED BY STORAGE CONDITIONS AND EXTRACTION PROCEDURES. (ABSTRACT).

K R Barker C J Nusbaum W F Congleton

Nematologica 14(1):3

1968 436.8 N342

Nematodes, Parasitism, Plant extracts, Population statistics, Soil temperature, Storage.

17415-68

SEASONAL POPULATION DYNAMICS OF BELONOLAIMUS LONGICAUDATUS, MELOIDOGYNE INCOGNITA, PRATYLENCHUS

ZEAE, TRICHODORUS CHRISTIEI AND TYLENCHORHYNCHUS CLAYTONI. (ABSTRACT).

K R Barker

Nematologica 14(1):2-3

1968 436.8 N342

Belonolaimus longicaudatus, Demography, Ecology, Meloidogyne incognita, Nematodes, Pratylenchus zcae, Trichodorus christiei, Tylenchorhynchus claytoni.

17416-68

INOCULATION TRAIL WITH MELOIDOGYNE JAVANICA ON OKRA (ABELMOSCHUS ESCULENTUS).

R B S Birat

Nematologica 14(1):155-156

1968 436.8 N342

Injections, Larvae, Meloidogyne javanica, Microscopy, Nematodes, Okra, Soils, Tomatoes.

17417-68

SOME EFFECTS OF PRATYLENCHUS BRACHYURUS UPON SPANISH PEANUTS. (ABSTRACT).

T E Boswell

Nematologica 14(1):3-4

1968 436.8 N342

Fungicides, Nematocides, Nematodes, Peanuts, Pentachloronitrobenzene, Plant injuries, Pratylenchus brachyurus.

17418-68

TAXONOMY LIFE CYCLE AND HOST RANGE OF HETERODERA MEXICANA N. SP. (NEMATODA HETERODERIDAE).

V A Campos

Diss Abstr Sect B 28(11):4375B

May 1968 Z5055.U49D53

Cysts, Greenhouse culture, Heterodera mexicana, Heterodera rostochiensis, Heterodera tabacum, Morphology, Nematodes, Potatoes, Taxonomy, Temperature, Time.

17419-68

SUPPLY OF OXYGEN DURING HATCHING OF THE NEMATODE MELOIDOGYNE JAVANICA UNDER NON-COMPETITIVE CONDITIONS.

N Collis-George H R Wallace

Australian J Biol Sci 21(1):21-35 REF

Feb 1968 442.8 AU72

Animal physiology, Competition, Hatch, Larvae, Meloidogyne javanica, Nematodes, Oxygen.

17420-68

VECTOR-EFFICIENCY OF XIPHINEMA INDEX IN THE TRANSMISSION OF GRAPEVINE FAN-LEAF VIRUS.

S Das D J Raski

Nematologica 14(1):55-62 REF

1968 436.8 N342

Fanleaf (grapes), Grapes, Nematode vectors, Soil temperature, Virus diseases (plants), Xiphinema index, German summary

17421-68

OCCURRENCE OF HETERODERA GLYCINES FROM THE GOLDEN ISLAND, GIZA, U. A. R.

K A Diab

Nematologica 14(1):148

1968 436.8 N342

Cowpeas, Heterodera glycines, Meloidogyne incognita, Nematodes, Plant galls, Roots.

17422-68

THE UTILITY OF POLYACRYLAMIDE-GEL ELECTROPHORESIS FOR DISTINGUISHING BETWEEN SPECIES OF MELOIDOGYNE AND SHOWING TAXONOMIC RELATIONSHIPS. (ABSTRACT).

D W Dickson J N Sasser D Husingh

Nematologica 14(1):5

1968 436.8 N342

Electrophoresis, Enzymes, Meloidogyne, Nematodes, Parasitism, Proteins, Taxonomy.

17423-68

17423-68

CLUMPING OF THE PLANT PARASITIC NEMATODE DITYLENCHUS DIPSACI IN WATER.

C C Doncaster J M Webster

Nematologica 14(1):131-136

1968 436.8 N342

Behaviorism, Ditylenchus dipsaci, Parasitism, Plant nematodes, Water. German summary

17424-68

THERMOTROPIC RESPONSE OF PRATYLENCHUS PENETRANS AND DITYLENCHUS DIPSACI. (ABSTRACT).

M A El-Sherif W F Mai

Nematologica 14(1):5-6

1968 436.8 N342

Agar, Biochemistry, Ditylenchus dipsaci, Heat, Nematodes, Pratylenchus penetrans, Temperature.

17425-68

RESISTANCE OF CUCUMIS SPECIES TO ROOT-KNOT NEMATODE, MELOIDOGYNE INCOGNITA ACRITA. (ABSTRACT).

G Fassulintj

Nematologica 14(1):6

1968 436.8 N342

Cucumbers, Meloidogyne incognita, Nematodes, Plant nematode resistance, Roots.

17426-68

PHYTOPATHOLOGICAL CONSEQUENCES OF CHANGING AGRICULTURAL METHODS. II. CEREALS.

W Feckes

Neth J Plant Pathol 73(SUP.1):97-115

1967 464.8 T44

Barley, Mechanization, Nematodes, Oats, Plant breeding, Plant disease control, Plant pest control, Plant protection, Septoria nodorum, Wheat.

17427-68

ON THE CLASSIFICATION AND LIFE HISTORY OF FERGUSOBIA CURRIEI (SPHAERULARIIDAE: NEMATODA). (ABSTRACT).

J M Fisher W R Nickle

Nematologica 14(1):6-7

1968 436.8 N342

Eucalyptus, Eucalyptus camaldulensis, Fergusobia curriei, Life cycle, Nematodes, Parasitism, Taxonomy.

17428-68

POPULATION PATTERNS OF NEMATODES IN LAKE CHAMPLAIN. (ABSTRACT).

K D Fisher

Nematologica 14(1):7

1968 436.8 N342

Ecology, Nematodes, Parasitism, Population statistics, Temperature.

17429-68

POPULATION FLUCTUATION OF THREE PRATYLENCHUS SPP. ON PEACH UNDER CENTRAL GEORGIA CONDITIONS. (ABSTRACT).

P Fliegel A M Golden

Nematologica 14(1):7-8

1968 436.8 N342

Nematodes, Parasitism, Peaches, Population statistics, Pratylenchus brachyurus, Pratylenchus vulnus, Pratylenchus zeae.

17430-68

ECOLOGY AND VECTOR RELATIONSHIP OF LONGIDORUS MACROSOMA HOOPER. (GE)

R Fritzsche

Biol Zentralbl 87(2):139-146

Mar 1968 442.8 B523

Animal vectors, Ecology, Nematodes, Plant diseases, Rhizosphere, Virus diseases (plants). English and German summaries

Abstract

17431-68

HETERODERA CRUCIFERA FRANKLIN 1945, BRASSICA ROOT EELWORM IN YUGOSLAVIA. (CZ)

G Grujicic D Krnjaic

Zastita Bilja 12(91-92):309-313

1966 464.8 Z1

Brassica, Cysts, Eggs, Heterodera cruciferae, Larvae, Nematodes, Vegetables. English summary

17432-68

THE RESPONSE OF A POPULATION OF HETERODERA ROSTOCHIENSIS TO CROPPING ROTATIONS THAT INCLUDE RESISTANT POTATOES. (ABSTRACT).

M B Harrison

Nematologica 14(1):8

1968 436.8 N342

Crop rotation, Heterodera rostochiensis, Nematodes, Plant nematode resistance, Population statistics, Potatoes.

17433-68

EFFECT OF ORGANIC AND INORGANIC NITROGEN ON NEMATODE POPULATIONS FEEDING ON TURF. (ABSTRACT).

C M Heald G W Burton

Nematologica 14(1):8

1968 436.8 N342

Ammonium nitrate, Belonolaimus longicaudatus, Cynodon dactylon, Feeding, Nematodes, Nitrogen, Population statistics, Turf.

17434-68

INFLUENCE OF SOIL MOISTURE ON PRATYLENCHUS PENETRANS.

P F Kable W F Mai

Nematologica 14(1):101-122 REF

1968 436.8 N342

Alfalfa, Nematodes, Population statistics, Pratylenchus penetrans, Roots, Soil moisture. German summary

17435-68

OVERWINTERING OF PRATYLENCHUS PENETRANS IN A SANDY LOAM AND A CLAY LOAM SOIL AT ITHACA, NEW YORK.

P F Kable W F Mai

Nematologica 14(1):150-152

1968 436.8 N342

Clay soils, Fruit, Loam, Nematodes, Pratylenchus penetrans, Roots, Sandy soils.

17436-68

RESEARCH ON THE OATS-NEMATODE PROBLEM. (GE)

E Lucke H Weber

Gesunde Pflanzen 19(8):167-169

Aug 1967 464.8 G33

Grain, Nematodes, Oats, Parasitism, Plant diseases, Research.

17437-68

THE DYNAMICS OF THE PERMEATION OF NEMATODES BY NEMATODES AND OTHER CHEMICALS.

C F Marks

Diss Abstr Sect B 28(10):3961B

Apr 1968 Z5055.U49D53

Agar, Aphelenchus avenae, Biochemistry, Chemicals, Nematocides, Nematodes, Permeability, Rhizoctonia solani.

17438-68

MODE OF REPRODUCTION OF HETERODERA TABACUM. (ABSTRACT).

L I Miller B J Gray

Nematologica 14(1):10-11

1968 436.8 N342

Hermaphroditism, Heterodera tabacum, Injections, Larvae, Nematodes, Physiology, Reproduction, Roots, Solanum carolinense.

17439-68

THE ROLE OF CALCIUM IN RESISTANCE OF ALFALFA TO DITYLENCHUS DIPSACI. (ABSTRACT).

D Muisinigh R T Sherwood

Nematologica 14(1):8-9

1968 436.8 N342

Alfalfa, Calcium, Ditylenchus dipsaci, Enzymes, Nematodes, Nutrient solutions (plants), Plant nematode resistance.

17440-68

STUDIES ON THE FEEDING AND REPRODUCTION OF SEVEN MYCOPHAGOUS NEMATODES ON RHIZOCTONIA, FUSARIUM, AND VERTICILLIUM. (ABSTRACT).

W R Nickle P McIntosh

Nematologica 14(1):11-12

1968 436.8 N342

Culture media, Feeding, Fungi, Fusarium solani, Injections, Nematodes, Physiology, Reproduction, Rhizoctonia solani, Verticillium albo-atrum.

17441-68

MIGRATORY ENDOPARASITIC NEMATODES REARED ON CARROT DISCS.

J H O'Bannon A L Taylor

Phytopathology 58(3):385

Mar 1968 464.8 P56

Carrots, Culture media, Ditylenchus destructor, Nematodes, Parasitism, Pratylenchus brachyurus, Radopholus similis.

17442-68

OBSERVATIONS ON SEASONAL POPULATION CHANGES OF TYLENCHULUS SEMIPENETRANS AND THE INFLUENCE OF TEMPERATURE ON EGG HATCH. (ABSTRACT).

J H O'Bannon

Nematologica 14(1):12-13

1968 436.8 N342

Citrus, Nematodes, Physiology, Population statistics, Temperature, Time, Tylenchulus semipenetrans.

17443-68

THE INFLUENCE OF SYSTEMIC PLANT GROWTH SUBSTANCES ON THE GALLS INDUCED BY THE ROOT KNOT NEMATODE MELOIDOGYNE JAVANICA.

D Orion G Minz

Phytopathology 58(3):384

Mar 1968 464.8 P56

Meloidogyne javanica, Nematodes, Plant galls, Plant injuries, Plant regulators, Root knot (tomatoes), Roots, Tomatoes.

17444-68

THE EFFECT OF CERTAIN CHEMICAL SOIL TREATMENTS AND METHODS OF APPLICATION IN THE CONTROL OF MELOIDOGYNE INCOGNITA ACRITA AND EFFECT OF THESE TREATMENTS ON FLUE-CURED TOBACCO YIELD AND VALUE. (ABSTRACT).

W W Osborne C Harris L M Harrison W F

Brown R L Shaw

Nematologica 14(1):13-14

1968 436.8 N342

Agricultural economics, Chemical control (nematodes), Crop yields, Flue-cured tobacco, Meloidogyne incognita acrita, Nematocides, Nematodes, Pesticide application, Soil chemistry, Soils, Tobacco.

17445-68

MULTIPLICATION OF THE POTATO CYST-NEMATODE (HETERODERA ROSTOCHIENSIS) IN LYCOPERSICON SPP.

A V Palo

Nematologica 14(2):314-315

21 Mar 1968 436.8 N342

Ecology, Heterodera rostochiensis, Plant nematode resistance, Roots, Tomatoes.

17446-68

EFFECT OF AN APHELENCHOIDES SPECIES ON THE GROWTH OF MYCORRHIZAL FUNGI. (ABSTRACT).

J W Riffle

Nematologica 14(1):14

1968 436.8 N342

Agar, Aphelenchoides, Fungi, Mycorrhiza, Nematodes, Physiology.

17447-68

DEVELOPMENT OF THE REPRODUCTIVE SYSTEM IN SOME PRATYLENCHUS SPECIES. (ABSTRACT).

J Roman

Nematologica 14(1):14

1968 436.8 N342

Morphology, Nematodes, Physiology, Pratylenchus, Reproduction, Reproductive organs.

17448-68

THE FORMATION OF GIANT CELLS IN TOMATO ROOTS INFECTED BY THE POTATO CYST NEMATODE, HETERODERA ROSTOCHIENSIS AND THE GREY STERILE FUNGUS, G.S.F..

A K Roy

Nematologica 14(2):313-314

21 Mar 1968 436.8 N342

Fungus diseases (plants), Heterodera rostochiensis, Nematodes, Plant cytology, Plant ecology, Tomatoes.

17449-68

THE EFFECT OF NINE PARASITIC NEMATODE SPECIES ON GROWTH, YIELD AND QUALITY OF PEANUTS AS DETERMINED BY SOIL FUMIGATION AND CORRELATION OF NEMATODE POPULATIONS WITH HOST RESPONSE. (ABSTRACT).

J N Sasser J C Wells L A Nelson

Nematologica 14(1):15

1968 436.8 N342

Agricultural economics, Crop yields, Nematodes, Parasitism, Peanuts, Plant physiology, Population statistics, Soil fumigation.

17450-68

POPULATION STUDIES OF PLANT-PARASITIC NEMATODES AROUND SUGARCANE ROOTS IN NYANZA PROVINCE, KENYA.

R L P W Schoemaker

Nematologica 14(2):295-299

21 Mar 1968 436.8 N342

Plant ecology, Plant nematodes, Population, Pratylenchus, Soil fauna, Sugarcane. French summary

17451-68

GREENHOUSE EXPERIMENTS WITH BAITS FOR CONTROL OF THE BLACK CUTWORM.

R E Sechriest

J Econ Entomol 61(3):591-593

Jun 1968 421 J822

Agrotis ipsilon, Biochemistry, Corn, Greenhouse culture, Insecticides, Larvae, Seedlings, Toxins. Chemicals used were: trichlorfon, American cyanamid CL47470, abate, ethyl parathion, mirex, TDE, and carbharyl.

17452-68

THE INFLUENCE OF THE STAGE OF DEVELOPMENT OF LESION NEMATODES ON POPULATION DYNAMICS AND SUBSEQUENT HOST RESPONSE. (ABSTRACT).

C J Southards

Nematologica 14(1):15-16

1968 436.8 N342

Beans, Corn, Demography, Morphology, Nematodes, Physiology, Tobacco.

17453-68

EFFECT OF SOME PHYSICAL FACTORS ON VARIABILITY WITHIN THE X. AMERICANUM GROUP. (ABSTRACT).

A C Tarjan

Nematologica 14(1):16

1968 436.8 N342

Ecology, Nematodes, Population, Rainfall, Temperature, Xiphinema americanum.

17454-68

QUANTITATIVE EVALUATION OF THE EFFECT OF PRATYLENCHUS PENETRANS ON ROOT DEVELOPMENT OF SEEDLING SOYBEANS UNDER DEFINED CONDITIONS. (ABSTRACT).

P L Taylor J M Ferris V R Ferris

Nematologica 14(1):17

1968 436.8 N342

Nematodes, Plant injuries, Plant physiology, Pratylenchus penetrans, Roots, Seedlings, Soybeans.

17455-68

SEPARATION OF EGGS OF PRATYLENCHUS PENETRANS FROM PLANT TISSUE CULTURE BY SUCROSE GRADIENT CENTRIFUGATION. (ABSTRACT).

B Thistlethwaite

Nematologica 14(1):17-18

1968 436.8 N342

Centrifugation, Nematodes, Plants, Pratylenchus penetrans, Sucrose, Tissue culture.

