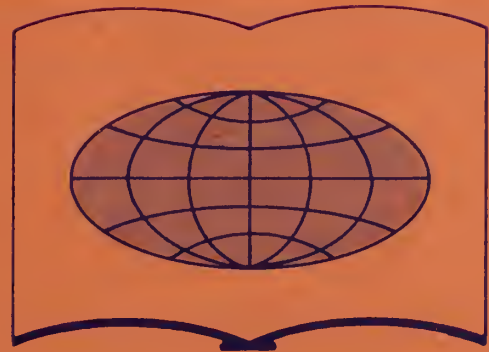


erve
241
13

Pesticides DOCUMENTATION BULLETIN

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY
JAN 6 1970
CURRENT SERIAL RECORDS



Volume 5
August 22, 1969

Number 17



Use Pesticides Safely
FOLLOW THE LABEL

U.S. DEPARTMENT OF AGRICULTURE

PESTICIDES DOCUMENTATION BULLETIN

Volume 5
August 22, 1969
Number 17

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.

Organizational Index: Names of corporate authors or sponsoring organizations are arranged alphabetically followed by accession numbers of pertinent citations.

Other Files

In addition to the citations contained in the Bulletin, the Pesticides Information Center maintains two other files, the INTREDIS Register and the Herbicides Data File.

The INTREDIS Register is a computer data bank in the field of forest pathology. It contains title and author references to abstracted articles including subject, country, host plant genus or species, organisms causing the diseases, abstracting journal and year of publication. The computer search uses boolean parameters in any combination of elements listed.

The Herbicides Data File consists of reports on field tests conducted by the Crops Protection Research Branch, Crop Research Division, 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

Note: Items subject to proprietary restriction will be suppressed when appropriate.

AVAILABILITY OF REFERENCES CITED

Search Requests

Each item appearing on magnetic tapes in the Pesticides Information Center is fully searchable on the computer. Questions submitted to the Center should fully describe all parameters of the desired information in narrative form.

Search requests may be submitted to:

U.S. Department of Agriculture
National Agricultural Library
PESTICIDES INFORMATION CENTER
Beltsville, Maryland 20705

Loans

Most of the material in the National Agricultural Library collection may be borrowed by employees of the Department of Agriculture and by other libraries. In requesting loans, please include the Library call number found with the citation. Loan of periodicals is restricted to the Washington, D.C. area. Foreign statistical publications and rare books are loaned only by special arrangement.

Free Distribution

U.S.D.A. publications: Domestic requests for publications of the United States Department of Agriculture will be supplied free to libraries and other qualified agencies and organizations upon application to the United States Department of Agriculture, Office of Information, Washington, D.C. 20250, as long as the supply lasts. Foreign institutions, organizations and agencies which issue publications may obtain U.S.D.A. publications in exchange by writing to the United States Department of Agriculture, National Agricultural Library, Exchange Unit, Washington, D.C. 20250.

State Agricultural Experiment Station and Extension Service publications are available except where noted, and as long as the supply lasts, from the issuing station or service. The National Agricultural Library does not distribute them; however, reproductions are available at regular Library rates.

Reproduction

All articles listed may be obtained in microfilm or photoprint form from the United States Department of Agriculture, National Agricultural Library, Photoduplication Section, Washington, D.C., 20250. Copying charges for each periodical or book are:

MICROFILMS: \$1.00 for each 30 pages or fraction copied from a single article or book.

PHOTOPRINTS: \$1.00 for each 4 pages or fraction copied from a single article or book.

RUSH SERVICE: Will be furnished upon payment of \$1.00 additional for each order.

Payment must accompany the order. Cash, Library coupons, check or money order drawn to the National Agricultural Library, U.S.D.A., are acceptable. Payment for orders originating outside of the United States should be made by American bank, or by UNESCO book coupons. Superintendent of Documents coupons and requests to furnish photocopy to be paid from Superintendent of Documents Deposit funds cannot be honored. Credit may be extended only to Government agencies and institutions. Billing address should be indicated.

Magnetic Tape Files

The files of the *Pesticides Documentation Bulletin*, its Vocabulary, the *Herbicides Data*, and *INTREDIS* are available on magnetic tape for the IBM-360 series computer. All tapes are nine-track, 800 bpi.

Tape prices are \$60.00 for the first tape reel on an order plus \$47.50 for each additional reel of magnetic tape. Tape orders may be submitted to:

U.S. Department of Agriculture
National Agricultural Library
AUTOMATION STAFF
Beltsville, Maryland 20705

Library Coupons

National Agricultural Library coupons, valued at \$1.00 each, may be purchased in any quantity.

ACKNOWLEDGMENT

The Pesticides Information Center, National Agricultural Library, gratefully acknowledges the cooperation and assistance of the Department of Defense; Health, Education, and Welfare; and Interior; the Federal Committee on Pest Control, and state and industrial organizations in the development of the Center and preparation of this Bulletin. Special thanks are expressed to the Federal Committee on Pest Control for its suggestions and support. We hope the Bulletin will serve as an example of the effectiveness of interdepartmental cooperation and the speed with which effective services can be developed through a coordinated and cooperative interdepartmental effort.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (May 23, 1968).

PLEASE GIVE COMPLETE BIBLIOGRAPHIC INFORMATION AS IT APPEARS IN THIS PUBLICATION FOR EACH ITEM REQUESTED.

This publication reports research involving pesticides. It does not contain recommendations for their use, nor does it imply that the uses discussed here have been registered. All uses of pesticides must be registered by appropriate State and/or Federal agencies before they can be recommended.

CAUTION: Pesticides can be injurious to humans, domestic animals, desirable plants, and fish or other wildlife—if they are not handled or applied properly. Use all pesticides selectively and carefully. Follow recommended practices for the disposal of surplus pesticides and pesticide containers.

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C., 20402. \$32.00 per year, domestic; \$40.00 per year, foreign. Single copies vary in price.

TABLE OF CONTENTS

BIBLIOGRAPHY (Citations)	<i>Page</i>
10 ENTOMOLOGY.....	1
Systematics.....	1
Physiology and Biochemistry.....	4
Genetics.....	12
Medical Entomology.....	13
20 CROP PROTECTION.....	13
Diseases.....	13
Arthropods.....	15
Nematodes.....	17
Weeds.....	17
Other Pests.....	19
30 LIVESTOCK PROTECTION.....	19
Diseases.....	19
Arthropods.....	21
Parasites.....	21
40 COMMODITY PROTECTION.....	22
Storage Diseases.....	22
Arthropods.....	22
Rodents and Other Pests.....	*
Microbial Contamination.....	*
50 ENVIRONMENTAL CONTAMINATION.....	22
55 RESIDUES.....	22
60 TOXICOLOGY.....	23
65 PLANT PHYSIOLOGY & BIOCHEMISTRY.....	24
70 CHEMISTRY.....	25
80 ENGINEERING.....	26
90 INDUSTRY.....	26
Economics.....	26
Education.....	26
Regulations.....	*
SUBJECT INDEX.....	27
BIOGRAPHICAL INDEX.....	79
AUTHOR INDEX.....	87
ORGANIZATIONAL INDEX.....	91

*This issue does not contain citations under this category.

Note: Mention of a company name or a proprietary product does not necessarily imply endorsement by the U.S. Department of Agriculture, NATIONAL AGRICULTURAL LIBRARY, PESTICIDES INFORMATION CENTER.

BIBLIOGRAPHY

ENTOMOLOGY

SYSTEMATICS

- 9865-69
NEW SPECIES OF CRANE FLIES FROM TROPICAL AMERICA. V. (DIPTERA: TIPULIDAE).
C P Alexander
Kans Entomol Soc J 42(1):83-90
Jan 1969 420 K13
Insect taxonomy, Tipulidae, Zoogeography.
- 9866-69
NEW OR LITTLE-KNOWN SPECIES OF EXOTIC TIPULIDAE (DIPTERA). XVI.
C P Alexander
Roy Entomol Soc London Proc Ser B Taxonom
38(3-4):33-39
06 May 1969 420 L84PB
Insect taxonomy, Tipulidae.
- 9867-69
GALL-INHABITING LIOTHRIPS UZEL FROM INDIA.
T N Ananthkrishman A Jagadish
Oriental Insects 2(2):205-217
Jun 1968 QL461.07
Gall-making insects, Habitats, Insect identification, Insect taxonomy.
The following species were described: *Liothrips ater*, *L. bosei*, *L. cecidii*, *L. eugeniae*, *L. flavescens*, *L. furvus*, *L. nubilis* and *L. strigosus*.
- 9868-69
A NEW SUB-GENUS AND SPECIES OF THE EUMENINAE (HYMENOPTERA, DIPLOPTERA) FROM THE BULGARIAN FAUNA. (GE)
N Atanassov
Bulgarska Akad Nauk Zool Inst Muz Izv 23:167-174
1967 410.9 B8721
Eumenidae, Insect taxonomy, Zoogeography. Russian abstract.
- 9869-69
A NEW GENUS OF NOTERIDAE (COLEOPTERA: NOTERIDAE, NOTERINI).
J Balfour-Browne
Roy Entomol Soc London Proc Ser B Taxonom
38(1-2):15-6
18 Mar 1969 420 L84PB
Insect taxonomy, Noteridae.
- 9870-69
NEW SPECIES OF CHRYSOBOTHRIS FROM THE PACIFIC NORTHWEST (COLEOPTERA: BUPRESTIDAE).
W F Barr
Entomol Soc Wash Proc 71(2):117-132
Jun 1969 420 W27
Buprestidae, Chrysobothris, Insect morphology, Insect taxonomy, Pacific Northwest, Zoogeography.
The seven new species described are: *Chrysobothris horningi*, *C. westcottii*, *C. potentillae*, *C. idahoensis*, *C. breviloboides*, *C. beeri*, and *C. columbiana*.
- 9871-69
CHLOROPIDAE (DIPTERA), UNKNOWN IN THE FAUNA OF BULGARIA. (RUS)
V Beshovski
Bulgarska Akad Nauk Zool Inst Muz Izv 26:33-38
REF
1968 410.9 B8721
Chloropidae, Insect taxonomy, Surveys. English abstract.
- 9872-69
THE LARVAE OF ODONATA IN THE VASCULAR TERRITORY OF STAGNANT WATERS IN BULGARIA. (RUS)
V L Besovski
Bulgarska Akad Nauk Zool Inst Muz Izv 26:5-27
1968 410.9 B8721
Insect ecology, Insect taxonomy, Larvae, Odonata, Surveys, Zoogeography. German abstract.
- 9873-69
YESPIDAE FROM BULGARIA (HYMENOPTERA, DIPLOPTERA). (GE)
P Bluthgen
Bulgarska Akad Nauk Zool Inst Muz Izv 23:229-234
1967 410.9 B8721
Surveys, Vespidae. Russian abstract.
- 9874-69
A NEW FAMILY TURANONISCIDAE FAM. N. (ISOPODA, ONISCOIDEA) FROM TERRITARIA OF MIDDLE ASIA. (RUS)
E V Borutsky
Zool Zhur 48(4):499-504
Apr 1969 410 R92
Insect nests, Insect taxonomy, Isopoda, Termites. English abstract.
- 9875-69
A NEW POLYMIXIS HB. OF SPAIN. POLYMIXIS LAJONQUIEREI BRSN. (SUPPLEMENTAL DESCRIPTION (1)) CONTRIBUTION TO THE STUDY OF NOCTUIDAE TRIFINAE 159(2). (FR)
C Boursin
Entomops (9):32-35
28 Sep 1967 QL461.E53
Insect genetics, Insect identification, Insect taxonomy, Noctuidae.
- 9876-69
THE IDENTIFICATION AND DISTRIBUTION OF QUADRASPIDIOTUS SPECIES (HOMOPTERA: DIASPIDIIDAE) ON POME AND STONE FRUITS IN AUSTRALIA.
H M Brookes N M Hudson
Entomol Soc Australia (nsw) J 7(2):90-100
REF
31 Dec 1968 423.92 EN84
Aspidiotus, Diaspididae, Fruit, Insect taxonomy, Zoogeography.
Four species of *Quadraspidotus* have been identified on pome and stone fruit trees in Australia, viz. *Q. lenticularis* (Lind.), *Q. ostreaformis* (Curt.), *Q. perniciosus* (Comst.) and *Q. pyri* (Licht.). Keys differentiating these species have been provided for second instar nymphs and adult females. Both stages in the four species are described in detail and illustrated. Present known distribution of these species in the Australian states is included.
- 9877-69
CERCYONIS PEGALA ABBOTTI, NEW SUBSPECIES (LEPID., SATYRIDAE).
F M Brown
Entomol News (philadelphia) 80(7):193-196
Jul 1969 421 EN88
Insect taxonomy, Satyridae.
- 9878-69
LATHRIDIUS BIFASCIATUS REITT. (COL., LATHRIDIIDAE) HABITATS.
F D Buck
S London Entomol Natur Hist Soc Proc Trans
9(4):99
Dec 1967 420 SO8
Insect ecology, Lathridiidae.
- 9879-69
REVISION OF THE NEARCTIC MOTH GENUS ABAGROTIS SMITH WITH DESCRIPTIONS OF NEW SPECIES (LEPIDOPTERA: NOCTUIDAE). PART VI THE DUANCA AND PLACIDA GROUPS; CHECKLIST OF THE PRESENTLY KNOWN SPECIES WITHIN THE GENUS.
J S Buckett
Calif Bur Entomol Occas Pap (17):3-27
MAP
REF
1969 420 C122
Insect taxonomy, Noctuidae, Surveys, Zoogeography.
- 9880-69
BUTTERFLIES HT COLLOBRIERES, VAR. ALPES MAURES, PROVENCE IN JULY AND AUGUST 1967.
P Calderara
S London Entomol Natur Hist Soc Proc Trans
9(4):100-102
Dec 1967 420 SO8
Lepidoptera, Seasonal variation, Surveys.
- 9881-69
A CHANGE IN THE LEPIDOPTERA OF HAMPSTEAD AFTER FOUR DECADES.
C I Carter
S London Entomol Natur Hist Soc Proc Trans
9(4):123-125
Dec 1967 420 SO8
Lepidoptera, Surveys.
- 9882-69
EAR MITES OF THE GENUS DICROCHELES (ACARINA: MESOSTIGMATA) FOUND ON NOCTUIDS IN HAWKES BAY.
T H Davies
New Zeal Entomol 4(2):26-32
Apr 1969 421 N48
Ears, Insect behavior, Mesostigmata, Mites, Noctuidae, Parasitic insects.
- 9883-69
STUDY OF THE WORLD GYPONINAE (HOMOPTERA: CICADELLIDAE). A SYNOPSIS OF THE GENUS CLINONARIA.
D M DeLong P H Freytag
Ohio J Sci 69(3):129-182
May 1969 410 OH3
Cicadellidae, Insect taxonomy, Surveys, Zoogeography.
- 9884-69
TWO NEW PALEARCTIC LITHOCOLLETIS SPECIES. (PRELIMINARY DESCRIPTION). (GE)
G Deschka
Wien Entomol Ges Z 78(9-10):84-85
15 Dec 1967 421 OS7
Graecillariidae, Insect taxonomy, Zoogeography.
- 9885-69
DESCRIPTION OF DENDROCERUS (T-MACROSTIGMA) NOUMEAEE SP. NOV. FROM NEW CALEDONIA (CERAPHRONOIDEA, MEGASPILIDAE). (FR)
P Dessart
Entomophaga 12(4):343-349
1967 421 EN835
Ceraphronidae, Insect ecology, Insect taxonomy, Zoogeography. English abstracts.
- 9886-69
A NOTE: SOME RECORDS OF AUSTRALIAN NOCTUIDAE IN NEW ZEALAND.
J S Dugdale
New Zeal Entomol 4(2):13-14
Apr 1969 421 N48
Noctuidae, Surveys.
- 9887-69
A NEW SPECIES OF EPHYDRELLA TONNOIR AND MALLOCH (DIPTERA: EPHYDRIDAE).
L J Dumbleton
New Zeal Entomol 4(2):38-46
REF
Apr 1969 421 N48
Ephydriidae, Insect taxonomy.
- 9888-69
NEW SIMULIIDAE (DIPTERA) FROM NEW CALEDONIA AND NORFOLK ISLAND.
L J Dumbleton
New Zealand J Sci 12(2):213-222
Jun 1969 514 N482
Insect taxonomy, Simuliidae.
- 9889-69
CHARACTERS FOR IDENTIFICATION OF SOME COMMON PLUSIINE CATERPILLARS OF THE SOUTHEASTERN UNITED STATES.