17456-68

A SURVEY OF PLANT-PARASITIC NEMATODES AROUND ROOTS OF GREAT MILLET (SORGHUM VULGARE) FROM RAJASTHAN, INDIA.

M G Tikyani S Khera

Plant Dis Rep 52(5):396-398, MAP

May 1968 1.9 P69P

Insect vectors, Nematodes, Parasitic insects, Parasitic plants, Plant diseases, Roots, Soil sampling, Sorghum.

17457-68

THE PERMEABILITY OF THE CYST OF THE TOBACCO ROOT EELWORM, HETERODERA TABACUM.

S E Wahrheim P M Miller A E Dimond

Phytopathology 58(6):843-847 REF

Jun 1968 464.8 P56

Autoradiography, Cysts, Heterodera tabacum, Nematodes, Roots, Tobacco.

WEEDS

17458-68

FACTORS AFFECTING THE ACTIVITY OF EPTC (ETHYL-N,N-DI-N-PROPYL THIOLCARBAMATE).

J C Cialone

Diss Abstr Sect B 28(10):3953B-3954B

Apr 1968 Z5055.U49D53

Biochemistry, Biological assay, Chemical control (weeds), Chemical reactions, Ethyl N,N-dipropylthiolcarbamate, Research, Soil horizons, Soil moisture, Vapors.

17459-68

HERBICIDES ARE TAKING OVER AQUATIC WEED CONTROL.

Farm Chem 130(18):87,90-92

Oct 1967 57.8 AM3

Alternanthera philoxeroides, Aquatic weeds, Carbon disulfide, Chemical control (weeds), Diuron, Herbicides, Methyl bromide.

17460-68

RESPONSE OF CONIFER SEEDLINGS AND WEEDS TO SEEDBED FUMIGANTS.

R Grover

Can J Plant Sci 48(2):189-196

Mar 1968 450 C16

Allyl alcohol, Chemical control (weeds), Chloropicrin, Dimethyltetrahydro-1,3,5,2H-thiadiazine-2-thione, 3,5-, Fumigants, Methyl bromide, Picea glauca, Picea pungens, Pinus sylvestris, Seedbeds, Sodium N-methyldithiocarbamate, Soil fumigation.

17461-68

CONTROL OF DETRIMENTAL WEEDS WITH STAM F-34 IN NONIRRIGATED RICE WITH DIFFERENT SPACING OF THE PLANTS. (POR

L Leiderman de D M Souza dos C A L Santos J

M Araujo

Biologico 33(5):102-106

May 1967 442.8 B529

Herbicides, Plant protection, Propanil, Rice, Weed control.

17462-68

CONTROL OF UNDESIRABLE GRASSES OF MANOBI BY THE PREEMERGENCE AND PRE-PLANTING APPLICATION OF HERBICIDES. (POR)

C A Lobato dos Santos I. Leiderman W

Sichmann

Biologico 33(11):244-250

Nov 1967 442.8 B529

Chemical control (weeds), Dichlorophenyl p-nitrophenyl ether, 2,4-, Herbicides, Methyl-4-chlorophenoxybutyric acid, 4-(2-, Peanuts, Pcbulate, Prometryne. Portuguese and English summaries Abstract

17463-68

METHOD FOR THE CONTROL OF UNDESIRABLE VEGETATION WITH 3,5,6-SUBSTITUTED URACILS. PATENT 3,374,083.

H M Loux

Us Patent Office Offic Gaz 848(3):751

19 Mar 1968 156.65 OF2

Chemical control (weeds), Herbicides, Patents, Pyrimidines, Uracils.

17464-68

COMPARED TESTS ON THE RESISTANCE OF VARIOUS TROPICAL TYPES OF WOOD TO WORM-ATTACK ON THE COAST OF WEST AFRICA. (TT 8544) TRANSL. 16896.

P Rancurel

15 P.

1967

Immunity, Nematodes, Research, Tables (data), Tree injuries, Wood. Translation from Bois et Forets des Tropiques 106:27-39, mar.-Apr. 1966. issued by CSIRO.

17465-68

FLAME, ALONE AND IN COMBINATION WITH HERBICIDES, FOR WEED CONTROL IN CORN, POTATOES, AND SEVERAL COLE CROPS.

H P Wilson

Diss Abstr Sect B 28(10):3958B

Apr 1968 Z5055.U49D53

Atrazine, Broccoli, Cabbage, Cauliflower, Chemical control (weeds), Corn, Herbicides, Histology, Linuron, Pesticide application, Potatoes, Weed burners, Weed control.

OTHER PESTS

17466-68

INTERNATIONAL DISPERSAL OF NEMATODES.

S Bingeors

Neth J Plant Pathol 73(SUP.1):44-60 REF

1967 464.8 T44

Biological transport, Ecology, Environment, Nematodes, Parasitism, Plant protection, World agricultural situation.

17467-68

AN ANALYSIS OF BLACKBIRD FLOCK FEEDING BEHAVIOR.

M I Dyer

Can J Zool 45(5):765-772, MAP

Sep 1967 470 C16D

Birds, Blackbirds, Corn, Feeding, Sweetcorn.

Abstract

LIVESTOCK PROTECTION

17468-68

EFFECT OF DIET ON METABOLISM OF FENTHION IN ANIMALS.

A Begum

Diss Abstr Sect B 28(10):4165B

Apr 1968 Z5055.U49D53

Biochemistry, Diet, Fenthion, Laboratory animals, Metabolism, Metabolites, Rabbits, Radioactivity, Rats.

17469-68

17469-68

EFFECT OF GLYCINE AND SERINE ON THE METABOLISM OF METHIONINE. (ABSTRACT).

N J Benvenega A E Harper

Fed Amer Soc Exp Biol Fed Proc 27(2):252

Mar 1968 442.9 F31P

Animal nutrition, Biochemistry, Diet, Glycine, Metabolism, Methionine, Rats, Serine.

17470-68

THE DYNAMICS OF ANTIBODY AGAINST EIMERIA TENELLA UNDER THE FLUORESCENT MICROSCOPE.

Z Cerna

Folia Parasitol 14(1):13-18

1967 436.8 C33

Antibodies, Antigens, Chickens, Eimeria tenella, Fluorescence microscopes, Quantitative analysis.

17471-68

EFFECT OF A LATHYROGEN ON OXYGEN CONSUMPTION AND C1402 RESPIRATORY PATTERN OF C14-LABELED AMINO ACIDS IN DEVELOPING CHICK EMBRYOS. (ABSTRACT).

J J Clemmons

Fed Amer Soc Exp Biol Fed Proc 27(2):412

Mar 1968 442.9 F31P

Amino acids, Animal metabolism, Animal respiration, Carbon dioxide, Eggs, Embryology, Lathyrism, Lathyrigen, Lysine, Oxygen, Radioactive tracers, Research.

17472-68

THE EFFECT OF FEEDING A LOW LYSINE DIET TO CHICKS AT FOUR WEEKS OF AGE. (ABSTRACT).

J R Couch J Trammell F M Farr C R Creger

Fed Amer Soc Exp Biol Fed Proc 27(2):251

Mar 1968 442.9 F31P

Agricultural research, Animal nutrition, Biochemistry, Chicks, Diet, Lysine.

17473-68

RESISTANCE OF CATTLE TO CATTLE TICK, BOOPHILUS MICROPLUS. I. THE DEVELOPMENT OF RESISTANCE TO EXPERIMENTAL INFESTATION.

R W Hewetson J Nolan

Australian J Agr Res 19(2):323-333

Mar 1968 23 AU783

Boophilus microplus, Cattle, Climate, Immunity, Insect eggs, Zebu cattle.

Abstract: There was a regression of adult female ticks becoming replete with infestation up to the fourth infestation. Egg-laying was not affected by a developing resistance, but the fertility of eggs from female egg-laying ticks was.

17474-68

THE BIOLOGICAL HALF LIFE OF PROGESTERONE IN THE PERIPHERAL BLOOD OF COWS. (JA)

T Imori

Jap J Vet Sci 29(4):201-208 REF

Aug 1967 41.8 J27

Biology, Blood, Dairy cattle, Hormones, Injections, Progesterone, Radioactivity, Radiochemistry.

Abstract: cows injected at different luteal stages of the ovarian cycle and in pregnancy.

17475-68

EFFECTS OF LATHYROGENS AND NON-LATHYROGENS ON CHICK EMBRYO OXYGEN CONSUMPTION WHEN INJECTED ONTO VARIOUS SITES. (ABSTRACT).

R J Malvesta

Fed Amer Soc Exp Biol Fed Proc 27(2):412

Mar 1968 442.9 F31P

Animal respiration, Beta-aminopropionitrile, Chicks, Eggs, Injections, Lathyrism, Oxygen.

17476-68

QUANTITATIVE ANALYSIS OF THE SOLUBLE ANTIGENS OF BIOTYPES OF BRUCELLA ABORTUS.

L K Nagy

Res Vet Sci 9(3):197-201 REF

May 1968 41.8 R312

Acetone, Agar, Antigens, Bacteria, Brucella abortus, Cells, Extracts, Immunization, Quantitative analysis, Rabbits.

17477-68

BLOOD CONCENTRATION OF CHLORAMPHENICOL IN HORSES AFTER INTRAMUSCULAR OR ORAL ADMINISTRATION.

S Oh-ishi

Jap J Vet Sci 30(1):25-28

Feb 1968 41.8 J27

Blood, Chloramphenicol, Horses, Metabolites, Microbiology, Mouth, Muscles, Serological tests, Tissues, Urine. Japanese summary

17478-68

EFFICACY STUDIES ON A NEW PROCESSED. I. MICRON REFINED PHENOTHIAZINE AGAINST GASTRO-INTESTINAL NEMATODES IN FEEDER LAMBS.

D L Peardon

Res Vet Sci 9(3):202-208 REF

May 1968 41.8 R312

Biochemistry, Dosage, Drug therapy, Gastrointestinal system, Haemonchus contortus, Lambs, Nematodes, Parasitism, Phenothiazine, Research.

17479-68

EFFECTS OF A POTASSIUM DEFICIENCY ON CALCIFICATION OF BONE IN CHICKS.

K E Rinehart J C Rogler W R Featherston

J Nutr 96(2):231-235

Oct 1968 389.8 J82

Bone diseases, Calcification (physiological), Chickens, Deficiency diseases, Feeding, Isotopes, Potassium, Sodium.

17480-68

EFFECTS OF CYCLOHEXIMIDE (CHX) ON DNA AND PROTEIN SYNTHESIS IN RAT LIVER. (ABSTRACT).

K Tornheim R G O'Dell L Prosky

Fed Amer Soc Exp Biol Fed Proc 27(2):415

Mar 1968 442.9 F31P

Biochemistry, Cycloheximide, Deoxyribonucleic acid, Leucine, Liver, Protein synthesis, Rats, Ribonucleic acid.

17481-68

FOOD HABITS OF THE PACIFIC MOUNTAIN BEAVER, APLODONTIA RUFA PACIFICA MERRIAM.

E H Voth

Diss Abstr Sect B 28(11):4372

May 1968 Z5055.U49D53

Aplodontia rufa pacifica, Beavers, Food, Seedlings, Tree injuries.

DISEASES

17482-68

THE MORPHOLOGICAL CHARACTERISTICS OF AFRICAN SWINE FEVER VIRUS AND ITS RESEMBLANCE TO TIPULA IRIDESCENT VIRUS.

J D Almedida A P Waterson W Plowright

Arch Gesamte Virusforsch 20(3):392-396 REF

1967 448.3 AR23

African swine fever virus, Morphology, Myxoviruses, Tipula iridescent virus, Virology.

17483-68

ELECTRON MICROSCOPY OF IMMUNE DISRUPTION OF LEPTOSPIRES: ACTION OF COMPLEMENT AND LYSOZYME.

D L Anderson R C Johnson

J Bacteriol 95(6):2293-2309 REF

Jun 1968 448.3 J82

Antibodies, Complement, Electron microscopy, Immunology, Leptospira, Muramidase.

Abstract

17484-68

INFLUENCE OF DUST AND AMMONIA ON THE DEVELOPMENT OF AIR SAC LESIONS IN TURKEYS.

D P Anderson R R Wolfe F L Chermers W E Roper

Amer J Vet Res 29(5):1049-1058

May 1968 41.8 AM3A

Air sacs, Ammonia, Animal diseases, Dust (soil), Mycoplasma, Mycoplasma melcagridis, Turkeys.

17485-68

NUCLEOSIDE PHOSPHORYLASE AND XANTHINE DEHYDROGENASE IN DEVELOPMENT OF NORMAL AND DYSTROPHIC CHICKENS. (ABSTRACT).

P Arslan I M Weinstock

Fed Amer Soc Exp Biol Fed Proc 27(2):781

Mar 1968 442.9 F31P

Chickens, Liver, Livestock diseases, Muscular dystrophy, Nucleic acids, Nucleosides, Pancreas, Phosphorylases, Thymidine, Xanthine dehydrogenase.

17486-68

STUDIES ON URINARY INCONTINENCE AND 'WET BELLY' IN RANCH MINK (MUSTELA VISON).

R J Aulerich

Diss Abstr Sect B 28(9):3545B

Mar 1968 Z5055.U49D53

Animal diseases, Calcium, Diet, Minks, Neomycin, Nitrofurantoin, Urine, Wet belly.

17487-68

REQUIREMENT OF YOUNG CHICK EMBRYOS FOR PHENYLALANINE AND TYROSINE. (ABSTRACT).

R E Austic

Fed Amer Soc Exp Biol Fed Proc 22(2):727

Mar 1968 442.9 F31P

Amino acids, Chicks, Deficiency diseases, Eggs, Neoplasms, Nervous system diseases, Phenylalanine, Tyrosine.

17488-68

NON-SPECIFIC PHOSPHATASES OF NORMAL AND NEOPLASTIC RABBITS ENDOMETRIUM. (ABSTRACT).

N Baba S C Vidyarthi E V Hamm

Fed Amer Soc Exp Biol Fed Proc 27(2):541

Mar 1968 442.9 F31P

Alkaline phosphatase, Endometrium, Neoplastic diseases, Phosphatases, Plasma membrane, Rabbits.

17489-68

SKIN ALLERGY OF THE CAT AND DOG.

K P Baker

Irish Vet J (N.S.) 3(22):47-50 REF

Mar 1968 41.8 IR4

Allergies, Animal diseases, Cats, Diagnosis, Dogs, Skin, Therapeutics.

17490-68

HISTOLOGIC CHANGES AND INCLUSION BODIES IN CHICKENS INOCULATED WITH AN ORNITHOSIS AGENT.

R A Bankowski H Gerlach T Mikami

Avian Dis 12(2):217-226 REF

May 1968 41.8 AV5

Animal diseases, Animal histology, Chickens, Immunization, Inclusion bodies, Ornithosis.

17491-68

THE SPREAD OF SARCOSPORIDIOSIS IN CATTLE AND SWINE AND ITS IMPORTANCE FOR THE ESTIMATION OF MEAT VALUE. (CZ)

V Bartulic I Ljubic

Vet Glas 22(3):179-183 REF

1968 41.8 J93

Cattle, Economics, Livestock diseases, Meat, Sarcosporidiosis, Swine. English and Russian summaries

17492-68

VITAMIN B6 REQUIREMENT OF THE MINK.

A L Bowman H F Travis R G Warner D E Hoguc

- J Nutr* 95(4):554-562 REF
Aug 1968 389.8 J82
Animal nutrition, Animal physiology, Deficiency diseases, Diet, Metabolism, Minks, Vitamin b6.
- 17493-68**
IMMUNOGENICITY OF CELL WALLS FROM VARIOUS MYCOBACTERIA AGAINST AIRBORNE TUBERCULOSIS IN MICE.
W Brehmer R L Anacker E Ribi
J Bacteriol 95(6):2000-2004 REF
Jun 1968 448.3 J82
Animal diseases, Cell wall, Immunology, Mice, Mycobacterium, Tuberculosis, Vaccines.
Abstract
- 17494-68**
AN ABORTIVE INFECTION PRODUCED BY MEASLES VIRUS. (ABSTRACT).
T Burnstein W R Miller
Fed Amer Soc Exp Biol Fed Proc 27(2):445
Mar 1968 442.9 F31P
Abortion, Culture media, Fluorescence, Hamsters, Immunology, Measles virus, Vesicular stomatitis virus.
- 17495-68**
DIETARY PRODUCTION OF CONGENITAL COPPER DEFICIENCY IN SWINE.
P A Cancilla R M Barlow N Weissman W F Coulson W H Carnes
J Nutr 93(4):438-444 REF
Dec 1967 389.8 J82
Animal breeding, Animal nutrition, Copper, Deficiency diseases, Diet, Swine.
- 17496-68**
EFFECT OF SMALL CHANGES IN DIETARY THIAMINE OR ESSENTIAL FATTY ACID IN ALTERING THE RATE OF DRUG DETOXICATION IN THE LIVER OF THE RAT. (ABSTRACT).
W O Caster A E Wade F E Greene J S Meadows
Fed Amer Soc Exp Biol Fed Proc 27(2):549
Mar 1968 442.9 F31P
Aniline, Animal metabolism, Chemurgy, Diet, Fatty acids, Heptachlor, Liver, Rats, Thiamine, Toxicology.
- 17497-68**
ELECTRON MICROSCOPIC OBSERVATIONS ON SCRAPIE IN THE MOUSE, WITH REFERENCE TO GLUCOSAMINIDASE ACTIVITY.
R L Chandler K Smith
Res Vet Sci 9(3):228-230 REF
May 1968 41.8 R312
Animal diseases, Cytology, Cytoplasm, Electron microscopy, Histochemistry, Metabolism, Mice, Scrapie.
- 17498-68**
FELINE INFECTIOUS ANAEMIA: A FIRST CASE.
J D Collins H J Neumann
Irish Vet J (N.S.) 22(5):88-89
May 1968 41.8 IR4
Cats, Equine infectious anemia, Parasitism.
- 17499-68**
ANTIGENIC HETEROGENEITY OF FOOT-AND-MOUTH DISEASE VIRUS AS DEMONSTRATED WITH 7 DAYS POSTINFECTION GUINEA PIG SERUM BY OUCHTERLONY ANALYSES. (ABSTRACT).
K M Cowan
Fed Amer Soc Exp Biol Fed Proc 27(2):733
Mar 1968 442.9 F31P
Antigens, Biochemistry, Blood serum, Chymotrypsin, Foot-and-mouth disease virus, Guinea pigs, Ribonucleic acid, Trypsin.
- 17500-68**
SEPHADEX G. 200 GEL-FILTRATION IN THE STUDY OF AGGLUTINATING, COMPLEMENT-FIXING, AND IN COMPLETE ANTIBODIES TO BRUCELLA ABORTUS IN CATTLE.
B Cunningham R A Q O'Meara W A Boggust
Irish Vet J (N.S.) 22(6):102-107 REF
Jun 1968 41.8 IR4
Agglutination, Antibodies, Blood, Brucella abortus, Cattle, Filters, Gels, Research, Vaccines.
- 17501-68**
THE INCIDENCE OF ANTIBODIES OF SOME ARBOVIRUSES IN MEN, DOMESTIC AND WILD ANIMALS LIVING IN THE NATURAL FOCUS OF THE TAHYNA VIRUS IN THE SOUTH OF MORAVIA. (CZ.)
V Danielova Z Marhoul
Cesk Epidemiol Mikrobiol Imunol 17(3):155-161 REF
May 1968 448.8 C332
Deer, Humans, Livestock, Pheasants, Rabbits, Russian spring-summer encephalitis, Serological tests, Tahyna virus, Wildlife. English, czech, and russian abstract
- Abstract: Serum of wild and domestic animals, and of the population in the natural focus of Tahyna virus in Moravia showed that 62.0 percent of men and 55.17 percent of hares were positive. Neutralization test on tissue cultures was more sensitive than in mice. Antibodies against Calovo virus were found in a hind, and against tickborne encephalitis virus in the serum of one pheasant and four people.
- 17502-68**
STUDIES TO DETERMINE NEUTRALIZING ANTIBODY IN SERA FROM SWINE RECOVERED FROM AFRICAN SWINE FEVER. (ABSTRACT).
C J De Boer A H Dardiri W R Hess
Fed Amer Soc Exp Biol Fed Proc 27(2):734
Mar 1968 442.9 F31P
African swine fever, African swine fever virus, Blood serum, Electron microscopy, Lactate dehydrogenase, Livestock diseases, Swine.
- 17503-68**
GROUP-SPECIFIC STREPTOCOCCUS AGALACTIAE ANTIBODIES IN COLOSTRUM OF FIRST-CALF HEIFERS.
K Dodd N L Noreross
Amer J Vet Res 29(5):1095-1096
May 1968 41.8 AM3A
Animal diseases, Antibodies, Antigens, Cattle, Colostrum, Dairy bacteriology, Streptococcus agalactiae.
- 17504-68**
PLASMA ZINC AND LEUKOCYTE CHANGES IN RATS DURING ZINC DEFICIENCY. (ABSTRACT).
I E Dreosti S Tao L S Hurley
Fed Amer Soc Exp Biol Fed Proc 27(2):484
Mar 1968 442.9 F31P
Blood plasma, Chemurgy, Leukocytes, Pregnancy, Rats, Zinc.
- 17505-68**
AN OUTBREAK OF ATYPICAL INTERSTITIAL PNEUMONIA OF CATTLE.
W J Ehret J G Pienaar
S Afr Vet Med Ass J 38(4):407-413 REF
Dec 1967 41.8 SO8
Algae, Cattle, Drug therapy, Livestock diseases, Molds, Pneumonia, Reproduction, Taxonomy.
- 17506-68**
COPPER DEFICIENCY IN THE GUINEA PIG.
G J Everson H C Tsai T Wang
J Nutr 93(4):533-540 REF
Dec 1967 389.8 J82
Animal abnormalities, Animal nutrition, Animal physiology, Copper, Deficiency diseases, Guinea pigs.
Abstract: Considerable myelination in utero, ataxia, brain abnormalities, aneurisms, agenesis of cerebellum, and defective nerve tissue development.
- 17507-68**
THE KINETICS OF THE HEMOLYSIN OF NEWCASTLE DISEASE VIRUS.
E M Faddoul
Diss Abstr Sect B 28(9):3578B
Mar 1968 Z5055.U49D53
Biochemistry, Erythrocytes, Hemolysins, Kinetics, Newcastle disease virus, Research.
- 17508-68**
PESTICIDE-MANGANESE INTERRELATIONSHIPS IN PREGNANCY. (ABSTRACT).
J P Feaster G K Davis C H Van Middeltem
Fed Amer Soc Exp Biol Fed Proc 22(2):730
Mar 1968 442.9 F31P
Animal nutrition, Blood plasma, Carbaryl, Liver, Manganese, Parathion, Pregnancy, Rats.
- 17509-68**
UNSUCCESSFUL ATTEMPTS TO TRANSMIT SCRAPIE BY NEMATODE PARASITES.
W M Fitzsimmons I H Pattison
Res Vet Sci 9(3):281-283
May 1968 41.8 R312
Animal diseases, Animal histology, Injections, Laboratory animals, Nematodes, Nippostrongylus brasiliensis, Parasitism, Scrapie.
- 17510-68**
TUBERCULIN REACTION IN REGARD TO PATHOGENESIS OF TUBERCULOSIS.
E Gavez
Vet Glas 22(1):51-54
1968 41.8 J93
Animal diseases, Cattle, Epizootic diseases, Heterogenesis, Tuberculin test, Tuberculosis.
- 17511-68**
THE EFFECT OF HYPOTHALAMIC LESIONS ON THYROID FUNCTION IN COCKERELS.
W H Gehrmann
Diss Abstr Sect B 28(9):3855B
Mar 1968 Z5055.U49D53
Animal physiology, Cockerels, Lesions, Radioactive tracers, Thyroid gland.
- 17512-68**
ULTRASTRUCTURAL CHANGES IN DOG KIDNEY IN INFECTIOUS CANINE HEPATITIS. (ABSTRACT).
K Givan
Fed Amer Soc Exp Biol Fed Proc 27(2):663
Mar 1968 442.9 F31P
Animal diseases, Animal morphology, Dogs, Electron microscopy, Glomerulitis, Histology, Infectious canine hepatitis, Kidneys, Research, Viruses.
- 17513-68**
EARLY RESPONSE OF CATTLE AND SWINE TO INACTIVATED FOOT-AND-MOUTH DISEASE VACCINE.
J H Graves P D McKercher H E Farris K M Cowan
Res Vet Sci 9(1):35-40
Jan 1968 41.8 R312
Cattle, Foot-and-mouth disease virus, Immunization, Swine, Vaccines, Virus diseases (animals).
- 17514-68**
PSEUDORABIES IN PREGNANT SOWS AND THEIR PROGENY. (ABSTRACT).
D P Gustafson R M Claflin J R Saunders
Fed Amer Soc Exp Biol Fed Proc 27(2):445
Mar 1968 442.9 F31P
Abortion, Agricultural research, Antibodies, Baby pigs, Colostrum, Culture media, Livestock diseases, Pregnancy, Pseudorabies, Swine, Viruses.
- 17515-68**
STUDIES ON THE ABSORPTION OF 75 SELENIUM IN CHICKS. (ABSTRACT).
C H Hill
Fed Amer Soc Exp Biol Fed Proc 27(2):417
Mar 1968 442.9 F31P
Animal nutrition, Biological transport, Chemurgy, Chicks, Duodenum, Intestinal absorption, Mercapto group, Radioactive tracers, Selenium.
- 17516-68**
ZINC LEVELS IN MATERNAL-FETAL ORGANISM UNDER TERATOGENIC CONDITIONS OF ZINC DEFICIENCY. (ABSTRACT).
L S Hurley H Swenerton J Gowan
Fed Amer Soc Exp Biol Fed Proc 27(2):484

17517-68

Mar 1968 442.9 F31P

Animal abnormalities, Animal nutrition, Bones, Chemurgy, Deficiency diseases, Diet, Fetal death, Liver, Rats, Zinc.

17517-68

DOGS AS A SOURCE OF TOXOPLASMOSES. (RUS)

N A Iova I D Nctrebko

Zhur Mikrobiol Epidemiol Immunobiol 12:105-108
Dec 1967 448.3 Z4

Dogs, Toxoplasmosis. English summary.

17518-68

RECOVERY OF CANINE DISTEMPER VIRUS FROM SUBCULTURED PRIMARY DOG KIDNEY CELL CULTURE.

L Kasza

Res Vet Sci 9(2):187-188

Mar 1968 41.8 R312

Antibodies, Canine distemper, Cytoplasm, Dogs, Kidneys, Research, Tissue culture, Virus diseases (animals).

17519-68

COMPARISON OF INFECTIONS WITH LEUCOCYTOZON SIMONDI IN BLACK DUCKS (ANAS RUBRIPES), MALLARDS (ANAS PLATYRHYNCHOS) AND WHITE PEKINS (ANAS BOCHAS).

R A Khan A M Fallis

Can J Zool 46(4):773-780 REF

Jul 1968 470 C16D

Animal diseases, Ducks, Leucocytozoon simondi, Leukocytes, Mortality, Parasitism.

17520-68

FOOD ADDITIVES PERMITTED IN THE FEED AND DRINKING WATER OF ANIMALS OR FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. AMMONIATED COTTONSEED MEAL.

J K Kirk

Fed Regist 33(151):11077

03 Aug 1968 L1.451

Agricultural regulation, Ammonia, Animals, Cottonseed meal, Feed, Food additives, Therapeutics, Water.

17521-68

FOOD ADDITIVES PERMITTED IN FEED AND DRINKING WATER OF FOODPRODUCING ANIMALS. AMPROLIUM, OXYTETRACYCLINE, ZOALENE.

J K Kirk

Fed Regist 33(172,PT.1):12368

04 Sep 1968 L1.451

Amprolium, Animals, Drug therapy, Feed, Food additives, Livestock diseases, Oxytetracycline, Therapeutics, Water, Zoalene.

17522-68

FOOD ADDITIVES PERMITTED IN THE FEED AND DRINKING WATER OF ANIMALS OR FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. CARBARSONE (NOT U.S.P.).

J K Kirk

Fed Regist 33(138,PT.1):10207

17 Jul 1968 L1.451

Carbarsonc, Drugs, Feed, Food additives, Livestock, Therapeutics, Water.

17523-68

A SIMPLE METHOD FOR THE SERUM NEUTRALIZATION WITH JAPANESE ENCEPHALITIS (JE) VIRUS UTILIZING PLAQUE INHIBITION BY AGAR-DIFFUSED ANTIBODY.

H Kiyota

Jap J Microbiol 12(2):179-185 REF

Jun 1968 448.8 J273

Antibodies, Immunology, Japanese b encephalitis virus, Serodiagnosis, Serological tests, Virology.

Abstract

17524-68

C.F. ANTIGEN FROM LEUKOCYTES INFECTED WITH THE VIRUS OF EQUINE INFECTIOUS ANEMIA. (ABSTRACT).

K Kobayashi J B Henson J R Gorham

Fed Amer Soc Exp Biol Fed Proc 27(2):733

Mar 1968 442.9 F31P

Animal diseases, Antigens, Culture media, Equine infectious anemia, Leukocytes, Viruses.

17525-68

ANEMIA AND MECHANISM OF RED CELL DESTRUCTION IN DUCKS WITH ACUTE LEUCOCYTOZON DISEASE.

R M Kocan

Diss Abstr Sect B 28(10):3948B-3949B

Apr 1968 Z5055.U49D53

Agglutination, Anaplasma, Anemia, Babesia, Cells, Ducks, Erythrocytes, Hemolysis, Leucocytozoon simondi, Plasmodium, Serum.

17526-68

MAREK'S DISEASE. II. PROPAGATION OF THE CONNECTICUT-A ISOLATE IN CELL CULTURES.

S D Kottaridis R E Luginbuhl T N Fredrickson

Avian Dis 12(2):246-258 REF

May 1968 41.8 AV5

Animal histology, Avian lymphomatosis, Cells, Chickens, Culture media, Cytology, Immunization, Virus diseases (animals).

17527-68

EFFECTS OF HIGH DIETARY EDTA, ZINC OR COPPER ON MINERAL CONTENT OF TURKEY POULT TISSUE. (ABSTRACT).

F H Kratzer P Vohra G D Gottfredson

Fed Amer Soc Exp Biol Fed Proc 27(2):481

Mar 1968 442.9 F31P

Animal nutrition, Copper, Diet, Ethylenediaminetetraacetic acid, Minerals, Turkeys, Zinc.

17528-68

RESPONSE OF WEANLING RATS TO INFECTION, REBLOCKADE AND DIETARY PROTEIN. (ABSTRACT).

N Kula P M Newberne

Fed Amer Soc Exp Biol Fed Proc 22(2):725

Mar 1968 442.9 F31P

Animal nutrition, Casein, Deficiency diseases, Diet, Neoplasms, Proteins, Rats, Salmonella typhimurium, Weaning.

17529-68

STUDIES ON THE ACQUIRED RESISTANCE OF SHEEP TO DICTYOCAULUS FILARIA (RUDOLPHI, 1809) RAILLIET AND HENRY, 1907.

G S Kunwar P G Dco

Indian J Vet Sci Anim Husband 37(4):298-304 REF

Dec 1967 41.8 IN22

Animal diseases, Dictyocaulus filaria, Immunity, Larvae, Parasitic bronchitis, Sheep, Vermineous bronchitis.

17530-68

EFFECT OF HISTIDINE OR SOYBEAN MEAL ADDITIONS ON ZN DEFICIENCY SYMPTOMS. (ABSTRACT).

J G Lease

Fed Amer Soc Exp Biol Fed Proc 27(2):483

Mar 1968 442.9 F31P

Animal abnormalities, Blood, Chicks, Histidine, Lcgs, Phytates, Soybean meal, Zinc.

17531-68

AVAILABILITY TO THE CHICK OF ZINC PHYTATE COMPLEXES ISOLATED FROM OIL SEED MEALS BY AN IN VITRO DIGESTION METHOD.

J G Lease

J Nutr 93(4):523-532

Dec 1967 389.8 J82

Chicks, Digestion, Food supply, Meal, Phytates, Salts, Soybean meal, Zinc.

Abstract: Binding agent termed a carrier. Three isolated soy proteins contained low or no carrier properties.

17532-68

THE EFFECTS OF HYPO- AND HYPERTHYROIDISM ON THE TESTES AND ANTERIOR PITUITARY GLANDS OF COCKERELS.

G C Lchman

Diss Abstr Sect B 28(9):3928B

Mar 1968 Z5055.U49D53

Chemurgy, Cockcrels, Hyperthyroidism, Phosphorus isotopes, Pituitary gland, Testes.

17533-68

FREE AMINO ACIDS, AMMONIA AND UREA CONCENTRATIONS IN THE BLOOD PLASMA OF STARVED LAMBS.

J Leibholtz C F Cook

J Nutr 93(4):561-567 REF

Dec 1967 389.8 J82

Amino acids, Ammonia, Animal nutrition, Animal physiology, Blood plasma, Lambs, Lysine, Starvation, Urca.