T D Eichlin H B Cunningham
Entomol Soc Amer Ann 63(3):507-510
 May 1969 420 EN82
 Insect taxonomy, Larvac, Plusiinae.

9890-69

CONTRIBUTION TO THE KNOWLEDGE OF THE STAPHYLINIDAE. CI. DIVERSE REMARKS ON SOME QUEDIUS FROM THE EASTERN MEDITERRANEAN. (FR)
 G Fagel
Inst Roy Sci Natur Belg Bull 44(12):1-13
 25 Feb 1968 504 B835B
 Insect taxonomy, Quedius, Zoogeography.

9891-69

ALLOMORPHUS FRANZI, N. GEN., N. SPEC. (COLEOPTERA, CURCULIONIDAE), A NEW SPECIES AND GENUS FROM AUSTRIA. 8. CONTRIBUTION TO THE KNOWLEDGE OF THE PALEARCTIC COSSONINAE. (GE)
 B Folwaczny
Entomol Bl 64(1):41-42
 15 Jul 1968 421 EN833
 Allomorpha franzi, Cossoninae, Curculionidae, Insect taxonomy.

9892-69

CONTRIBUTION TO THE KNOWLEDGE OF THE COCCIDAE FROM BRAZIL (HOMOPTERA-COCCIDEA). (POR)
 J P de Fonseca
Sao Paulo Inst Biol Arq 36(1 JAN-MAR):9-40 REF
 Mar 1969 442.9 SA6
 Coccoidea, Insect taxonomy.

Three new genera, nine new species and two new sub-species of the Coccoidea, are described in this paper, as well as *Pseudoparlatoria cauceae* Balachowsky, from Columbia, which has been recently found in Brazil.

9893-69

SCYMNUS (SIDIS) HIEKEI FURSCH, AS A FOE OF PSEUDOCOCCUS CITRI RISSO. (GE)
 H Fursch
Entomophaga 12(3):309-310
 1967 421 EN835
 Coccinellidae, Insect taxonomy, Planococcus citri, Predaceous insects, Scymnus. French abstract.

9894-69

RESULTS OF AN AUSTRIAN LEPIDOPTERA COLLECTING TRIP TO SYRIA AND LEBANON. (PART V.: EPERMENIIDAE). (GE)
 R Gaedike
Wien Entomol Ges Z 78(9-10):85-88
 421 OS7
 Epermeniidae, Insect taxonomy, Surveys.

9895-69

THOMISUS ONUSTUS WALCK. (ARACHNIDA) RECORDED IN ERROR FROM THURSLEY COMMON SURREY.
 P A Goddard
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 1):14
 Mar 1967 420 SO8
 Arachnida, Insect taxonomy.

9896-69

CNEMACANTHA ILLOTA (LOEW) (DIPT., LAUXANIIDAE) RECORDED IN ERROR FROM STANMORE COMMON, MIDDX.
 P A Goddard
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 1):12
 Mar 1967 420 SO8
 England, Insect taxonomy, Lauxaniidae.

9897-69

ORIENTAL SPECIES OF COESULA CAMERON (HYMENOPTERA: ICHNEUMONIDAE).
 V K Gupta J K Jonathan
Oriental Insects 2(2):155-193 MAP
 Jun 1968 QL461.07

Ichneumonidae, Insect identification, Insect taxonomy, Zoogeography. 11 new species and 5 new subspecies are described.

9898-69

A NEW DROSOPHILA SPECIES FROM NORTHERN FENNOSCANDIA (DIPTERA).
 W Hackman
Notulae Entomol 49(2):69-72
 1969 421 N84
 Drosophila, Insect taxonomy.

9899-69

THE OCCURRENCE OF DANIS HYMETUS TAYGETUS (FELDER) AT BAYVIEW, NEW SOUTH WALES.
 L C Haines
 62
 24 Apr 1969 410.9 N48P
 Insect taxonomy, Lycæniidae. Proceedings for the years 1967-68

9900-69

THE TIGER MOTHS OF THE COUNTY OF CUMBERLAND, NEW SOUTH WALES.
 L C Haines
 59-61
 24 Apr 1969 410.9 N48P
 Arctiidae, Surveys. Proceedings for the years 1967-68.

9901-69

A KEY TO THE SPECIES OF CARCINOPUS MARSEUL (COLEOPTERA, HISTERIDAE) ASSOCIATED WITH STORED PRODUCTS, INCLUDING C. TROGLODYTES (PAYKULL) NEW TO THIS HABITAT.
 D G H Halstead
J Stored Prod Res 5(1): 83-85
 May 1969 421 J829
 Histeridae, Insect taxonomy, Stored products, Surveys.

9902-69

LIST OF INSECT AND OTHER INVERTEBRATE TYPES IN THE MIGUEL LILLO INSTITUTION. (3RD LIST). (SP)
 K J Hayward
Acta Zool Lilloana 22:337-352
 1967 410 AC82
 Catalogs, Insect collection.

9903-69

THREE NEW SPECIES OF GENUS BLAPTICA, STAL., 1874 (DICTYOPTERA, BLABERIDAE OF THE REPUBLIC OF ARGENTINA). (SP)
 H C Hepper
Acta Zool Lilloana 22:221-229
 1967 410 AC82
 Blaberidae, Insect taxonomy. English abstract.

9904-69

CADDIS LARVAE.
 N E Hickin
S London Entomol Natur Hist Soc Proc Trans 9(4):102
 Dec 1967 420 SO8
 Larvae, Reviews, Trichoptera.

9905-69

SYNONYMY OF KEIFERIA GLOCHINELLA (ZELLER) AND RELATED NAMES (LEPIDOPTERA: GELECHIIDAE).
 R W Hodges
Entomol Soc Wash Proc 71(1):34-37 MAP REF
 Mar 1969 420 W27
 Gelechiidae, Insect taxonomy, Isophrictis similicella, Keiferia glochinella, Keiferia inconspicua.

9906-69

A NEW SPECIES OF TRICHACOIDES FROM INDIA WITH A REDESCRIPTION OF T. SCUTELLARIS DODD (HYMENOPTERA: PLATYGASTERIDAE).
 D Jackson
Roy Entomol Soc London Proc Ser B Taxonom 37(9-10):121-124
 22 Nov 1968 420 L84PB

Insect taxonomy, Platygasteridae.