Abstract: Concentration of lysine in blood plasma was significantly higher in starved lambs.

17534-68

DUCK PLAGUE ON THE AMERICAN CONTINENT.

L Leibovitz J Hwang

Avian Dis 12(2):361-378 REF MAP

May 1968 41.8 AV5

Animal histology, Ducks, Epidemiology, Plague, Splccn, Virus diseases (animals).

17535-68

PATHOGENESIS AND INCIDENCE OF SPONTANEOUS GLOMERULONEPHRITIS (S.G.) IN SHEEP AND OTHER RUMINANTS. (ABSTRACT).

R A Lerncr

Fed Amer Soc Exp Biol Fed Proc 27(2):363

Mar 1968 442.9 F31P

Animal diseases, Glomerulonephritis, Mice, Pathology, Rabbits, Radioactive tracers, Sheep.

17536-68

A TECHNIQUE FOR THE DETERMINATION OF THE ACTION LEVEL OF INHIBITORS.

P Limasset

Ann Epiphyt 18:3-9

1967 464.9 F84AN

Injections, Methodology, Mosaic (tobacco), Plant injuries, Virus diseases (plants). English and German summary

17537-68

RESPIRATION OF BOVINE SPERMATOZOA IN THE PRESENCE OF ALPHAMETHYLBENZYL 3-(DIMETHOXYPHOSPHINYLOXY)-CIS-CROTONATE (CIODRIN) IN VARIOUS CONCENTRATE MIXTURES. (ABSTRACT).

J R Lodge

J Dairy Sci 51(6):965

Jun 1968 44.8 J822

Biochemistry, Cattle, Cells, Ciodrin, Insecticides, Respiration, Semen, Spermatozoa.

17538-68

CHARACTERIZATION OF RECEPTORS AND LYSOSOMES OF CELLS SUSCEPTIBLE TO INFECTIOUS BRONCHITIS VIRUS.

P D Lukert

Diss Abstr Sect B 28(9):3802B

Mar 1968 Z5055.U49D53

Acid phosphatase, Animal diseases, Eggs, Infectious bronchitis virus, Kidneys, Liver, Lungs, Lysosomes.

17539-68

THE PREVALENCE OF CANINE TOXOPLASMOSES IN NIIGATA PREFECTURE, JAPAN WITH SPECIAL REFERENCE TO ISOLATION OF TOXOPLASMA FROM DIAPHRAGM MUSCLE SAMPLES. (JA)

T Maitani M Yokoyama

Jap J Parasitol 16(3):147-155 REF

Jun 1967 436.8 J27

Animal histology, Dogs, Immunodiagnosis, Toxoplasmosis. English summary

Abstract

17540-68

ISOLATION OF MIRCObACTERIUM TUBERCULOSIS HUMAN TYPES FROM THE ORGANS OF HOME-PRODUCED POULTRY. (SL)

P Markovic S Zakula B Nikolic Z Ljesevic
Vet Glas 22(2):101-103
1968 41.8 J93

Animal diseases, Animal morphology, Bacteriology, Biology, Chickens, Human diseases, Liver, Poultry, Tuberculosis. Russian and English summaries

17541-68

ISOLATION OF BRUCELLA ABORTUS FROM GOATS AND SHEEP IN THE PUNJAB.

T N Mathur

Indian J Vet Sci Anim Husb 37(4):277-286

Dec 1967 41.8 IN22

Antigens, Brucella abortus, Brucella melitensis, Goats, Milk, Sheep, Virus diseases (animals).

17542-68

OBSERVATIONS ON BLOOD COPPER IN SHEEP. I. NORMAL COPPER STATUS AND VARIATIONS INDUCED BY DIFFERENT CONDITIONS.

P J McCosker

Res Vet Sci 9(1):91-101 REF

Jan 1968 41.8 R312

Blood, Cells, Copper, Research, Sheep.

17543-68

EFFICACY OF NAPHTHALOPHOS AND COUMAPHOS AGAINST NEMATODES OF GOATS.

L R McDougald R G White M F Hansen

Amer J Vet Res 29(5):1077-1079

May 1968 41.8 AM3A

Animal diseases, Coumaphos, Goats, Naphthalophos, Nematodes, Nematodirus, Oostegiasis, Trichostrongylus.

17544-68

AN EPIZOOTIC OF ASPERGILLOSIS IN CANADA GESE.

H C McDougald R W Vaught

J Wildlife Manage 32(2):415-417

Apr 1968 41.8 J827

Aspergillosis, Epizootic diseases, Geese, Mycosis, Pneumonia, Respiratory diseases.

Abstract: Geese had varying degrees of pulmonary aspergillosis; 3 distinct stages of mycotic pneumonia were recorded.

17545-68

LINOLEIC ACID REQUIREMENT OF THE HEN FOR REPRODUCTION.

H Menge

J Nutr 95(4):578-582 REF

Aug 1968 389.8 J82

Animal nutrition, Caloric value, Chickens, Diet, Linoleic acid, Reproduction.

17546-68

EXPERIMENTAL PARATUBERCULOSIS IN SHEEP AFTER ORAL, INTRATRACHEAL, OR INTRAVENOUS INOCULATION: SEROLOGIC AND INTRADERMAL TESTS.

R S Merkall A B Larsen K E Kopecky J P Kluge

W S Merkall R P Lehmann L Y Quinn

Amer J Vet Res 29(5):963-969 REF

May 1968 41.8 AM3A

Bacteria, Dermatology, Immunization, Injections, Johne's disease, Mouth, Serological tests, Sheep, Trachea.

Abstract: Hemagglutinating and complement-fixing antibodies disappeared while lambs were still severely infected, but precipitins continued to increase as the infection became more severe and decreased as lambs recovered.

17547-68

EXPERIMENTAL PARATUBERCULOSIS IN SHEEP AFTER ORAL, INTRATRACHEAL, OR INTRAVENOUS INOCULATION: HISTOCHEMICAL LOCALIZATION OF DEHYDROGENASE ACTIVITIES.

R S Merkall W S Merkall J P Kluge A B Larsen K E Kopecky L Y Quinn R P Lehmann

Amer J Vet Res 29(5):971-982 REF

May 1968 41.8 AM3A

Dehydrogenases, Histochemistry, Immunization, Injections, Johne's disease, Mouth, Sheep, Trachea.

17548-68

EXPERIMENTAL PARATUBERCULOSIS IN SHEEP AFTER ORAL, INTRATRACHEAL, OR INTRAVENOUS INOCULATION: HISTOCHEMICAL LOCALIZATION OF HYDROLASE ACTIVITIES.

R S Merkall J P Kluge W S Merkall A B Larsen K E Kopecky L Y Quinn R P Lehmann

Amer J Vet Res 29(5):985-994

May 1968 41.8 AM3A

Histochemistry, Hydrolases, Immunization, Injections, Johne's disease, Mouth, Sheep, Tissues, Trachea.

17549-68

THE ROLES OF VITAMIN E, SELENIUM, AND METHIONINE IN DIETARY LIVER NECROSIS AND NUTRITIONAL MUSCULAR DYSTROPHY IN THE PIG.

R L Michel

Diss Abstr Sect B 28(9):3764B

Mar 1968 Z5055.U49D53

Animal nutrition, Deficiency diseases, Diet, Liver, Methionine, Muscular dystrophy, Necrosis, Selenium, Swine, Vitamin e.

17550-68

TOXIC SUBSTANCES IN ALFALFA HAY. (ABSTRACT).

G P Mohanty C W Carlson H H Voelker N A Jorgensen

J Dairy Sci 51(6):984

Jun 1968 44.8 J822

Alfalfa, Chickens, Chloroform, Distilled water, Hay, Toxicology.

17551-68

ISOLATION OF A PARAVACCINIA VIRUS FROM A COW IN JAPAN. (JA)

C Morita H Izawa M Soekawa

Jap J Vet Sci 29(4):171-175 REF

Aug 1967 41.8 J27

Culture media, Dairy cattle, Livestock diseases, Poxviruses, Pseudocowpox, Udders, Virus diseases (animals).

17552-68

PASSAGE OF ANTIBIOTICS THROUGH THE DIGESTIVE TRACT OF NORMAL AND SCOURING CALVES AND THEIR EFFECT UPON THE BACTERIAL FLORA.

P J Mylrea

Res Vet Sci 9(1):5-13

Jan 1968 41.8 R312

Antibiotics, Bacteria, Calves, Dihydrostreptomycin, Dysentery, Gastrointestinal system, Milk, Neomycin.

Abstract: Neither antibiotic eliminated Salmonella.

17553-68

PHYSICO-CHEMICAL STUDIES OF NEWCASTLE DISEASE VIRUS. III. THE CONTENT OF VIRUS NUCLEIC ACID AND ITS SEDIMENTATION PATTERN.

H Nakajima J Obara

Arch Gesamte Virusforsch 20(3):287-295 REF

1967 448.3 AR23

Biophysics, Molecular weight, Newcastle disease virus, Nucleic acids, Physical chemistry, Virology.

Abstract

17554-68

SURVIVABILITY OF THE FOOT-AND-MOUTH DISEASE VIRUS OUTSIDE THE HOST. TRANSL. I6891.

I Nauruzbayev

23 P.

Barns, Cattle, Foot-and-mouth disease virus, Guinea pigs, Humidity, Injections, Measurement, Methodology, Research, Tables (data), Temperature. Translation from Trudy. 26:96-103, 1966, translated by C. C. Nikiforoff

17555-68

CALCIUM STATUS STUDIES ON ADULT SHEEP.

T E Nelson A D Tillman

J Nutr 93(4):475-479 REF

Dec 1967 389.8 J82

Animal nutrition, Animal physiology, Calcium, Deficiency diseases, Phosphorus, Sheep.

Abstract: Postulated that renal phosphorus clearance was greater in the Ca-deficient sheep.

17556-68

ALLEVIATION OF THE LEG ABNORMALITY IN ZINC-DEFICIENT CHICKS BY HISTAMINE AND BY VARIOUS ANTI-ARTHRITIC AGENTS.

F H Nielsen M L Sunoe W G Hoekstra

J Nutr 94(4):527-533 REF

Apr 1968 389.8 J82

Animal abnormalities, Animal nutrition, Arthritis, Chicks, Deficiency diseases, Histamine, Zinc.

Abstract

17557-68

RELATIONSHIP OF HISTIDINE. ITS METABOLITES AND OTHER FACTORS TO THE ARTHRITIC SYNDROME IN ZINC-DEFICIENT CHICKS.

F H Nielsen

Diss Abstr Sect B 28(11):4417B

May 1968 Z5055.U49D53

Amino acids, Animal nutrition, Arthritis, Chicks, Diet, Histidine, Legs, Metabolites, Temperature, Zinc.

17558-68

PNEUMONIA DUE TO MYCOPLASMA IN GNOTOBIOTIC MICE. III LESIONS IN THE LUNGS OF GNOTOBIOTIC MICE AFTER MULTIPLE INTRANASAL INOCULATIONS OF BROTH CULTURES OF MYCOPLASMA PNEUMONIAE.

A B Organick I I Lutsky

J Bacteriol 95(6):2310-2316 REF

Jun 1968 448.3 J82

Animal diseases, Germ-free life, Mice, Mycoplasma, Pneumonia.

Abstract

17559-68

CELLULAR IMMUNITY OF MICE INFECTED WITH LISTERIA MONOCYTOGENES IN DIFFUSION CHAMBERS.

J W Osebold R A DiCapua

J Bacteriol 95(6):2158-2164 REF

Jun 1968 448.3 J82

Animal diseases, Antibodies, Immunity, Listeria monocytogenes, Mice.

Abstract

17560-68

EFFECTS OF FREEZING ON AFRICAN HORSE-SICKNESS VIRUS. (ABSTRACT).

Y Ozawa S Bahrami

Fed Amer Soc Exp Biol Fed Proc 27(2):562

Mar 1968 442.9 F31P

African horse sickness virus, Culture media, Freezing, Research, Salts, Sugars, Temperature.

17561-68

INTESTINAL ELECTROLYTE DISTRIBUTION AND CA45 AND SR89 INSORPTION IN CALVES.

S C Perry

Diss Abstr Sect B 28(9):3858B

Mar 1968 Z5055.U49D53

Animal metabolism, Calcium isotopes, Calves, Chemistry, Intestines, Strontium isotopes.

17562-68

SUSCEPTIBILITY OF CHICKS WITH GENETIC MUSCULAR DYSTROPHY TO GOUT INDUCED BY HIGH PROTEIN DIETS. (ABSTRACT).

D W Peterson W H Hamilton R Matson

Fed Amer Soc Exp Biol Fed Proc 27(2):416

Mar 1968 442.9 F31P

17563-68

Animal genetics, Animal metabolism, Chicks, Diet, Gout, Mortality, Muscular dystrophy, Proteins.

17563-68

IN VITRO POTENCY TESTS FOR ANTI-HOG CHOLERA ANTIBODIES: A TEST FOR ANTI-HOG CHOLERA SERUMS AND A TEST FOR HERD EXPOSURE.

C E Phillips

Amer J Vet Res 29(5):1097-1102

May 1968 41.8 AM3A

Antibodies, Culture media, Hog cholera, Serological tests, Serum, Swine, Virus diseases (animals).

Abstract: Large numbers of coverslip monolayer cell cultures were processed rapidly with apparatus of special design.

17564-68

SUSCEPTIBILITY OF CULTURED MAMMALIAN CELLS TO INFECTION WITH VIRULENT AND MODIFIED HOG CHOLERA VIRUSES.

E C Pirtle A J Kniazoff

Amer J Vet Res 29(5):1033-1040 REF

May 1968 41.8 AM3A

Antibodies, Antigens, Cells, Culture media, Hog cholera, Immunity, Mammals, Virus diseases (animals).

17565-68

METABOLIC MECHANISMS AFFECTING AFLATOXIN B, TOXICITY IN TWO SPECIES. (ABSTRACT).

R Portman T C Campbell K Plowman

Fed Amer Soc Exp Biol Fed Proc 27(2):839

Mar 1968 442.9 F31P

Aflatoxin, Animal metabolism, Glucose, Liver, Mice, Rats, Toxicology.

17566-68

INFECTIOUS INHERITANCE OF PATHOGENICITY IN ASPERGILLUS. (ABSTRACT).

D M Purnell G M Martin G L Dorn

Fed Amer Soc Exp Biol Fed Proc 27(2):477

Mar 1968 442.9 F31P

Aspergillus nidulans, Fetal death, Mice, Phytopathology, Plant genetics.

17567-68

INTERACTIONS OF SERA AND LEUCOCYTES IN VITRO ON CELLS TRANSFORMED BY ROUS SARCOMA VIRUS. (ABSTRACT).

H Rabin

Fed Amer Soc Exp Biol Fed Proc 27(2):429

Mar 1968 442.9 F31P

Antibodies, Cells, Chickens, Culture media, Immunization, Rous sarcoma virus, Serum.

17568-68

CONGENITAL GOITRE IN MERINO SHEEP DUE TO AN INHERITED DEFECT IN THE BIOSYNTHESIS OF THYROID HORMONE.

R Rac G N Hill R W Pain C J Mulhearn

Res Vet Sci 9(3):209-223 REF

May 1968 41.8 R312

Animal diseases, Animal genetics, Blood tests, Goiter, Hereditary diseases, Hormones, Lambs, Mortality, Research.

17569-68

THEILERIASIS IN TEXAS WHITE-TAILED DEER.

R M Robinson K L Kuttler J W Thomas R G Marburger

J Wildlife Manage 31(3):455-459 MAP

Jul 1967 410 J827

Deer, Immunization, Insect vectors, Theileriasis, Wildlife diseases.

Abstract: Five splenectomized and five nonsplenectomized fawns were inoculated with blood from a parasitized deer; one fawn died. Surviving splenectomized deer did not regain preinoculation erythrocyte values. No signs of infection were seen in the nonsplenectomized deer.

17570-68

IMMUNITY TO EIMERIA BRUNETTI AND EIMERIA MAXIMA INFECTIONS IN THE FOWL.

M E Rose

Parasitology 57(2):363-370 REF

May 1967 448.8 P21

Animal diseases, Coccidiosis, Experiment stations, Injections, Intestines, Poultry.

17571-68

PENICILLIN CONCENTRATION IN CANINE BLOOD AND URINE AFTER INTRAMUSCULAR INJECTION.

I H Siddique W Battle G T Blackledge

Amer Vet Med Ass J 152(6):631-633

15 Mar 1968 41.8 AM3

Animal diseases, Blood, Dogs, Dosage, Drugs, Injections, Muscles, Penicillin, Procaine, Sodium, Therapeutics, Urine.