A second species of *Trichacoides* Dodd, parasitic on *Procontarinia* sp. (Cecidomyiidae), is described from India. The first description of a male of this genus is given. *Trichacoides* scutellaris Dodd, the type species, is redescribed and illustrated, and a revised generic diagnosis presented.

9907-69

PALEARCTIC SPECIES FROM THE GENUS PHYMATA LATREILLE, 1802 (HEM. HET. REDUVIIDAE). (RUS)
 M Josifov
Bulgarska Akad Nauk Zool Inst Muz Izv 26:29-32
 1968 410.9 B872I
 Insect taxonomy, Reduviidae.

9908-69

THE SUBGENUS PERSICARGAS (IXODOIDEA, ARGASIDAE, ARGAS). 7. A. (P.) WALKERAE, NEW SPECIES, A PARASITE OF DOMESTIC FOWL IN SOUTHERN AFRICA.
 M N Kaiser H Hoogstraal
Entomol Soc Amer Ann 62(4):885-889
 Jul 1969 420 EN82
 Argas, Insect taxonomy, Parasitic insects, Poultry, Zoogeography.

9909-69

A REVISION OF THE PSEUDOMORPHACRIDINI (ORTHOPTERA: ACRIDOIDEA: PYRGOMORPHIDAE).
 D K M Kevan
Oriental Insects 2(2):141-154 MAP
 Jun 1968 QL461.07
 Insect identification, Insect taxonomy, Orthoptera, Pyrgomorphidae, Zoogeography.

9910-69

A NEW SPECIES OF FICALBIA (RAVENALITES) FROM CAMBODIA (DIPTERA: CULICIDAE).
 J M Klein
Entomol Soc Wash Proc 71(2):215-217
 Jun 1969 420 W27
 Culicidae, Ficalbia, Insect morphology, Insect taxonomy, Zoogeography.

9911-69

MITES OF THE SUPER-FAMILY GAMASOIDEA ON MICROMAMMALIA IN THE WESTERN BALKAN RANGE. (RUS)
 M Koyumdjieva
Bulgarska Akad Nauk Zool Inst Muz Izv 26:47-49
 1968 410.9 B872I
 Acarina, Mammals, Surveys. English abstract.

9912-69

OCHROMOLOPIS ICTELLA HB. (LEPIDOPTERA, EPERMENIIDAE) IN FINLAND, PROBABLY TRANSPORTED BY WINDSTORM. (GE)
 H Krogerus
Notulae Entomol 49(2):86-88 MAP
 1969 421 N84
 Epermeniidae, Insect dissemination, Insect morphology, Wind dispersal.

9913-69

AMPHIPYRA PYRAMIDEA L. AND A. BERBERA RUNGS IN FINLAND (LEPIDOPTERA, NOCTUIDAE). (GE)
 H Krogerus
Notulae Entomol 49(2):83-85
 1969 421 N84
 Amphipyra herbera, Amphipyra pyramidea, Insect morphology, Zoogeography.

9914-69

A NEW SPECIES OF MESIDIA (HYMENOPTERA: APHELINIDAE) FROM CALIFORNIA.
 C F Lagace
Entomol Soc Amer Ann 63(3):530-531
 May 1969 420 EN82
 Aphelinidae, Insect taxonomy.

- 9915-69**
ON SERGENTOMYIA RUTLEDGEI (LEWIS KIRK) AND S. SCHWETZI (ADLER, THEODOR PARROT) (DIPTERA: PSYCHODIDAE).
D J Lewis G R Barnley D M Minter
Roy Entomol Soc London Proc Ser B Taxonom
38(3-4):53-60 REF
06 May 1969 420 1.84PB
Insect taxonomy, Psychodidae.
- 9916-69**
NEW MYMARIDAE FROM CENTRAL AFRICA. (HYMENOPTERA: CHALCIDOIDEA). (FR)
G Mathot
Rev Zool Bot Afr 78(3/4):265-276
30 Dec 1968 410 R26
Acmopolynema, Anagnrus, Hymenoptera, Insect identification, Insect taxonomy, Lymaenon, Mymaridae, Zoogeography. Several new species of the three genera are described.
- 9917-69**
A NEW SPECIES OF EPIDERMOPTES FROM A SOUTH DAKOTA PHEASANT (ACARINA: EPIDERMOPTIDAE).
B McDaniel G C Parikh
Kans Entomol Soc J 42(1):34-38
Jan 1969 420 K13
Epidermoptidae, Insect taxonomy.
- 9918-69**
A NEW SPECIES OF CHRYSOMELA (COLEOPTERA, CHRYSOMELIDAE)-AN IMPORTANT COMPONENT OF THE TAIMYR PENINSULA BIOCOENOSES. (RUS)
I. N Medvedev Yu I Chernov
Zool Zhur 48(4):532-537
Apr 1969 410 R92
Chrysomelidae, Insect ecology, Insect taxonomy. English abstract
- 9919-69**
THE GENUS HETEROCONIS ENDERLEIN, 1905 (NEUROPTERA, CONIOPTERYGIDAE).
M Meinander
Notulae Entomol 49(2):49-68
1969 421 N84
Coniopterygidae, Insect taxonomy, Zoogeography.
- 9920-69**
FURTHER RECORDS OF THE DISTRIBUTION OF PETROBIA LATENS (MULLER) (ACARINA: TETRANYCHIDAE), A PEST OF WHEAT IN INDIA TOGETHER WITH THE DESCRIPTION OF A NEW SPECIES OF PREDATORY MITES ON THE SAME.
M G R Menon S Ghai
Indian J Entomol 30(1):77-79
Mar 1968 420 IN23
Petrobia latens, Predaceous insects, Wheat, Zoogeography.
- 9921-69**
THREE NEW RECORDS OF BRYOBIINAE FROM INDIA (ACARINA: TETRANYCHIDAE).
Menon S Ghai
Indian J Entomol 30(1):88-89
Mar 1968 420 IN23
Surveys, Tetranychidae.
- 9922-69**
PRESENTATION OF AQUATIC HETEROPTERAN FAUNA II, AQUATIC HETEROPTERA FROM EVORA, PORTUGAL. (FR)
N Nieser
Entomol Ber 29(1):2-6 REF
01 Jan 1969 420 N38B
Aquatic insects, Heteroptera, Surveys. English abstract.
- 9923-69**
A NEW DANAUS SPECIES FROM CENTRAL-CELEBES.
E J Nicuwenhuis
Entomol Ber 29(1):18-19
01 Jan 1969 420 N38B
Danaus, Insect taxonomy.
- 9924-69**
THE STRUCTURE OF POLYMORPHIC SPECIES OF THE SUBGENUS AUTOLETHRUS (COLEOPTERA, SCARABAEIDAE) FROM SOUTH KAZAKHISTAN. (RUS)
G V Nikolajev
Zool Zhar 48(4):524-531
Apr 1969 410 R92
Insect taxonomy, Polymorphism, Scarabaeidae. English abstract.
- 9925-69**
CORRECTION TO THE KEY OF THE EUROPEAN GYRINUS SPECIES. (GE)
G Ochs
Entomol Bl 64(1):64
15 Jul 1968 421 EN833
Gyrinidae, Gyrinus, Insect taxonomy.
- 9926-69**
NEW MIMARIDS OF ARGENTINA (HYMENOPTERA; MYMARIDAE). (SP)
A A Oglohin
Acta Zool Lilloana 22:183-196
1967 410 AC82
Insect taxonomy, Mymaridae. English abstract.
- 9927-69**
THE FAMILY LEPTOGASTRIDAE (DIPTERA).
H Oldroyd
Roy Entomol Soc London Proc Ser B Taxonom
38(1-2):27-31
18 Mar 1969 420 L84PB
Asilidae, Insect names, Insect taxonomy, Lepidoptera.
- 9928-69**
BULGARIAN GRASSHOPPERS (HOMOPTERA: AUCHENORRHYNCHA). (RUS)
P Pelov
Bulgarska Akad Nauk Zool Inst Muz Izv 26:159-171 REF
410.9 B8721
Homoptera, Insect taxonomy, Surveys. German abstract.
- 9929-69**
THE BUTTERFLIES OF LORD HOWE ISLAND.
J V Peters
63-64
24 Apr 1969 410.9 N48P
Lepidoptera, Surveys. Proceedings for the years 1967-68
- 9930-69**
THREE NEW SPECIES OF HETEROMENOPON (MALLOPHAGA: MENOPONIDAE) FROM BRAZILIAN AND AUSTRALIAN PARROTS.
R D Price
Entomol Soc Amer Ann 63(3):563-566
May 1969 420 EN82
Insect taxonomy, Menoponidae, Parrots.
- 9931-69**
A NEW NORTH PALEARCTIC STENUS: ST. (NESTUS) CORIACEUS N. SP. (COLEOPTERA, STAPHYLINIDAE) (58. CONTRIBUTION TO THE KNOWLEDGE OF THE STENIDS). (GE)
V Puthz
Notulae Entomol 49(2):80-82
1969 421 N84
Insect taxonomy, Staphylinidae.
- 9932-69**
FIRST RECORD OF AEWASIVUS ADVENA COMPERE (ENCYTRIDAE; HYMENOPTERA) FROM INDIA AS A PARASITE OF FERRISIA VIRGATA CKLL...
R R Rawat B N Modi
Indian J Entomol 30(1):85
Mar 1968 420 IN23
Encyrtidae, Ferrisia virgata, Parasitic insects, Surveys.
- 9933-69**
A NEW GENUS AND KEY TO THE SPECIES OF AUSTRALIAN STILBOPTERYGIDAE (NEUROPTERA).
E F Rick
Entomol Soc Australia (nsw) J 7(2):105-108
31 Dec 1968 423.92 EN84
Insect taxonomy, Neuroptera.
- 9934-69**
SPIRACLES OF ADULT SCARABAEOIDEA (COLEOPTERA) AND THEIR PHYLOGENETIC SIGNIFICANCE. I. THE ABDOMINAL SPIRACLES.
P O Ritcher
Entomol Soc Amer Ann 62(4):869-880 REF
Jul 1969 420 EN82
Abdomen, Insect evolution, Insect names, Insect taxonomy, Lucanidae, Passalidae, Scarabaeidae, Spiracles.
- 9935-69**
NEOTROPICAL COCKROACHES OF THE EPILAMPRA ABDOMENNIGRUM COMPLEX; A CLARIFICATION OF THEIR SYSTEMATICS (DICTYOPEERA, BLATTARIA).
L M Roth A B Gurnet
Entomol Soc Amer Ann 63(3):617-627 REF
May 1969 420 EN82
Blattaria, Insect taxonomy, Neotropical Region.
- 9936-69**
NEW SPECIES AND RECORDS OF NASUTITERMITINAE (ISOPTERA: TERMITIDAE) FROM AFRICA.
W A Sands
Roy Entomol Soc London Proc Ser B Taxonom
37(11-12):163-169 MAP
20 Dec 1968 420 L84PB
Insect taxonomy, Surveys, Termites, Zoogeography.
- 9937-69**
DISTRIBUTION AND ESTABLISHMENT OF TETRASTICHUS INCERTUS IN THE EASTERN UNITED STATES.
R F W Schroder J L Huggans D J J Horn G York
Entomol Soc Amer Ann 62(4):812-815 MAP
Jul 1969 420 EN82
Surveys, Tetrastichus incertus, Zoogeography.
Tetrastichus incertus (Ratzburg) (Hymenoptera: Eulophidae), a larval parasite of the alfalfa weevil, Hypera postica (Gyllenhal), has become established in 10 middle Atlantic and New England States since its initial release in New Jersey in 1960 and its subsequent release in 14 other States. The release sites and the dispersal and distribution in the Eastern United States are reported for the period from 1960 to June 1968.
- 9938-69**
LYMANTRIIDAE--EAST VERSUS WEST AFRICA.
D G Scvastopulo
S London Entomol Natur Hist Soc Proc Trans
7(6,PT 1):15-17
Mar 1967 420 S08
Insect taxonomy, Lymantriidae.
- 9939-69**
LIMACODIDAE- EAST VERSUS WEST AFRICA.
D G Scvastopulo
S London Entomol Natur Hist Soc Proc Trans
9(4):98-99
Dec 1967 420 S08
Insect taxonomy, Limacodidae.
- 9940-69**
NEW SPECIES OF BEETLE MITES OF THE FAMILY CHAMDBATIDAE (ORIBATEI) FROM THE USSR. (RUS)
E S Shaldybidia
Zool Zhur 48(4):518-523
Apr 1969 410 R92
Insect taxonomy, Mites, Oribatei. English abstract.
- 9941-69**
MORDELISTENA PUMILA GROUP IN FINLAND (COLEOPTERA, MORDELLIDAE). (SW)
H Silfverberg
Notulae Entomol 49(2):110

- 1969 421 N84
Mordellidae, Surveys, Zoogeography.
- 9942-69**
SIPHONAPTERA FROM INARI, FINLAND.
W Sinclair
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 1):13-14
Mar 1967 420 SO8
Insect taxonomy, Siphonaptera.
- 9943-69**
APHID FAUNA OF MACEDONIA. (RUS)
D G Tassehev
Bulgarska Akad Nauk Zool Inst Muz Izv 26:173-182
1968 410.9 B8721
Aphididae, Insect taxonomy, Surveys. German abstract.
- 9944-69**
A NEW MALAYAN SPECIES OF THE ANT GENUS EPITRITUS AND A RELATED NEW GENUS FROM SINGAPORE (HYMENOPTERA: FORMICIDAE).
R W Taylor
Entomol Soc Australia (nsw) J 7(2):130-134
31 Dec 1968 423.92 EN84
Formicidae, Insect taxonomy.
- 9945-69**
PHILONTHUS PARCUS SHARP (COL., STAPHYLINIDAE) IN BRITAIN.
C E Tottenham
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 2):46-47
May 1967 420 SO8
Insect taxonomy, Staphylinidae.
- 9946-69**
NEW BULGARIAN FAUNA OF PHYTOPHAGEOUS WASPS (SYMPHYTA, HYMENOPTERA). (RUS)
I B Vasilev
Bulgarska Akad Nauk Zool Inst Muz Izv 26:183-186
1968 410.9 B8721
Insect taxonomy, Phytophagous insects, Symphyta, Zoogeography. German abstract.
- 9947-69**
A NEW NAME FOR THE GENUS CYRTOLABUS VAN DER VECHT (HYMENOPTERA, EUMENIDAE).
J VAN DER Vecht
Entomol Ber 29(1):1
01 Jan 1969 420 N38B
Eumenidae, Insect taxonomy, Nomenclature.
- 9948-69**
SOME NEW RECORDS OF BUTTERFLIES FROM NEPAL.
S R Wadhi B Parshad
Indian J Entomol 30(1):92-93
Mar 1968 420 IN23
Lepidoptera, Surveys, Zoogeography.
- 9949-69**
ADELPHOCORIS MINOR NOV. SPEC. (HETEROPTERA, MIRIDAE). (GE)
E Wagner
Notulae Entomol 49(2):105-107
1969 421 N84
Insect taxonomy, Miridae, Zoogeography.
- 9950-69**
ADDITIONS TO THE GENUS ALLOEONOTUS FIEBER, 1878 (HETEROPTERA, MIRIDAE). (GE)
E Wagner
Natulae Entomol 49(2):108-110
1969 421 N84
Insect taxonomy, Miridae, Zoogeography.
- 9951-69**
NEW ORTHOTYLUS AND PACHYLOPS SPECIES (HETEROPTERA, MIRIDAE). (GE)
E Wagner