17572-68

NITROFURANS AND ANTIBIOTIC THERAPY OF ARTIFICIALLY INDUCED SWINE SALMONELLOSIS.

V K Singh

Amer Vet Med Ass J 153(1):65-68 REF

01 Jul 1968 41.8 AM3

Antibiotics, Autopsies, Nitrofurans, Salmonellosis, Swine, Therapeutics.

Abstract

17573-68

PATHOGENESIS OF STAPHYLOCOCCAL SYNOVITIS IN TURKEYS: CULTURAL RETRIEVAL IN EXPERIMENTAL INFECTION.

R A Smart M L Miner R V Davis

Avian Dis 12(1):37-46 REF

Feb 1968 41.8 AV5

Infectious synovitis, Septicemia, Turkeys.

17574-68

THE EFFECT OF DIETARY MG AND F ON BONE CALCIFICATION IN CHICKS. (ABSTRACT).

F Spierto J C Rogler H E Parker

Fed Amer Soc Exp Biol Fed Proc 27(2):312

Mar 1968 442.9 F31P

Animal nutrition, Bones, Chicks, Culture media, Diet, Iron, Magnesium.

17575-68

BEDSONIA ABORTION OF SHEEP. I. AETIOLOGICAL STUDIES.

M J Studdert D G McKercher

Res Vet Sci 9(1):48-56 REF

Jan 1968 41.8 R312

Abortion, Bedsonia virus, Etiology, Injections, Research, Sheep, Virus diseases (animals).

17576-68

EFFECT OF ROUS SARCOMA VIRUS INFECTION ON THE INHIBITION OF NUCLEOLAR RNA- AND DNA SYNTHESIS BY ACTINOMYCIN D IN CHICKEN FIBROBLASTS: RADIOAUTOGRAPHIC LOCALIZATION OF VIRAL RNA SYNTHESIS IN NUCLEOLI. (ABSTRACT).

R G Suskind T Pry G Rabotti

Fed Amer Soc Exp Biol Fed Proc 22(2):715

Mar 1968 442.9 F31P

Actinomycin d, Autoradiography, Biosynthesis, Chickens, Deoxyribonucleic acid, Ribonucleic acid, Rous sarcoma virus, Viruses.

17577-68

SPERM OUTPUT OF BULLS AND PRODUCTION BY COWS FED SUPPLEMENTAL VITAMINS. (ABSTRACT).

J W Thomas D Hillman H D Hafs

J Dairy Sci 51(6):979

Jun 1968 44.8 J822

Alfalfa, Animal nutrition, Bulls, Cattle, Corn, Feeding, Hay, Injections, Lactation, Semen, Spermatozoa, Vitamin a, Vitamin d, Vitamin e.

17578-68

SELENIUM DEFICIENCY IN CHICKS AND ITS EFFECT ON THE REQUIREMENT FOR VITAMIN E. (ABSTRACT).

J N Thompson M L Scott

Fed Amer Soc Exp Biol Fed Proc 27(2):417

Mar 1968 442.9 F31P

Amino acids, Chemurgy, Chicks, Deficiency diseases, Diet, Exudative diathesis, Micronutrients, Mortality, Selenium, Vitamin c.

17579-68

TRANSMISSIBLE ENTERITIS OF TURKEYS-DISEASE REPRODUCTION.

R B Truscott

Avian Dis 12(2):239-245

May 1968 41.8 AV5

Animal diseases, Culture media, Enteritis, Immunization, Reproduction, Transmissible gastroenteritis, Turkeys.

17580-68

VASCULAR DISEASE IN ORGANOMERCURIAL POISONING IN SWINE. (ABSTRACT).

L Tryphonas O Nielsen

Fed Amer Soc Exp Biol Fed Proc 27(2):612

Mar 1968 442.9 F31P

Animal diseases, Circulatory system, Lesions, Mercury, Organic compounds, Swine, Toxicology.

17581-68

YELLOW PIGMENTS EXCRETED BY VITAMIN A-DEPLETED SHEEP.

R E Tucker G E Mitchell C O Little

J Nutr 93(4):518-522 REF

Dec 1967 389.8 J82

Animal nutrition, Cecum, Colon, Deficiency diseases, Feces, Gastrointestinal system, Sheep, Vitamin a.

17582-68

THE ABSORPTION OF ZINC AND OLEIC ACID FROM DIGESTIVE TRACTS PARASITIZED IN THE ILEUM, CECA, AND COLON. (ABSTRACT).

D E Turk J F Stephens

Fed Amer Soc Exp Biol Fed Proc 27(2):421

Mar 1968 442.9 F31P

Coccidiosis, Eimeria acervulina, Eimeria brunetti, Eimeria necatrix, Eimeria tenella, Intestinal absorption, Oleic acid, Parasitism, Zinc.

17583-68

ENZOOTIC PNEUMONIA OF SHEEP IN THE MAFKING DISTRICT.

R R Van Der Veen I F Zumpt

S Afr Vet Med Ass J 38(4):415-419

Dec 1967 41.8 S08

Bacteria, Drug therapy, Enzootic pneumonia, Immunization, Livestock diseases, Pasteurella haemolytica, Pasteurella multocida, Pneumonia, Sheep, Vaccines.

17584-68

MEASUREMENT OF THE ANTITHYROTOXIC FACTOR CONTENT OF VARIOUS ROUGHAGES AND COW FECES. (ABSTRACT).

R W Wallenius J W Hibbs H R Conrad

J Dairy Sci 51(6):984

Jun 1968 44.8 J822

Animal nutrition, Animal physiology, Biological assay, Cattle, Feces, Feed, Measurement, Roughage, Thyroid gland, Toxicology.

17585-68

NIACIN REQUIREMENT OF GROWING MINK.

R G Warner H F Travis C F Bassett B McCarthy

R P Abernathy

J Nutr 95(4):563-568

Aug 1968 389.8 J82

Animal nutrition, Animal physiology, Deficiency diseases, Diet, Metabolism, Minks, Nicotinic acid.

17586-68

VARIABILITY IN HEMATOLOGICAL RESPONSE OF CHICKS FED IRON-COPPER DEFICIENT SKIM MILK DIET. (ABSTRACT).

K W Washburn

Fed Amer Soc Exp Biol Fed Proc 27(2):481

Mar 1968 442.9 F31P

Animal nutrition, Chemurgy, Chicks, Copper, Deficiency diseases, Diet, Hematology, Iron, Skim milk.

17587-68

METABOLISM OF 75SE-SELENITE AND 75SE-SELENOMETHIONINE BY RUMEN MICROORGANISMS. (ABSTRACT).

P D Whanger P H Weswig O H Muth

Fed Amer Soc Exp Biol Fed Proc 27(2):418

Mar 1968 442.9 F31P

Animal nutrition, Chemurgy, Chromatography, Microorganisms, Pronase, Protocins, Radioactive tracers, Rumen, Selenite, Selenium, Selenomethionine.

17588-68

INVESTIGATIONS ON TERATOGENIC EFFECTS OF DIETARY NITRATE IN THE RAT AND EXCESS VITAMIN A IN THE DOG.

D O Wiersig

Diss Abstr Sect B 28(9):3815B

Mar 1968 Z5055.U49D53

Animal abnormalities, Diet, Dogs, Feed additives, Potassium nitrite, Pregnancy, Rats, Vitamin a.

17589-68

SUSCEPTIBILITY OF TURKEYS TO INFECTIOUS LARYNGOTRACHEITIS.

R W Winterfield I G So

Avian Dis 12(1):191-202 REF

Feb 1968 41.8 AV5

Chick embryos, Infectious laryngotracheitis virus, Turkeys.

17590-68

BRUCELLOSIS. DESIGNATION OF MODIFIED CERTIFIED BRUCELLOSIS, AREAS, PUBLIC STOCKYARDS, SPECIFICALLY APPROVED STOCKYARDS AND SLAUGHTERING ESTABLISHMENTS.

G H Wise

Fed Regist 33(138,PT.1):10201-10202

17 Jul 1968 L1.451

Agricultural regulation, Brucellosis, Livestock diseases, Slaughterhouses, Stockyards.

17591-68

STUDIES ON TRANSMISSIBLE GASTROENTERITIS VIRUS OF PIGS.

K H M Witte

Diss Abstr Sect B 28(11):4368B-4369B

May 1968 Z5055.U49D53

Culture media, Cytology, Kidneys, Research, Salivary glands, Serological tests, Swine, Thyroid gland, Transmissible gastroenteritis.

17592-68

RENAL EFFECTS OF CARBON TETRACHLORIDE IN THE CAT.

L C K Wong

Diss Abstr Sect B 28(9):3817B

Mar 1968 Z5055.U49D53

Animal metabolism, Blood plasma, Carbon tetrachloride, Cats, Fats, Glycerides, Kidneys, Lipids.

17593-68

EFFECT OF ENDOGENOUS INTERFERON AND ACTINOMYCIN D ON GROWTH OF JAPANESE ENCEPHALITIS VIRUS IN CHICK EMBRYO CELLS.

S Yamazaki

Jap J Microbiol 12(2):171-178 REF

Jun 1968 448.8 J273

Actinomycin d, Antibiotics, Chickens, Interferon, Japanese b encephalitis virus, Tissue culture, Virucides.

Abstract

17594-68

STUDIES ON PATHOGENIC LEPTOSPIRAE. VI. EFFECT OF TWEEN 80 ON THE GROWTH OF LEPTOSPIRA CANICOLA AND LEPTOSPIRA ICTEROHAEMORRHAGIAE.

Y Yanagihara I Mifuchi

Jap J Microbiol 12(2):145-149 REF

Jun 1968 448.8 J273

Antimetabolites, Leptospira canicola, Leptospira icterohaemorrhagiae, Metabolism, Physiology.

Abstract

17595-68

COMPARATIVE DRUG METABOLISM IN FIVE MAMMALIAN SPECIES. (ABSTRACT).

B Zook R M Cook

J Dairy Sci 51(6):981

Jun 1968 44.8 J822

Animal physiology, Cattle, Drugs, Enzymes, Goats, Liver, Mammals, Metabolism, Pesticides, Rats, Sheep, Swine.

ARTHROPODS

17596-68

TICK INFESTATION OF LIVESTOCK IN NATAL. I. THE PREDILECTION SITES AND SEASONAL VARIATIONS OF CATTLE TICKS.

M K Baker F B W Ducasse

S Afr Vet Med Ass J 38(4):447-453

Dec 1967 41.8 SO8

Cattle, Chemical control (insects), Climate, Insect behavior, Insect dissemination, Insect ecology, Insect vectors, Ixodides.

17597-68

INSECT-BORNE ANIMAL DISEASES ARE TARGETS FOR NEW ZEALAND VIGILANCE.

G A Helson

New Zeal J Agr 117(2):58-59

Aug 1968 23 N48J

Aircraft disinfection, Animal quarantine, Insect control, Insect vectors, Sanitation. Quarantine and aircraft disinfection procedures are primary precautions in New Zealand's vigilance against introduction of insects bearing animal diseases.

PARASITES

17598-68

EXPLORATIONS FOR VARIATIONS IN THE PATHOGENICITY OF HAEMONCHUS CONTORTUS ISOLATES.

G W Benz

Diss Abstr Sect B 28(11):4368

May 1968 Z5055.U49D53

Anemia, Animal diseases, Haemonchus contortus, Hematologic diseases, Hemoglobin, Population, Research, Sheep.

17599-68

STUDIES ON PATHOGENICITY AND FATTY ACID COMPOSITION OF RAILLIETINA CESTICILLUS (CESTODA).

H Botero

Diss Abstr Sect B 28(10):3948B

Apr 1968 Z5055.U49D53

Animal physiology, Cestoda, Chicks, Chromatography, Diet, Fatty acids, Feeding, Linoleic acid, Parasitism, Raillietina cesticillus, Tribolium.

17600-68

BENZIMIDAZOLE ANTHELMINTIC COMPOSITIONS AND METHOD OF USE. PATENT 3,326,753.

H D Brown

Us Patent Office Offic Gaz 839(3):1112

20 Jun 1967 156.65 OF2

Anthelmintics, Benzimidazole, Helminthiasis, Patents.

17601-68

CRUZIA BRASILIENSIS SP. N. (NEMATODA-CRUZIIDAE) PARASITE OF SUS DOMESTICUS. (SP)

H M A Costa

Minas Gerais Univ Escol Vet Arq 17:61-69 REF

1965 41.9 M662

Cruzia brasiliensis, Nematodes, Parasitism, Swine, Taxonomy. English summary

Abstract

17602-68

EXPERIMENTAL TRICHOSTRONGYLUS COLUBRIFORMIS INFECTION IN ADULT GOATS.

W M Fitzsimmons E Harness S A Sellwood

Res Vet Sci 9(3):237-247 REF

May 1968 41.8 R312

Animal abnormalities, Animal histology, Dosage, Goats, Helminthiasis, Hematology, Immunity, Laboratory animals, Larvae, Research, Trichostrongylus colubriformis.

17603-68

PARASITIC HYPOALBUMINAEMIA: STUDIES ON TYPE II OSTERTAGIASIS OF CATTLE.

G J Halliday W Mulligan R G Dalton

Res Vet Sci 9(3):224-227 REF

May 1968 41.8 R312

Albumins, Cattle, Chemical control (nematodes), Electrophoresis, Gastrointestinal system, Iodine isotopes, Measurement, Metabolism, Nematodes, Ostertagiasis, Parasitism, Proteins, Research, Serum.

17604-68

THE ROUTINE DIFFERENTIATION OF THE OVA AND LARVAE OF TWO PARASITES OF SWINE, HYOSTRONGYLUS RUBIDUS (HASSELL ET STILES, 1892) AND OESOPHAGOSTOMUM DENTATUM (RUD., 1803).

M R Honer

Z Parasitenk 29(1):40-45

1967 442.8 Z33F

Hyostrogylus rubidus, Oesophagostomum dentatum, Parasites, Swine.

Abstract

17605-68

OBSERVATIONS ON THE EARLY MIGRATION OF THE LARVAE OF ASCARIS SUUM GOEZE, 1782 IN WHITE MICE.

D C Jenkins

Parasitology 58(2):431-440 REF

May 1968 448.8 P21

Anatomy, Ascaris lumbricoides suum, Insect migration, Larvae, Mice, Parasitism, Research.

17606-68

STUDY OF THE EFFICACY OF HALOXON AGAINST TRICHINELLA SPIRALIS. (SP)

A Martinez Fernandez M Cordero Del Campillo

B Aller Gancedo

Oviedo Univ Fac Vet Leon An 12(12):251-265 REF

1966 41.9 OV4

Anthelmintics, Haloxon, Hamsters, Rats, Trichinella spiralis. Spanish, French, English, and German summaries.

Abstract

17607-68

HELMINTHIC INFESTATIONS OF PIGLETS WITH REFERENCE TO LESIONS ENCOUNTERED.

G S Mishra B P Pande

Indian J Vet Sci Anim Husb 37(3):143-149 REF

Sep 1967 41.8 IN22

Ascaris lumbricoides suum, Baby pigs, Helminthiasis, Livestock diseases, Nematodes, Parasitism.

Abstract: A. lumbricoides suum is greatest significance because of the extensive injury in causes by migration. In heavy infestations it greatly affects the hepatic and pulmonary tissues.

17608-68

EXPERIMENTAL STUDIES ON TOXASCARIS LEONINA. IV. DEVELOPMENT OF EGGS OF THREE ASCARIDS, T. LEONINA, TOXOCARA CANIS AND TOXOCARA CATI, IN DOGS AND CATS.

S Okoshi M Usui

Jap J Vet Sci 30(1):29-38 REF

Feb 1968 41.8 J27

Cats, Dogs, Feces, Physiology, Research, Temperature, Toxascaris leonina, Toxocara canis, Toxocara cati. Japanese summary

LIVESTOCK PROTECTION

17609-68

17609-68
EXPERIMENTAL STUDIES ON ANCYLOSTOMIASIS IN CATS. VI. VISCERAL MIGRATION OF LARVAE OF ANCYLOSTOMA TUBAFORME AND A. CANINUM IN DOGS.

S Okoshi Y Murata
Jap J Vet Sci 30(1):43-51 REF
Feb 1968 41.8 J27

Ancylostoma caninum, Ancylostoma tubaeforme, Ancylostomiasis, Biological transport, Cats, Dogs, Larvae, Parasitism, Viscera. English summary

17610-68
INTESTINAL MALABSORPTION OF D-GLUCOSE IN MICE INFECTED WITH TRICHINELLA SPIRALIS.

L J Olson J A Richardson
J Parasitol 54(3):445-451 REF
Jun 1968 448.8 J824

Animal diseases, D-glucose, Intestinal absorption, Larvae, Mice, Parasitism, Trichinella spiralis, Trichinosis.