- Notulae Entomol* 49(2):99-104
1969 421 N84
Insect taxonomy, Miridae, Zoogeography.
- 9952-69**
SEVERAL GLOBICEPS-SPECIES (HETEROPTERA, MIRIDAE). (GE)
E Wagner
Notulae Entomol 49(2):89-98
1969 421 N84
Insect taxonomy, Miridae, Surveys.
- 9953-69**
KEYS TO GENERA AND SOME SPECIES OF NEW ZEALAND LATHRIDIIDAE (COLEOPTERA).
J C Watt
New Zeal Entomol 4(2):49-67 REF
Apr 1969 421 N48
Insect taxonomy, Lathridiidae.
- 9954-69**
HYPOCYPTUS NITIDUS PALM. (COL., STAPHYLINIDAE) IN THE JOY COLLECTION.
S A Williams
S London Entomol Natur Hist Soc Proc Trans 9(4):99
Dec 1967 420 SO8
Insect identification, Staphylinidae.
- 9955-69**
QUEDIUS (MICROSAURUS) SCITUS (GRAV.) (COL., STAPHYLINIDAE) A TERATOLOGICAL SPECIMEN.
S A Williams
S London Entomol Natur Hist Soc Proc Trans 10(3):66
Aug 1967 420 SO8
Insect identification, Quedius, Staphylinidae.
- 9956-69**
DESCRIPTION OF IMMATURE STAGES OF COREIDAE. 3. ARCHIMERUS ALTERNUS.
T R Yonke J T Medler
Entomol Soc Amer Ann 63(3):477-480
May 1969 420 EN82
Coreidae, Insect eggs, Insect taxonomy, Nymphs.
- 9957-69**
DESCRIPTION OF IMMATURE STAGES OF COREIDAE. 1. EUTHOCHTHA GALEATOR.
T R Yonke J T Medler
Entomol Soc Amer Ann 63(3):469-473
May 1969 420 EN82
Coreidae, Insect eggs, Insect taxonomy, Nymphs.
- PHYSIOLOGY AND BIOCHEMISTRY**
- 9958-69**
ON TWO NEW SPECIES OF TEREBRANTIAN THYSANOPTERA WITH REMARKS ON A NEW GENUS PELLOTHRIPS.
T N Ananthakrishnan
Oriental Insects 2(2):201-204
Jun 1968 QL461.07
Insect identification, Insect taxonomy, Thysanoptera, Zoogeography.
- 9959-69**
HELICOPTER SPRAYERS MAY RESCUE INFESTED FORESTS.
Anonymous
Agr Res 17(11):12
May 1969 1.98 AG84
Aerial spraying, Biological control (insects), Forest insects, Helicopters, Hemerocampa pseudotsugata, Insect diseases, Insect pests, Polyhedroses, Spraying equipment.
- 9960-69**
ULTRASTRUCTURAL OBSERVATIONS ON THE BRANCHED RODS ASSOCIATED WITH SOME INSECT GRANULOSSES.
H J Arnott K M Smith
J Invertebrate Pathol 13(3):345-350
May 1969 421 J826
Cytology, Electron microscopy, Granuloses, Insect diseases.
- 9961-69**
LACTIC DEHYDROGENASE ISOZYMES IN THE GRASSHOPPER.
J N Aronson J R Fish F A Muckenthaler
Compar Biochem Physiol 24(2):657-659 REF
Feb 1968 444.8 C73
Electrophoresis, Insect biochemistry, Lactate dehydrogenase, Melanoplus differentialis, Muscles, Testes, Tissue extracts.
- 9962-69**
IXODES PACIFICUS COOLEY AND KOHLS, 1943: ITS LIFE-HISTORY AND OCCURRENCE.
D R Arthur K R Snow
Parasitology 58(4):893-906 MAP REF
Nov 1968 448.8 P21
Animals, Insect biology, Ixodes, Life cycle, Surveys, Zoogeography.
- 9963-69**
DESCRIPTION OF THE MALE, PUPA, AND LARVAL HABITAT OF NILOBEZZIA BREVICORNIS (DIPTERA: CERATOPOGONIDAE).
W R Atchley
Kans Entomol Soc J 42(1):54-57
Jan 1969 420 K13
Ceratopogonidae, Habitats, Insect morphology, Larvae, Pupae.
- 9964-69**
STUDIES ON AN ISRAEL STRAIN OF ANAGYRUS PSEUDOCOCCI (GIRAULT) (HYM., ENCARTIDAE). II. SOME BIOLOGICAL ASPECTS.
Z Avidov Y Rossler D Rosen
Entomophaga 12(2):111-118
1967 421 EN835
Anagyrus pseudocoeci, Insect behavior, Insect biology, Longevity, Planococcus citri, Reproduction.
- 9965-69**
LIFE HISTORY AND HABITS OF SIALIS ROTUNDA AND S. CALIFORNICA IN WESTERN OREGON.
K M Azam N H Anderson
Entomol Soc Amer Ann 63(3):549-558 REF
May 1969 420 EN82
Insect biology, Insect ecology, Sialidae.
- 9966-69**
SEASONAL CHANGES IN THE DISTRIBUTION OF THE MILLIPEDE CYLINDROIULUS PUNCTATUS (LEACH) IN DECAYING LOGS AND SOIL.
B Banerjee
J Anim Ecol 36(1):171-177 REF
Feb 1967 410 J826
Diplopoda, Habitats, Logs, Soil sampling.
- 9967-69**
NOTE ON PROSPALTELLA AURANTII HOW. (HYM., APHELINIDAE), PARASITE OF QUADRASPIDIOTUS PYRI LICHT. IN THE MATITIME ALPS (HOM., DIASPIDINAE). (FR)
C Benassy H Bianchi
Entomophaga 12(2):181-186
1967 421 EN835
Aspidiotus pyri, Biological control (insects), Insect biology, Prospaltella aurantii. English abstract.
- 9968-69**
INTRACELLULAR ACTIVITY IN CRICKET NEURONS DURING THE GENERATION OF BEHAVIOUR PATTERNS.
D R Bentley
J Insect Physiol 15(4):677-699 REF
Apr 1969 421 J825
Electrophysiology, Gryllus campestris, Insect behavior, Insect physiology, Nervous system.
- 9969-69**
SINDBIVIRUS MULTIPLICATION AND CALIPHORA ERYTHROCEPHALA (MEIG.) METAMORPHOSIS. (FR)

- A Berkaloff P Berreur P Cals
Acad Sci Compt Rend Ser D Sci Nat 264(11, 1ST SEMESTER):1545-1548
13 Mar 1967 505 P21
Calliphora vicina, Hormones, Insect diseases, Insect physiology, Metamorphosis, Sindbis virus.
- 9970-69**
NOTES ON THE BIOLOGY OF DIATRAEOPHAGA STRIATALIS TOWNSEND, TACHINID PARASITE OF PROCERAS SACCHARIPHAGUS BOJ. (FR)
M Betbeder-Natihet
Entomophaga 12(2):161-173
1967 421 EN835
Diatraeophaga striatalis, Insect biology, Insect physiology, Predaceous insects, Proceras sacchariphagus.
- 9971-69**
OVIPOSITION BEHAVIOUR OF THE DESERT LOCUST (SCHISTOCERCA GREGARIA FORSK.).
K R Bhattia S C Harjai
Indian J Entomol 30(2):109-112 REF
Jun 1968 420 IN23
Insect behavior, Insect biology, Oviposition, Schistocerca gregaria.
- 9972-69**
AN INTEGRATED TECHNIQUE TO STUDY THE EFFECTS OF FUMIGANTS ON RESPIRATION OF INSECTS.
S S Bhatia
J Stored Prod Res 5(1):57-67 REF
May 1969 421 J829
Acetone, Chloroform, Ethyl ether, Fumigants, Insect physiology, Insect respiration, Methodology, Periplaneta americana.
- 9973-69**
QUANTITATIVE DETERMINATION OF URIC ACID IN INSECT FECES BY LITHIUM CARBONATE EXTRACTION AND THE ENZY-MATIC-SPECTROPHOTOMETRIC METHOD.
A K Bhattacharya G P Waldbauer
Entomol Soc Amer Ann 62(4):925-927 REF
Jul 1969 420 EN82
Methodology, Quantitative analysis, Statistical analysis, Tenebrio molitor, Tenebroides mauritanicus, Uric acid.
- 9974-69**
STUDIES ON BROOD REARING ACTIVITY OF INDIAN HONEY BEE APIS INDICA F. UNDER DELHI CONDITIONS.
D S Bisht N C Pant
Indian J Entomol 30(3):223-228
Sep 1968 420 IN23
Apiculture, Apis indica, Feeding, Insect nutrition, Insect physiology, Insect rearing.
- 9975-69**
RECOVERY OF MITES FROM PEAT AND MINERAL SOILS USING A NEW FLOTATION METHOD.
W Block
J Anim Ecol 36(2):323-327 REF
Jun 1967 410 J826
Flotation, Methodology, Mites, Peat, Soil sampling.
- 9976-69**
EFFECT OF TEMPERATURE ON THE DEVELOPMENT OF MUSTARD SAWFLY, ATHALIA PROXIMA KLUG. (HYMENOPTERA: TENTHREDINIDAE).
J K Bogawat
Indian J Entomol 30(1):80-82
Mar 1968 420 IN23
Athalia proxima, Insect biology, Insect physiology, Temperature, Tenthredinidae.
- 9977-69**
A NEW CARADRINA O. OF SPAIN- CONTRIBUTIONS TO THE STUDY NOCTUIDAE TRIFINAE, 158(1). (FR)
C Boursin
Entomops (9):29-31
28 Sep 1967 QL461.E53
Insect identification, Insect taxonomy, Noctuidae.
- 9978-69**
OBSERVATIONS ON THE LIFE HISTORY AND BIONOMICS OF OLIGOTOMA CEYLONICA CEYLONICA ENDERLEIN (OLIGOTOMIDAE, EMBIOPTERA), COMMENSAL IN THE NEST OF THE SOCIAL SPIDER STEGODYPIIUS SARASINORUM KARSCH.
B L Bradoo
Bombay Natur Hist Soc J 64(3):447-454 REF
Dec 1967 513 B63
Araneida, Embioptera, Insect behavior, Insect biology, Insect nests, Oligotomidae, Symbiosis.
- 9979-69**
WASPS ATTACKING OTHER INSECTS.
F D Buck
S London Entomol Natur Hist Soc Proc Trans 9(4):97
Dec 1967 420 SO8
Diptera, Hymenoptera, Predaceous insects.
- 9980-69**
METEORUS VERSICOLOR WESM. VAR. DECOLORATUS RUTHE (HYM., BRACONIDAE), A NEW PARASITE OF THAU-METOPOEA PITOCAMPA SCHIFF. (LEP., THAUMETOPOEIDAE). (FR)
D Cadahia G Demolin E Biliotti
Entomophaga 12(4):355-361 MAP REF
1967 421 EN835
Braconidae, Insect biology, Natural control (insects), Notodontidae, English abstract.
- 9981-69**
LOCUST WIND RECEPTORS. I. TRANSDUCER MECHANICS AND SENSORY RESPONSE.
J M Cambi
J Exp Biol 50(2):335-348 REF
Apr 1969 442.8 B77
Aerodynamics, Electrophysiology, Insect flight, Insect physiology, Schistocerca gregaria, Sense organs, Wind.
- 9982-69**
LOCUST WIND RECEPTORS. III. CONTRIBUTION TO FLIGHT INITIATION AND LIFT CONTROL.
J M Cambi
J Exp Biol 50(2):363-373
Apr 1969 442.8 B77
Aerodynamics, Insect flight, Insect physiology, Schistocerca gregaria, Sense organs.
- 9983-69**
LOCUST WIND RECEPTORS. II. INTERNEURONES IN THE CERVICAL CONNECTIVE.
J M Cambi
J Exp Biol 50(2):349-362
Apr 1969 442.8 B77
Electrophysiology, Insect flight, Insect physiology, Nervous system, Schistocerca gregaria, Sense organs, Wind.
- 9984-69**
THE UTILIZATION OF C14-LABELLED ADENOSINE DIPHOSPHATE DURING THE IN VITRO RESPIRATION OF HOUSEFLY SAR-COSOMES.
G C Carney
Life Sci 8(10,PT 2):453-464 REF
15 May 1969 442.8 L62
Adenosine pyrophosphates, Insect biochemistry, Musca domestica, Radioactive tracers, Sar-cosomes, Tissue culture.
- 9985-69**
AN INTERESTING CASE OF ADAPTATION TO VARIOUS HOSTS ON THE PART OF AN EGG PARASITE. (IT)
B Cavaleaselle
Entomophaga 13(4):319-322
1968 421 EN835
Aphelinidae, Centrodora italiae, Cerambycidae, Eggs, Insect adaptation, Natural control (insects), Populus, Predaceous insects, Saperda carcharias, English abstract.
- 9986-69**
POLLENS COLLECTED BY SPECIES OF ANDRENA (HYMENOPTERA: APIDAE).
V H Chambers
Roy Entomol Soc London Proc Ser A Gen Entomol 43(10-12):155-160
31 Dec 1968 420 L84PA
Andrena, Palynology, Surveys.
- 9987-69**
THE EXTERNAL MORPHOGENESIS OF GRASSHOPPER EMBRYOS.
R F Chapman F Whitham
Roy Entomol Soc London Proc Ser A Gen Entomol 43(10-12):161-169 REF
31 Dec 1968 420 L84PA
Acrididae, Embryology, Insect eggs, Insect physiology, Temperature.
- 9988-69**
REARING OF THE MAIZE STEM BORER, CHILO ZONELLUS SWINHOE ON ARTIFICIAL DIET.
S M Chatterji K H Siddiqui V P S Panwar G C Sharma W R Young
Indian J Entomol 30(1):8-12
Mar 1968 420 IN23
Chilo zonellus, Insect nutrition, Insect rearing.
- 9989-69**
ON THE ODOUR COMPONENTS OF THE STINK OF TWO HETEROPTERAN BUGS OF INDIA.
D K Choudhuri K K Das
Indian J Entomol 30(3):203-208 REF
Sep 1968 420 IN23
Insect biochemistry, Leptocoris varicornis, Pentatomidae, Secretion.
- 9990-69**
A COMPARATIVE BIOLOGICAL STUDY OF THREE CEROPLASTES SPECIES (HEM. COCCIDEAE) AND THEIR NATURAL ENEMIES.
C J Cilliers
S Afr Dep Agr Tech Serv Entomol Mem 13:1-59 REF
Aug 1967 423.92 SO8
Ceroplastes, Eublemma, Parasitism, Tetrastichus.
- 9991-69**
THE NEUTRAL LIPIDS FROM VARIOUS ORGANS OF THE TERMITE MACROTERMES GOLIATH.
S H W Cmelik
J Insect Physiol 15(5):839-849 REF
May 1969 421 J825
Chromatography, Insect biochemistry, Lipids, Termites.
- 9992-69**
CORN STUNT VECTOR LEAFHOPPER ATTRACTANCY TO AND OVIPOSITION PREFERENCE FOR HYBRID DENT CORN. II. GRAMINELLA NIGRIFRONS.
H L Collins H N Pitre
Entomol Soc Amer Ann 62(4):773-775 REF
Jul 1969 420 EN82
Corn, Crop varieties, Graminella nigrifrons, Oviposition, Plant disease resistance, Stunt, Virus diseases (plants).
On the basis of leafhopper counts and rate of egg deposition corn stunt susceptible hybrids in general were not preferred over hybrids exhibiting resistance when the leafhoppers were given a choice of hybrids in a field cage. Further, no significant differences in egg laying were obtained when females were continued on individual hybrids and not given a choice of oviposition sites.
- 9993-69**
BIOCHEMICAL STUDY OF PLODIA INTER-PUNCTELLA (HBN.) (LEPIDOPTERA) I-VARIATIONS OF BODY WEIGHT, WATER CONTENT, AND DRY MATTER CONTENT. (FR)
G Couture L Huot
Natur Can 94(4JUL-AUG):437-446 REF
Aug 1967 410 N216