17611-68
THREE NEW COCCIDIA PARASITIC IN CUBAN BIRDS. (PROTOZOA: SPOROZOA).

L Pellerdy
Acta Zool (budapest) 13(1-2):227-230
1967 410 AC85

Birds, Coccidiosis, Sporozoa, Taxonomy. Russian summary

17612-68
THE EFFECT OF SPLENECTOMY UPON INFECTION WITH EIMERIA TENELLA.

M E Rose
Parasitology 58(2):481-487 REF
May 1968 448.8 P21
Bursectomy, Chickens, Eimeria tenella, Insect control, Research, Spleen extract.

17613-68
FASCIOLIASIS IN CATTLE: A STUDY OF THE DISEASE IN THE FIELD.

J G Ross T C Geary J C McM Welsh
Irish Vet J (N.S.) 22(5):82-87 REF
May 1968 41.8 IR4
Cattle, Fasciola hepatica, Fascioliasis, Liver, Livestock diseases, Parasitism.

17614-68
BIOCHEMICAL OBSERVATIONS OF ASCARIS SUUM LUNG-STAGE LARVAE.

H J Saz O L Cure E Bueding
J Parasitol 54(3):457-461 REF
Jun 1968 448.8 J824
Ascaris lumbricoideus suum, Biochemistry, Guinea pigs, Larvae, Lungs, Nematodes, Parasitism.

17615-68
HETEROLOGOUS IMMUNITY IN AVIAN HOSTS INFECTED WITH PLASMODIUM RELICTUM AND PLASMODIUM LOPHURAE (SPOROZOA: HAEMOSPORINA).

A A Shahidi
Diss Abstr Sect B 28(10):4357B
Apr 1968 Z5055.U49D53
Antigens, Chickens, Electrophoresis, Immunity, Injections, Parasitism, Plasmodium lophurae, Plasmodium relictum.

17616-68
CONTRIBUTION TO THE KNOWLEDGE OF PARASITIC FAUNA IN FOWLS WITHIN SERBIA. V. ECTOPARASITES OF FOWLS IN THE VICINITY OF LAZAREVAC. (CZ)

R Slijepcevic-Jovanovic
Vet Glas 22(3):199-201
1968 41.8 J93
Chickens, Ducks, Geese, Parasitism, Poultry, Research, Turkeys. English and Russian summaries

17617-68
HELMINTHS, ARTHROPODS AND PROTOZOA OF DOMESTICATED ANIMALS, (SIXTH EDITION OF MONNIG'S VETERINARY HELMINTHOLOGY AND ENTOMOLOGY).

SF810.0M6.
E J L Soulsby

BIBLIOGRAPHY

824 P. BALTIMORE WILLIAMS AND WILKINS COMPANY

1968
Arthropoda, Helminthiasis, Livestock, Protozoa.

17618-68
TRANSMAMMARY PASSAGE OF ANCYLOSTOMA CANINUM LARVAE IN DOGS.

W M Stone M Giradeau
J Parasitol 54(3):426-429 REF
Jun 1968 448.8 J824
Ancylostoma caninum, Animal diseases, Dogs, Larvae, Mammary glands, Toxocara canis, Uterus.

17619-68
ESCHERICHIA COLI IN ENTERIC DISEASE OF SWINE: OBSERVATIONS ON HERD RESISTANCE.

E J Sweeney
Irish Vet J (N.S.) 3(22):42-46 REF
Mar 1968 41.8 IR4
Enteritis, Escherichia coli, Genetics, Immunity, Livestock diseases, Swine.

17620-68
THE FEEDING PROCESSES OF THE CATTLE TICK BOOPHILUS MICROPLUS (CANESTRINI). II. THE SEQUENCE OF HOST-TISSUE CHANGES.

R J Tatchell D E Moorhouse
Parasitology 58(2):441-459 REF
May 1968 448.8 P21
Blood, Boophilus microplus, Cattle, Erythrocytes, Feeding, Histology, Secretions, Tissues.

17621-68
CALCIUM AND MAGNESIUM ABSORPTION IN THE YOUNG CALF FOLLOWING INDUCED PARASITISM, OSTERTAGIA SPP. (ABSTRACT).

L B Waymack S L Hansard
Fed Amer Soc Exp Biol Fed Proc 27(2):421
Mar 1968 442.9 F31P
Calcium, Chemurgy, Helminthiasis, Intestinal absorption, Larvae, Magnesium, Ostertagiasis.

COMMODITY PROTECTION

STORAGE DISEASES

17622-68
THE RAMIFICATIONS OF SALMONELLOSIS.

E E Dunton O C Raymond
Can J Public Health 59(6):246-247
Jun 1968 449.8 P964
Bacteria, Epidemiology, Food poisoning, Health, Human diseases, Packing, Salmonella typhimurium, Salmonellosis, Sanitation, Surveys, Typhoid.

ARTHROPODS

17623-68
INSECT PESTS IN FOOD STORES.

Great Brit Min Agr Food Adv Leaflet 483:8P.
Mar 1968 10 G79LA
Food, Insect pests, Insecticides, Mites, Stegobium paniceum, Storage.

17624-68
TREATMENT OF SEEDS OF THE COMMON PINE TREE WITH FUNGICIDES. TRANSL.

16706.
V I Mosin
9 P.
1966
Chemicals, Fungicides, Fungus diseases (plants), Laboratories, Pinus, Seeds, Storage, Trees.

17625-68
ANTHRENU SARNICUS MROCZKOWSKI (COLEOPTERA, DERMESTIDAE) IN BRITAIN.
G E Woodroffe

J Stored Prod Res 3(3):263-265

Oct 1967 421 J829
Anthrenus sarnicus, Dermestidae, Great Britain, Household insects.

RODENTS AND OTHER PESTS

17626-68
CARDIAC LESIONS IN THE OFFSPRING OF RATS FED COPPER DEFICIENT DIET WITH LOW-LEVEL MULTIPESTICIDE SUPPLEMENTATION. (ABSTRACT).

W A Kelly W W Carlton
Fed Amer Soc Exp Biol Fed Proc 27(2):481
Mar 1968 442.9 F31P
Carbaryl, Casein, Copper, Corn, Fats, Fetal death, Heart, Neoplasms, Parathion, Rats, Sucrose.

17627-68
ACQUIRED IMMUNITY TO FASCIOLA HEPATICA IN THE LABORATORY WHITE MOUSE.

B Z Lang
Amer J Trop Med Hyg 17(4):561-567
Jul 1968 448.8 AM326
Acanthocephala, Antigens, Histology, Immunity, Laboratories, Leukocytes, Mice, Trichinella spiralis.

MICROBIAL CONTAMINATION

17628-68
THE BIOLOGY OF FUNGI BACTERIA VIRUSES. QR41.OS7.

G Stevenson
202 P. REF LONDON, EDWARD ARNOLD LIMITED
1967
Air, Bacteriophages, Biology, Cells, Ecology, Fungi, Habitats, Measurement, Metabolism, Microbiology, Morphology, Physiology, Soils, Tables (data), Water.

ENVIRONMENTAL CONTAMINATION

17629-68
EFFECT OF POLLUTION OF AIR WITH OZONE ON FLAVOR OF SPRAY-DRIED MILKS. (ABSTRACT).

F E Kurtz A Tamsma R L Selman M J Pallansch
J Dairy Sci 51(6):935
Jun 1968 44.8 J822

Air pollution, Food flavor, Milk, Ozone, Spraying.

17630-68
THE ACCUMULATION OF 36CL RING-LABELED DDT IN A FRESHWATER MARSH.

R L Meeks
J Wildlife Manage 32(2):376-397 REF
Apr 1968 410 J827
Aquatic animals, Aquatic plants, Chlorine isotopes, DDT, Insecticide residues, Marshes, Radioactive tracers.

Abstract: Plants and most invertebrates accumulated their highest residues during the first week; vertebrates required longer periods.

RESIDUES

17631-68
THE INORGANIC BROMIDE CONTENT OF FOODSTUFFS DUE TO SOIL TREATMENT WITH FUMIGANTS.

H Beekman D G Crosby P T Allen C Mourer
J Food Sci 32(1):138-140
Jan 1967 389.8 F7322

Bromides, Dibromo-3-chloropropane, 1,2-, Ethylene dibromide, Food contamination, Fumigation, Pesticide residues, Soil contamination, Trimethylene chlorobromide.

Abstract

17632-68

COMPARATIVE METABOLISM OF MALATHION-C IN PLANTS AND ANIMALS. J B Bourke E J Broderick L R Hackler P C Lippold

J Agr Food Chem 16(4):585-589 REF

Jul 1968 381 J8223

Animals, Beans, Chromatography, Excreta, Extracts, Malathion, Pesticides, Plant metabolism, Radioactivity, Rats, Tissues.

17633-68

INFLUENCE OF VARIOUS PERSISTENT CHLORINATED INSECTICIDES ON THE MACRO AND MICRO ELEMENT CONSTITUENTS OF ZEA MAYS AND PHASEOLUS VULGARIS GROWING IN SOIL CONTAINING VARIOUS AMOUNTS OF THESE MATERIALS.

H Cole D MacKenzie C B Smith E L Bergman

Bull Environ Contamination Toxicol 3(3):141-154

May 1968 RA1270.P35A1

Beans, Chlorine, Corn, Elements, Insecticides, Pesticide residues, Soil analysis.

17634-68

HALOGENATED PESTICIDES; LOCALIZATION OF DIELDRIN IN WHEAT TISSUE.

R C Cotner R H Hamilton R O Mumma D E H Frear

J Agr Food Chem 16(4):608-609

Jul 1968 381 J8223

Dieldrin, Halogen compounds, Pesticides, Roots, Tissues, Wheat, X-rays, Xylem.

17635-68

THE PHOTODECOMPOSITION OF DIELDRIN RESIDUES IN WATER.

G L Henderson G C Donald

Bull Environ Contamination Toxicol 3(3):131-134

May 1968 RA1270.P35A1

Aldrin, Chemical reactions, Decomposition, Dieldrin, Insecticides, Pesticide residues, Photochemistry, Water.

17636-68

EXPOSURE TO INSECTICIDES IN QUEBEC.

Z Jegier J Brodeur

Can J Public Health 59(6):229-232

Jun 1968 449.8 P964

Accident prevention, Health, Insecticide residues, Insecticides, Research, Spraying. Summary in French

17637-68

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

J K Kirk

Fed Regist 33(183):14184

19 Sep 1968 L1.451

Agricultural chemistry, Dalapon, Herbicide residues, Lemons, Toxicology.

17638-68

NOTICE OF AMENDED FILING OF PETITION REGARDING PESTICIDES.

J K Kirk

Fed Regist 33(188):14480

26 Sep 1968 L1.451

Food plants, Fungi, Fungicides, Peanuts, Pesticide residues, Triphenyltin hydroxide.

17639-68

NOTICE OF AMENDED FILING OF PETITION REGARDING PESTICIDES.

J K Kirk

Fed Regist 33(188):14480

26 Sep 1968 L1.451

Atrazine, Chemicals, Food plants, Herbicides, Pesticide residues, Pineapples, Rye, Wheat.

17640-68

TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDES CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. DEMETON.

J K Kirk

Fed Regist 33(131):9774

06 Jul 1968 L1.451

Chemicals, Demeton, Food plants, Insecticides, Pesticide residues.

17641-68

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

J K Kirk

Fed Regist 33(188):14480

26 Sep 1968 L1.451

Bacillus thuringiensis, Chemicals, Food plants, Insecticides, Microorganisms, Pesticide residues, Spores.

17642-68

NOTICE OF FILING OF PETITION REGARDING PESTICIDE CHEMICALS.

J K Kirk

Fed Regist 33(149,PT.1):10952

01 Aug 1968 L1.451

Apples, Biochemistry, Chemicals, Chloro-1-(2,4,5-trichlorophenyl) vinyl dimethyl phosphate, 2-, Chromatography, Insecticide residues, Insecticides, Pesticides, Phosphorus.

17643-68

NOTICE OF AMENDED FILING OF PETITION REGARDING PESTICIDES.

J K Kirk

Fed Regist 33(162):11788

20 Aug 1968 L1.451

Alfalfa, Cattle, Corn, Endosulfan, Food plants, Insecticide residues, Insecticides, Mcat.

17644-68

ETHION. PROPOSED ESTABLISHMENT OF PESTICIDE TOLERANCES.

J K Kirk

Fed Regist 33(155):11362

09 Aug 1968 L1.451

Agricultural legislation, Agricultural regulation, Ethion, Insecticide residues, Meat, Milk, Toxicology.

17645-68

IMIDAN INSECTICIDE RESIDUES (IMIDAN AND IMIDOXON): THEIR PERSISTENCE IN CORN, GRASS, AND SOYBEANS.

D B Leuck M C Bowman

J Econ Entomol 61(3):705-707

Jun 1968 421 J822

Biochemistry, Chemical control (insects), Corn, Forage plants, Grasses, Imidan, Insecticide residues, Insecticides, Soybeans, Time.

17646-68

NOTICE OF AMENDED FILING OF PETITION REGARDING PESTICIDES. DUGGAN, R E.

Fed Regist 33(178):12924

12 Sep 1968 L1.451

Animals, Chloro-N-isopropylacetanilide, 2-, Corn, Herbicide residues, Metabolites, Pesticides.

17647-68

THE DEVELOPMENT OF ANALYTICAL METHODS FOR THE DETERMINATION OF CHLORINATED HYDROCARBON INSECTICIDES IN SOILS AND WATERS.

H B Pionke

Diss Abstr Sect B 28(11):4383B

May 1968 Z5055.U49D53

Assay, Chlorine, Chromatography, Hydrocarbons, Insecticide residues, Insecticides, Measurement, Soils, Water.

17648-68

GAS CHROMATOGRAPHIC ANALYSIS OF MALATHION IN WATER AND IN FISH.

M T H Ragab

Bull Environ Contamination Toxicol 3(3):155-163

May 1968 RA1270.P35A1

Chromatography, Fish, Gases, Insecticides, Malathion, Pesticide residues, Water.

17649-68

A SURVEY OF CHLORINATED PESTICIDE RESIDUES IN BLACK DUCK EGGS.

W L Reichel C E Addy

Bull Environ Contamination Toxicol 3(3):174-179,MAP

May 1968 RA1270.P35A1

Chlorine, Chromatography, Ducks, Eggs, Pesticide residues, Surveys.

17650-68

DROSOPHILA ALCOHOL DEHYDROGENASE. PURIFICATION AND PARTIAL CHARACTERIZATION.

W Sofer H Ursprung

J Biol Chem 243(11):3110-3115 REF

10 Jun 1968 381 J824

Alcohol dehydrogenase, Centrifugation, Chromatography, Drosophila melanogaster, Electrophoresis, Enzymes, Extracts, Molecular weight.

17651-68

AN EPIDEMIOLOGICAL STUDY OF PESTICIDE CONTAMINATION IN MILK ON AN OPERATING DAIRY FARM.

J W Stull W H Brown F M Whiting J M Witt

Bull Environ Contamination Toxicol 3(3):135-140

May 1968 RA1270.P35A1

Dairy cattle, Epidemiology, Feeds, Food contamination, Milk, Pesticide residues, Pesticides.

17652-68

EFFECT OF SELECTED PESTICIDES ON QUALITY OF STRAWBERRIES.

J P Sweeney V J Chapman P A Hepner

J Agr Food Chem 16(4):632-634 REF

Jul 1968 381 J8223

Captan, Chlordane, Ferbam, Fungicides, Pesticide residues, Pesticides, Sampling (statistics), Soil testing, Strawberries.

17653-68

HEPTACHLOR AND HEPTACHLOR EPOXIDE RESIDUES ON FALL-TREATED ALFALFA AND IN MILK AND COW TISSUE.

A C Waldron H E Kaeser D L Goleman J R

Staubus H D Miernczyk

J Agr Food Chem 16(4):627-631 REF

Jul 1967 381 J8223

Alfalfa, Cattle, Diet, Heptachlor, Heptachlor epoxide, Milk analysis, Sampling (statistics), Tissues.

17654-68

EFFECTS OF CHARCOAL FEEDING ON DIELDRIN EXCRETION IN RUMINANTS. (ABSTRACT).

K A Wilson R M Cook R S Emery

Fed Amer Soc Exp Biol Fed Proc 27(2):558

Mar 1968 442.9 F31P

Animal metabolism, Charcoal, Dieldrin, Excretion, Feeding, Goats, Sheep.

TOXICOLOGY

17655-68

LABORATORY INVESTIGATIONS OF RESISTANCE TO WARFARIN OF RATTUS NORVEGICUS BERK. IN MONTGOMERYSHIRE AND SHROPSHIRE.

D C Drummond E J Wilson

Ann Appl Biol 61(2):303-312 REF

Apr 1968 442.8 AN72

Baits, Immunity, Laboratory animals, Mineral oil, Rattus norvegicus, Rodenticides, Rodents, Toxicology, Warfarin.

17656-68

EFFECTS OF AFLATOXIN AND BENZOPYRENE ON MICROSOMAL HYDROXYLATION. (ABSTRACT).

H Gurtoo T C Campbell R Webb K Plowman

Fed Amer Soc Exp Biol Fed Proc 27(2):551

Mar 1968 442.9 F31P

TOXICOLOGY

17657-68

Aflatoxin, Animal nutrition, Benzopyrene, Chemurgy, Microsomes.

17657-68

HETEROGENEITY OF CLOSTRIDIUM BOTULINUM TYPE A TOXIN.

A H W Hauschild R Hilshcimer

Can J Microbiol 14(7):805-807 REF

Jul 1968 448.8 C162

Cells, Chromatography, Clostridium botulinum, Extracts, Heterogenesis, Molecular weight, Toxins.

17658-68

SPORIDESMIN POISONING IN THE SHEEP. II. A COMPARISON OF SOME CHANGES IN CLINICAL SIGNS AND SERUM CONSTITUENTS FOLLOWING SPORIDESMIN POISONING AND EXPERIMENTAL OBSTRUCTION OF THE COMMON BILE DUCT.

D D Leaver

Res Vet Sci 9(3):265-273 REF

May 1968 41.8 R312

Bile ducts, Gamma globulins, Jaundice, Laboratory animals, Poisoning, Research, Serum, Sheep, Sporidesmin, Zinc sulfate.

17659-68

SPORIDESMIN POISONING IN THE SHEEP. I. CHANGES IN BILE SECRETION AND THE EXCRETION OF SPORIDESMIN IN BILE.

D D Leaver

Res Vet Sci 9(3):255-264 REF

May 1968 41.8 R312

Assay, Bile, Carbon tetrachloride, Gallbladder, Jaundice, Poisoning, Research, Serum, Sheep, Sporidesmin, Toxicology.

17660-68

IMMUNIZATION WITH NATIVE, INCRIMINATED WASP VENOM IN STING ALLERGY: 12-YR STUDY OF SAFETY AND EFFECTIVENESS OF A SINGLE VISIT, YEARLY COURSE. (ABSTRACT).

M H Loveless

Fed Amer Soc Exp Biol Fed Proc 27(2):368

Mar 1968 442.9 F31P

Allergies, Hymenoptera, Immunization, Toxicology, Vespidiae.

17661-68

THE EFFECTS OF GOSSYPOL ON CERTAIN ENZYMES IN CELLULAR FRACTIONS OF ANIMAL TISSUES.

L A Meksongsee

Diss Abstr Sect B 28(10):3945B

Apr 1968 Z5055.U49D53

Assay, Baby pigs, Cells, Cottonseed, Enzymes, Feeding, Gossypol, Liver, Mitochondria, Phenols, Rabbits, Rats, Spectrophotometry, Toxins.

17662-68

EFFECTS OF AFLATOXIN B₁ ON RAT LIVER POLYRIBOSOME PROFILE. (ABSTRACT).

R S Pong G N Wogan

Fed Amer Soc Exp Biol Fed Proc 27(2):552

Mar 1968 442.9 F31P

Aflatoxin, Animal metabolism, Biochemistry, Liver, Proteins, Rats, Toxicology.

17663-68

STUDIES ON TOXICITY OF TANNIC ACID AND THE MECHANISM(S) FOR ITS DETOXICATION IN CHICKENS.

D K Potter

Diss Abstr Sect B 28(10):3946B

Apr 1968 Z5055.U49D53

Animal physiology, Arginine, Biochemistry, Chickens, Choline, Chromatography, Diet, Eggs, Feed, Gallic acid, Metabolites, Pyrogallol, Research, Tannic acids, Toxicology, Urine.

17664-68

AFLATOXIN B₁ AND IN VITRO RNA SYNTHESIS. (ABSTRACT).

A K Roy

Fed Amer Soc Exp Biol Fed Proc 27(2):552

Mar 1968 442.9 F31P

BIBLIOGRAPHY

Adenosine triphosphates, Aflatoxin, Animal metabolism, Chemurgy, Culture media, Deoxyribonucleic acid, Growth factors, Ribonucleic acid.

17665-68

EFFECTS OF MELITTIN (BEE VENOM) ON NATURAL AND ARTIFICIAL MEMBRANES. (ABSTRACT).

G Sessa G Weissmann J H Freer R Hirschhorn

Fed Amer Soc Exp Biol Fed Proc 27(2):248

Mar 1968 442.9 F31P

Bee venom, Cells, Culture media, Liver, Rabbits, Research, Toxicology.

17666-68

A LABORATORY AND FIELD INVESTIGATION OF ADJUVANTS TO INCREASE THE RESIDUAL TOXICITY OF DICHLORVOS, MEVINPHOS AND MALATHION TO MEXICAN BEAN BEETLE AND SOUTHERN ARMYWORM LARVAE.

Z Smilowitz

Diss Abstr Sect B 28(10):4168B-4169B

Apr 1968 Z5055.U49D53

Adjuvants, Biochemistry, Chemical control (insects), Dichlorvos, Epilachna varivestis, Experimental insects, Insecticide residues, Insecticides, Malathion, Mevinphos, Prodenia cridania, Toxicology.

17667-68

PROTECTIVE EFFECT OF CHLORPROMAZINE ON PARATHION AND PARAOXON TOXICITY IN MICE. (ABSTRACT).

R A Vukovich A J Triolo J M Coon

Fed Amer Soc Exp Biol Fed Proc 27(2):597

Mar 1968 442.9 F31P

Biochemistry, Blood, Chlorpromazine, Cholinesterases, Mice, Microsomes, Mortality, Paraoxon, Parathion, Toxicology.

17668-68

IN VITRO TOXIN PRODUCTION BY THE FUNGUS BEAUVERIA BASSIANA AND BIOASSAY IN GREATER WAX MOTH LARVAE.

E S West J D Briggs

J Econ Entomol 61(3):684-687

Jun 1968 421 J822

Beauveria bassiana, Biological assay, Culture media, Dosage, Feeding, Fungi, Galleria mellonella, Injections, Larvae, Paralysis, Toxins.

17669-68

INTERPRETATION OF NUCLEAR DIVISION FIGURES IN VEGETATIVE HYPHAE OF FUNGI.

J R Aist C L Wilson

Phytopathology 58(6):876-877 REF

Jun 1968 464.8 P56

Cell nucleus, Ceratocystis fagacearum, Fungi, Fusarium oxysporum, Hyphae, Macrophomina phaseoli, Plant physiology, Vegetation.

17670-68

AMINO ACID REQUIREMENTS OF THE COTTON STAINER, DYSDERCUS FASCIATUS (PYRRHOCORIDAE, HEMIPTERA).

M A Alihan

Entomol Exp Appl 11(1):43-50

1968 421 EN895

Amino acids, Cotton, Culture media, Dysdercus fasciatus, Extracts, Glutamic acid, Hemiptera, Injections, Insect metabolism, Pyrrhocoridae, Radioactivity.

17671-68

SOME RELATIONSHIPS OF PHENOLIC ACIDS TO THE DEVELOPMENT OF RUST INFECTION IN FLAX COTYLEDONS.

J R Allan

Diss Abstr Sect B 28(10):4001B

Apr 1968 Z5055.U49D53

Biochemistry, Chromatography, Flax, Fungi, Injections, Melampsora lini, Metabolites, Phenols, Plant morphology, Plant physiology, Radioactivity, Rust (flax), Seedlings.

17672-68

SOME FACTORS INFLUENCING CONIDIAL PRODUCTION OF GLOMERELLA CINGULATA PATHOGENIC TO CAMELLIAS. (ABSTRACT).

S Brown L W Jr. Baxter

Phytopathology 58(6):726

Jun 1968 464.8 P56

Camellia, Culture media, Glomerella cingulata, Lighting, Plant diseases, Plant physiology, Reproduction, Spores.

17673-68

COMPARATIVE GROWTH STUDIES OF PYTHIUM IRREGULARE AND P. VEXANS. (ABSTRACT).

H F Cantrell W M Dowler

Phytopathology 58(6):726

Jun 1968 464.8 P56

Biochemistry, Fungi, Plant physiology, Pythium irregulare, Pythium vexans, Temperature.

17674-68

X-RAY ANALYSIS OF HYPHAL AND SCLEROTIUM WALLS OF SCLEROTIUM ROLFII SACC.

I Chet Y Henis

Can J Microbiol 14(7):815-816

Jul 1968 448.8 C162

Assay, Biochemistry, Cellulose, Chitin, Infrared spectra, Melanins, Pigments, Plants, Sclerotium rolfsii, X-rays.

17675-68

ADSORPTION OF HERBICIDES BY ACTIVATED CARBON AND OTHER ADSORBENTS. (0)

D L Coffey

Diss Abstr Sect B 28(11):4380B

May 1968 Z5055.U49D53

Adsorption, Biochemistry, Biological assay, Carbon, Chemical control (weeds), Herbicides, Hydrogen-ion concentration, Plant translocation, Roots, Soil organic matter, Toxicology.

17676-68

INTRACELLULAR AND EXTRACELLULAR METABOLISM OF 3-INDOLEACETIC ACID IN THE ASEPTIC AND NONASEPTIC CULTURES OF PISUM SATIVUM ROOT TIPS. (FR)

G F Collet

Can J Bot 46(8):969-978 REF

Aug 1968 470 C16C

Biochemistry, Cells, Chromatography, Indoleacetic acid, Metabolism, Peas, Plant physiology, Roots. English summary

17677-68

INHIBITORS FROM CAROB (CERATONIA SILIQUA L.) I. NATURE OF THE INTERACTION WITH GIBBERELIC ACID ON SHOOT GROWTH.

M R Corcoran C A West

Plant Physiol 43(6):859-864 REF

Jun 1968 450 P692

Ceratonia siliqua, Gibberellic acid, Plant extracts, Plant growth inhibitors.

Abstract

17678-68

EFFICACY OF SOME INSECTICIDES FOR TREATING CEREALS.

J Coulon

Pyrethrum Post 9(3):44-53

Apr 1968 421 P99

Grain, Insecticides, Piperonyl butoxide, Pyrethrum, Sitophilus granarius.

17679-68

THE EFFECT OF VITAMINS AND LIGHT ON CULTURAL RESPONSES OF FUSICLADIUM EFFUSUM. (ABSTRACT).

R G Davis C H Graves

Phytopathology 58(6):727

Jun 1968 464.8 P56

Agar, Biochemistry, Fusicladium effusum, Light, Plant physiology, Vitamins.

- 17680-68**
OXIDATIVE ACTIVITY OF BOTRYTIS CINEREA EXTRACTS IN ALCOHOL. (ABSTRACT).
D W De Jong A D King K Popper
Fed Amer Soc Exp Biol Fed Proc 27(2):808
Mar 1968 442.9 F31P
Alcohol, Botrytis cinerea, Enzymes, Mitochondria, Oxidation-reduction potential, Plant physiology, Plant respiration, Serum albumin.
- 17681-68**
TOXIC EFFECTS OF ALUMINUM ON VITIS VINIFERA, MERLOT VARIETY, CULTIVATED IN A CONTROL MEDIUM. (FR)
J Delmas
Acad Sci Compt Rend Ser D Sci Nat 265(21):1619-1622
20 Nov 1967 505 P21
Aluminum, Grapes, Nutrient solutions (plants), Plant physiology, Poisons, Toxicology. French summary
- 17682-68**
UNIDENTIFIED NINHYDRIN POSITIVE SUBSTANCE FOUND IN THE CULTURE FILTRATE OF PLANT PATHOGENIC FUNGI WHEN CULTURED ON THE MEDIUM CONTAINING AUTHENTIC AMINO ACID. I.
H Egawa M Masuko A Ueyama
Phytopathol Soc Jap Ann 34(1):56-60
Jan 1968 464.9 P562
Amino acids, Biochemistry, Chromatography, Culture media, Filters, Fungi, Injections, Ninhydrin reaction, Plant diseases, Plant metabolism. Abstract in Japanese. A part of this paper was read at the annual Meeting of the Phytopathological Society of Japan, Tokyo, on March 1967.
Abstract: The chemical property was different from that of alanine, glycine, threonine, glutamic acid, glutamine, glucosamine, galactosamine, and anthranilic acid in thin layer chromatographic behaviors.
- 17683-68**
PHENYLACETIC ACID, A METABOLITE OF XANTHOMONAS ORYZAE (UYEDA ET ISHIYAMA) DOWSON IN CULTURE AFFECTING UPON THE DEPRESSIVE GROWTH OF YOUNG ROOTS OF RICE SEEDLINGS. (JA)
H Egawa K Yoshii A Ueyama
Phytopathol Soc Jap Ann 34(1):46-50
Jan 1968 464.9 P562
Biochemistry, Culture media, Injections, Metabolites, Phenylacetic acid, Plant growth inhibitors, Rice, Roots, Seedlings, Temperature, Xanthomonas oryzae. Abstract in English.
- 17684-68**
CHANGES IN PATHOGENICITY AMONG THREE ISOLATES OF GEOTRICHUM CANDIDUM AFTER SERIAL PASSAGE ON THE CHORIOALLANTOIC MEMBRANE OF EMBRYONATED CHICKEN EGGS. (ABSTRACT).
Z M El-Tobshy J B Sinclair
Phytopathology 58(6):727
Jun 1968 464.8 P56
Chickens, Eggs, Embryology, Geotrichum candidum, Parasitism, Plant physiology.
- 17685-68**
HISTOPATHOLOGY OF GEOTRICHUM CANDIDUM IN THE CHORIOALLANTOIC MEMBRANE OF EMBRYONATED CHICKEN EGGS. (ABSTRACT).
Z M El-Tobshy J B Sinclair
Phytopathology 58(6):727
Jun 1968 464.8 P56
Chickens, Eggs, Embryology, Geotrichum candidum, Histology, Parasitism, Plant physiology.
- 17686-68**
CALCIUM INHIBITION OF POTASSIUM ABSORPTION IN CORN ROOTS.
O E Elzam T K Hodges
Plant Physiol 42(11):1483-1488 REF
Nov 1967 450 P692
Absorption, Barley, Calcium chloride, Calcium sulfate, Corn, Kinetics, Potassium.
- 17687-68**
SYNTHESIS AND PHYSIOLOGICAL ACTIVITY OF SEVERAL 1-SUBSTITUTED INDOLE-3-ACETIC ACIDS AND ESTERS.
R L Franklin
Diss Abstr Sect B 28(10):4041B
Apr 1968 Z5055.U49D53
Biochemistry, Biological assay, Indoleacetic acid, Infrared spectra, Nitrogen, Oats, Plant hormones, Plant physiology, Plant regulators, Ultraviolet rays.
- 17688-68**
BIOCHEMICAL RELATIONSHIPS IN CHLOROTIC LEAVES OF MACADAMIA (MACADAMIA TETRAPHYLLA L. JOHNSON) UNDER CONDITIONS OF IRON AND MANGANESE DEFICIENCY.
I M Gilfillan
Diss Abstr Sect B 28(10):3939B
Apr 1968 Z5055.U49D53
Amino acids, Arginine, Biochemistry, Chlorophylls, Citric acid, Iron, Leaves, Lysine, Macadamia tetraphylla, Manganese, Plant nutritional deficiencies, Proteins.
- 17689-68**
THE HYPERSENSITIVE REACTION IN TOBACCO: A REFLECTION OF CHANGES IN HOST CELL PERMEABILITY.
R N Goodman
Phytopathology 58(6):872-873
Jun 1968 464.8 P56
Bacterial diseases (plants), Cells, Fungus diseases (plants), Hypersensitivity, Permeability, Plant physiology, Tobacco, Virus diseases (plants).
- 17690-68**
RELATION OF STEROLS TO THE DIFFERENTIAL SENSITIVITY OF SPORES AND MYCELIA OF PHYTOPHTHORA TO POLYENE ANTIBIOTICS.
G O Guardia
Diss Abstr Sect B 28(10):3962B
Apr 1968 Z5055.U49D53
Agar, Antibiotics, Environment, Fungicides, Phytophthora, Phytophthora palmivora, Phytophthora parasitica, Pimaricin, Polyenes, Propagules, Pythium, Reproduction, Seed germination, Soils, Sterols.
- 17691-68**
A POSSIBLE RESERVOIR OF TYROSINASE SUBSTRATES IN DROSOPHILA MELANOGASTER.
A S Henderson
Diss Abstr Sect B 28(9):3579B
Mar 1968 Z5055.U49D53
Amylases, Chromosomes, Drosophila melanogaster, Insect genetics, Insect metabolism, Lipases, Nucleases, Phenolases, Proteinases, Ribonucleic acid, Tyrosine.
- 17692-68**
RESPONSE OF ECHINOCHLOA CRUSGALLI (L.) BEAUV. AT VARIOUS STAGES OF DEVELOPMENT TO 2-CHLORO-4-ETHYLAMINO-6-ISOPROPYLAMINO-S-TRIAZINE.
E R Hill
Diss Abstr Sect B 28(10):3971B
Apr 1968 Z5055.U49D53
Atrazine, Biochemistry, Chloroplasts, Chromatography, Echinochloa crusgalli frumentacea, Electron microscopy, Foliar application, Herbicides, Humidity, Plant morphology, Roots, Temperature.
- 17693-68**
THE EFFECT OF SODIUM-CARBOXY-METHYL-CELLULOSE ON THE SEDIMENTATION AND VIABILITY OF BRUCELLA ORGANISMS IN SUSPENSION.
F D Horwell
S Afr Vet Med Ass J 38(4):431-434
Dec 1967 41.8 S08
Bacteria, Biochemistry, Brucella, Cells, Centrifugation, Culture media, Freeze drying, Hydrogen-ion concentration, Sedimentation, Sodium carboxymethyl cellulose.
- 17694-68**
ON THE MULTIPLICATION OF DUNALIELLA BIOCULATA IN THE PRESENCE OF THE GASEOUS PHASE OF CIGARETTE SMOKE AND ON OBTAINING MUTATIONS IN THE PRESENCE OF ACROLEIN. (FR)
C Izard
Acad Sci Compt Rend Ser D Sci Nat 265(23):1799-1802
06 Dec 1967 505 P21
Acrolein, Dunaliella bioculata, Gases, Mutagens, Plant growth inhibitors, Plant mutation, Plant physiology, Smoke.
- 17695-68**
THE EFFECT OF ORGANIC SUBSTRATES ON GERMINATION OF THE CONIDIA OF HELMINTHOSPORIUM SPP.8(ABSTRACT).
G C Kingsland
Phytopathology 58(6):729
Jun 1968 464.8 P56
Fungi, Helminthosporium, Organic compounds, Plant physiology, Seed germination, Substrates.
- 17696-68**
THE ISOLATION AND PARTIAL CHARACTERIZATION OF THE GROWTH FACTOR IN THE GINSENG ROOT.
F Lim
Diss Abstr Sect B 28(11):4415B
May 1968 Z5055.U49D53
Ammonium compounds, Biochemistry, Choline, Esters, Plant physiology, Roots, Sodium tetraphenylboron, Vitamins.
- 17697-68**
ASPERGILLUS ORYZAE AMYLASE ACTIVITY AND ITS CARBOHYDRATE CONTENT. (ABSTRACT).
R L McGeachin T G Willis
Fed Amer Soc Exp Biol Fed Proc 27(2):810
Mar 1968 442.9 F31P
Amylases, Antigens, Aspergillus oryzae, Carbohydrates, Mannose, Plant physiology, Rabbits.
- 17698-68**
STUDIES ON DOWNY MILDEW OF HOP PLANTS. VII. EFFECT OF AUTUMN FOLIAR SPRAY OF FUNGICIDES ON THE CONTROL OF DOWNY MILDEW OF HOPS.
Y Mori
Phytopathol Soc Jap Ann 34(2):92-97 REF
Mar 1968 464.9 P562
Biochemistry, Chemical control (plant diseases), Downy mildew (hops), Foliar application, Fungicides, Roots, Spraying. Abstract in Japanese
- 17699-68**
FAR-RED SENSITIVE DARK PROCESSES ESSENTIAL FOR LIGHT- AND GIBBERELLIN-INDUCED GERMINATION OF LETTUCE SEED.
M Negbi M Black J D Bewley
Plant Physiol 43(1):35-40 REF
Jan 1968 450 P692
Chromoproteins, Gibberellic acid, Infrared rays, Kinetics, Lettuce, Pigments (plant), Seed germination, Thiourea.
- 17700-68**
EFFECT OF PHENOLS AND CYTOKININS ON POLYGALACTURONASE PRODUCTION BY VERTICILLIUM ALBO-ATRUM IN CULTURE.
S S Patil A E Dimond
Phytopathology 58(6):868-869
Jun 1968 464.8 P56
Biochemistry, Culture media, Cytokinins, Enzymes, Fungus diseases (plants), Pectinase, Phenols, Verticillium albo-atrum.
- 17701-68**
EFFECTS OF GIBBERELLIC ACID ON METABOLISM OF BARLEY SEEDS. (ABSTRACT).
C J Pollard
Fed Amer Soc Exp Biol Fed Proc 27(2):812
Mar 1968 442.9 F31P
Amylases, Antimycin a, Barley, Gibberellic acid, Peroxidases, Plant metabolism, Plant respiration, Puromycin, Seeds.

17702-68

EVIDENCE FOR INDOLYL-3-ACETALDEHYDE IN TRYPTOPHANE METABOLISM OF RHIZOBIUM. (FR)

J Rigaud

Acad Sci Compt Rend Ser D Sci Nat 265(21):1654-1656 REF
20 Nov 1967 505 P21

Indole-3-acetaldehyde, Plant hormones, Plant metabolism, Rhizobium, Tryptophan. French summary

17703-68

EFFECTS OF TRIFLURALIN ON NUCLEIC ACID METABOLISM AND OTHER PHYSIOLOGICAL PROCESSES.

D O Schultz

Diss Abstr Sect B 28(10):4024B-4025B

Apr 1968 Z5055.U49D53

Autoradiography, Biochemistry, Corn, Cucumbers, Foliar application, Herbicides, Nucleic acids, Plant metabolism, Plant physiology, Seed germination, Sorghum, Soybeans, Trifluralin.

17704-68

EFFECTS OF METABOLIC POISONS ON RICE: THE COMPARATIVE SENSITIVITY OF AEROBIC AND ANAEROBIC MODES OF GERMINATION.

S M Siegel M Lederman O Daly K Roberts

Plant Physiol 42(11):1489-1492 REF

Nov 1967 450 P692

Aerobic bacteria, Anaerobic bacteria, Mercapto group, Mode, Phenylmercuric acetate, Poisons, Rice, Seed germination, Sodium fluoroacetate.

17705-68

THE DISTRIBUTION OF HOUSEFLIES IN A SIMULATED DINING ROOM AFTER KNOCKDOWN BY AEROSOLS CONTAINING PYRETHRINS AND AEROSOLS CONTAINING D. V. P.

N K Sylvester

Pyrethrum Post 9(3):39-43

Apr 1968 421 P99

Aerosols, Dichlorvos, Insect dissemination, Insecticides, Musca domestica, Pyrethrum.

17706-68

EFFECTS OF HYDROGEN FLUORIDE ACCUMULATION ON PLANT CELL MICROSTRUCTURE AND ULTRASTRUCTURE.

D Timmermann

Diss Abstr Sect B 28(10):4026B-4027B

Apr 1968 Z5055.U49D53

Biochemistry, Cells, Chlorophylls, Fumigation, Microscopy, Plant anatomy, Plant injuries, Upland cotton.

17707-68

PHYSIOLOGICAL ABNORMALITIES IN GROWTH, HORMONE BEHAVIOR, AND CHEMICAL TRANSPORT IN ASTER YELLOWS INFECTED PLANTS.

W P P Ting

Diss Abstr Sect B 28(10):3963B-3964B

Apr 1968 Z5055.U49D53

Amino acids, Aster yellows (tobacco), Aztec tobacco, Carbon dioxide, Chemicals, Chlorophylls, Plant abnormalities, Plant hormones, Plant physiology, Plant regulators, Plant translocation, Roots, Virus diseases (plants).

17708-68

THE OZONE RESISTANCE OF LEAVES AS RELATED TO THEIR SULFHYDRYL AND ADENOSINE TRIPHOSPHATE CONTENT.

H Tomlinson S Rich

Phytopathology 58(6):808-810

Jun 1968 464.8 P56

Adenosine triphosphates, Beans, Biological assay, Leaves, Mercapto group, Ozone, Spinach, Tobacco.

17709-68

GROWTH RESPONSES OF PINTO BEAN AND ALFALFA TO SUBLETHAL FLUORIDE CONCENTRATIONS.

M Treshow F M Harner

Can J Bot 46(10):1207-1210 REF

Oct 1968 470 C16C

Alfalfa, Fluorides, Kidney beans, Plant biochemistry, Plant physiology.

17710-68

THE INCORPORATION OF TRITIATED THYMIDINE IN THE CYTOPLASM BEFORE THE INCORPORATION OF THE CELL NUCLEUS DURING THE GERMINATION IN ZEA MAYS. (FR)

C Van De Walle G Bernier

Acad Sci Compt Rend Ser D Sci Nat 265(21):1599-1601 REF

20 Nov 1967 505 P21

Autoradiography, Cell nucleus, Corn, Deoxyribonucleic acid, Plant cytology, Plant embryos, Plant genetics, Thymidine.

17711-68

THE EFFECT OF CYCLOHEXIMIDE ON THE METABOLISM OF NEUROSPORA CRASS 10780.

J P Viau

Diss Abstr Sect B 28(10):3999B

Apr 1968 Z5055.U49D53

Antibiotics, Biochemistry, Chromatography, Cycloheximide, Metabolism, Methionine, Neurospora crassa, Proteins, Ribonucleic acid, Uracil.

17712-68

DEPENDENCE ON FATTY ACID CHAIN LENGTH OF OXYGEN UPTAKE AND DECARBOXYLLATION BY CRONARTIUM FUSIFORME AECIOSPORES.

C H Walkinshaw

Phytopathology 58(6):855-859 REF

Jun 1968 464.8 P56

Biochemistry, Cronartium fusiforme, Fatty acids, Fungicides, Oxygen, Spores.

17713-68

HYDROCARBON AND FATTY ACID DISTRIBUTION IN THE SPORE COATS OF PATHOGENIC BASIDIOMYCETES. (ABSTRACT).

J D Weete D J Weber

Phytopathology 58(6):731-732

Jun 1968 464.8 P56

Basidiomycetes, Fatty acids, Fungi, Hydrocarbons, Plant physiology, Plant translocation, Puccinia graminis, Spores, Urocystis agropyri, Ustilago avenae.

17714-68

EFFECTS OF NITROGEN AND POTASSIUM ON THE IRON METABOLISM OF GREENHOUSE-GROWN APPLE TREES.

H K Wutscher

Diss Abstr Sect B 28(9):3554B

Mar 1968 Z5055.U49D53

Applcs, Chemurgy, Greenhouses, Iron, Nitrogen, Plant metabolism, Potassium.

CHEMISTRY

17715-68

STUDIES ON THE TOTAL SYNTHESIS OF THE GIBBERELLINS. I. TETRAHYDROFLOURENE APPROACH. II. A POSSIBLE ROUTE FOR GIBBERELLIN A.

W E Barnett

Diss Abstr Sect B 28(10):4029B

Apr 1968 Z5055.U49D53

Acids, Borane, Chemical reactions, Chemicals, Esters, Gibberellin a1, Gibberellins, Glycols, Stereochemistry.

17716-68

BIOCHEMICAL TRANSFORMATIONS OF ANILIDE HERBICIDES IN SOIL.

R Bartha

J Agr Food Chem 16(4):602-604 REF

Jul 1968 381 J8223

Anilides, Azobenzene, Biochemistry, Chemicals, Chromatography, Herbicides, Molecules, Organic compounds, Respirometers, Soil testing.

17717-68

THE DECOMPOSITION OF UREA HERBICIDES IN SOIL. (GER)

H Börner

Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 74(3):135-143

Mar 1967 464.8 Z3

Aspergillus niger, Chemical control (weeds), Herbicides, Linuron, Monolinuron, Soil chemistry, Urea. English summary

17718-68

SOME STOCHASTIC MODELS FOR MICROORGANISM DEATH KINETICS.

F P Geyser

Diss Abstr Sect B 28(10):4105B

Apr 1968 Z5055.U49D53

Frequency distribution, Kinetics, Markov chains, Mathematical analysis, Microorganisms, Mortality, Population statistics.

17719-68

DETERMINATION OF SOLUBLE COPPER AND COPPER OXYCHLORIDE BY THE METHOD OF BATHOCUPREINA. (SP)

F Sanchez Rasero J Henriot

Rev Iberica Parasitol 27(3-4):189-202

Jul 1967 436.8 R32

Copper, Copper oxychloride, Fungicides. French, Spanish and English summaries

Abstract

17720-68

PYRETHUM AS AN INSECT REPELLENT. II. A LABORATORY TECHNIQUE FOR ITS EVALUATION AS A MOSQUITO REPELLENT, AND THE INFLUENCE OF FORMULATION ON PERSISTENCE.

J S Weaving N K Sylvester

Pyrethrum Post 9(1):31-35 REF

Apr 1967 421 P99

Aedes aegypti, Alcohols, Insect pests, Insect repellents, Laboratories, Oils, Pyrethrum, Water.

ENGINEERING

17721-68

THE I.I.S.R. BULLOCK-DRAWN CHEMICAL APPLICATOR.

R G Menon N S L Srivastava

Indian Farming 18(1):27,29

Apr 1968 22 IN283

Equipment, Fertilizer spreaders, Pesticide application.

INDUSTRY

ECONOMICS

17722-68

1968-'69 BUYER'S GUIDE FOR THE AGRICULTURAL CHEMICALS TRADE.

Anonymous

Agr Chem 23(9):77-108

Sep 1968 381 AG8

Agricultural chemistry, Agricultural economics, Chemicals, Indexing.

17723-68

MALARIA CONTROL ON IMPOUNDED WATER. RA644.0M20U55.

E L Bishop M D Hollis C I Mansur

422 P. WASHINGTON, D. C., U. S. GOVERNMENT PRINTING OFFICE 20402

Agricultural outlook, Culicidae, Insect control, Larvicides, Malaria, Malaria control, Mollusks, Spraying, Wildlife management.

17724-68

COORDINATION AND RESPONSIBILITY IN WILDLIFE MANAGEMENT AND MOSQUITO CONTROL.

J E Nagel

Utah Mosquito Abatement Ass Proc 18-19 ANNU. MEETING:34-35

1966 420 UT1

Agricultural outlook, Culicidae, Insect control, Research, Wildlife management.

EDUCATION

17725-68

PHYTOSANITARY MEASURES IN A DEVELOPING EUROPE.

I Granhall

Neth J Plant Pathol 73(SUP.1):13-19

1967 464.8 T44

Agricultural economics, Plant disease control, Plant protection, Sanitation control (pests), World agricultural situation.

REGULATIONS

17726-68

INTERSTATE TRANSPORTATION OF ANIMALS AND POULTRY. HOG CHOLERA AND OTHER COMMUNICABLE SWINE DISEASES. ERADICATION AND FREE STATES.

R J Anderson

Fed Regist 33(150,PT.1):10999

02 Aug 1968 L1.451

Agricultural regulation, Health surveys, Hog cholera, Livestock diseases, Swine.

17727-68

INTERSTATE TRANSPORTATION OF ANIMALS AND POULTRY. TEXAS (SPLENETIC) FEVER IN CATTLE. CHANGES IN AREAS QUARANTINED.

G W Irving

Fed Regist 33(168):12135

28 Aug 1968 L1.451

Agricultural legislation, Agricultural regulation, Cattle, Piroplasmosis, Quarantine.

17728-68

FOOD ADDITIVES PERMITTED IN THE FEED AND DRINKING WATER OF ANIMALS OR FOR THE TREATMENT OF FOOD-PRODUCING ANIMALS. AMPROLIUM.

J K Kirk

Fed Regist 33(150,PT.1):11024

02 Aug 1968 L1.451

Agricultural regulation, Amprolium, Arsanilic acid, Chickens, Coccidiosis, Ethopabate, Food additives.

17729-68

DOMESTIC QUARANTINE NOTICES. PINK BOLLWORM. REGULATED AREAS.

D R Shepherd

Fed Regist 33(160):11630

16 Aug 1968 L1.451

Agricultural legislation, Agricultural regulation, Pectinophora gossypiella, Quarantine.

17730-68

DOMESTIC QUARANTINE NOTICES. PINK BOLLWORM.

D R Shepherd

Fed Regist 33(159):11585

15 Aug 1968 L1.451

Agricultural regulation, Insect pests, Pectinophora gossypiella, Plant diseases, Plant quarantine.



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