Insect ecology, Phytophagous insects, Population. English abstract.

10018-69

HISTOLOGICAL, BEHAVIORAL, AND SYMPTOMATIC EFFECTS OF PENTAC ON TETRANYCHUS URTICAE.

J B Gingrich H T Streu
Entomol Soc Amer Ann 63(3):640-647 REF
May 1969 420 EN82

Acaricides, Insect behavior, Insect histology, Pentac, Tetranychus urticae.

10019-69

STUDY OF DENSONUCLEOSIS OF LEPIDOPTERA BY THE IMMUNOLOGICAL GEL DIFFUSION METHOD. (FR)

F Giran
Entomophaga 13(4):271-279 REF
1968 421 EN835

Galleria mellonella, Insect diseases, Serodiagnosis. English abstract.

10020-69

EXPERIMENTAL INFECTIONS WITH BACILLUS LARVAE. I. A STRAIN WITH A MORPHOLOGICAL MARKER.

T A Gochnauer J C M L'Arrivee
J Invertebrate Pathol 13(2):280-284 REF
Mar 1969 421 J826

Apis mellifera, Bacillus larvae, Flagella, Indicators (disease), Insect diseases, Morphology.

A marker strain of Bacillus larvae, isolated from naturally infected honey-bee larval remains, produced microscopically visible flagellar whips half the normal wavelength of whips of other strains, both in artificial culture and in inoculated honey-bee larvae. The strain thus may serve as a specific indicator of the presence and purity of infections in test larvae.

10021-69

COMPOSITIONS AND METHODS FOR REGULATING THE GROWTH OF PLANTS. PATENT 3,455,673.

H F Goonewardene B Loev
Us Patent Office Offic Gaz 864(3):903
15 Jul 1969 156.65 OF2

Carbamates, Patents, Plant regulators.

10022-69

ANTENNOPSIS GALICA HEIM AND BUCHLI (HYPHOMYCETES: GLOEOHAUSTORIALES), AN ENTOMOGENOUS FUNGUS ON SUBTERRANEAN TERMITES IN FLORIDA.

R J Gouger J W Kimbrough
J Invertebrate Pathol 13(2):223-228 REF
Mar 1969 421 J826

Entomogenous fungi, Insect diseases, Microbiology, Reticulitermes flavipes, Termites.

Antennopsis gallica Heim and Buchli is reported for the first time in North America on the subterranean termites Reticulitermes virginicus Banks and Reticulitermes flavipes (Kollar) from north Florida. Details of the life cycle of this entomogenous fungus are described and illustrated.

10023-69

DIOXANE AND DIOXASPIRO DERIVATIVES AS ATTRACTANTS FOR MALE YELLOW-FEVER MOSQUITOES.

G G Grant
J Econ Entomol 62(4):786-789
15 Aug 1969 421 J822

Aedes aegypti, Attractants, Dioxane compounds, Dioxaspiro compounds, Organic compounds, Volatile substances.

10024-69

SPERMATOPHORES OF THE BLATTARIA.

P N Graves
Entomol Soc Amer Ann 63(3):595-602
May 1969 420 EN82

Blattaria, Insect evolution, Insect physiology, Reproduction, Spermatophores.

10025-69

HEXALURE, AN INSECT SEX ATTRACTANT DISCOVERED BY EMPIRICAL SCREENING.

N Green M Jacobson J C Keller

Experientia 25(7):682-683
15 Jul 1967 475 EX7

Attractants, Chemicals, Insect behavior, Methodology, Pectinophora gossypiella.

10026-69

DEVELOPMENT OF CHROTOGONUS TRACHYPTERUS (BLANCH.) (ORTHOPTERA: PYRSGOMORPHIDAE) IN RELATION TO DIFFERENT LEVELS OF TEMPERATURE AND HUMIDITY.

G S Grewal A S Atwal
Indian J Entomol 30(1):1-7
Mar 1968 420 IN23

Acrididae, Humidity, Insect physiology, Oviposition, Temperature.

10027-69

A STUDY OF A POCKET OF SCATTERED DESERT LOCUST POPULATION IN RAJASTHAN, INDIA DURING 1966 WITH SPECIAL REFERENCE TO EYE-STRIPES AND BIOMETRICS.

S C Harjai A J Dhillon M V Venkatesh
Indian J Entomol 30(2):137-153 REF
Jun 1968 420 IN23

Habitats, Insect morphology, Population, Schistocerca gregaria.

10028-69

THE INFLUENCE OF TEMPERATURE ON REPRODUCTION AND DEVELOPMENT IN FOUR SPECIES OF GLOSSINA (DIPTERA: MUSCIDA).

J M B Harley
Roy Entomol Soc London Proc Ser A Gen Entomol 43(10-12):170-177 REF
31 Dec 1968 420 L84PA

Glossina, Insect physiology, Ovulation, Pupae, Temperature.

10029-69

COURSE OF SPORULATION OF BACILLUS POPILLIAE IN LIQUID MEDIUM CONTAINING ACTIVATED CARBON.

W C Haynes L J Rhodes
J Invertebrate Pathol 13(2):161-166
Mar 1969 421 J826

Bacillus popilliae, Bacterial diseases (insects), Culture media, Insect diseases, Popillia japonica.

10030-69

LABORATORY DEMONSTRATION OF A CHEMICAL SEX ATTRACTANT IN COSTELYTRA ZEALANDICHA (WHITE) (SCARABAEIDAE: COLEOPTERA).

R F Henzell M D Lowe H J Taylor E Boston
New Zealand J Sci 12(2):252-257
Jun 1969 514 N482

Costelytra zealandica, Insect behavior, Insect physiology, Scarabaeidae, Sex attractants.

10031-69

THE TOXICITY TO TRIBOLIUM CASTANEUM (HERBST) (COLEOPTERA, TENEBRIONIDAE) OF MIXTURES OF PYRETHRINS AND PIPERONYL BUTOXIDE: FITTING A MATHEMATICAL MODEL.

P S Hewlett
J Stored Prod Res 5(1):1-9 REF
May 1969 421 J829

Mathematical analysis, Models, Piperonyl butoxide, Pyrethrum, Toxicology, Tribolium castaneum.

10032-69

MEDITERRANEAN FRUIT FLIES AND MELON FLIES TRAPPED AT VARIOUS HEIGHTS WITH SYNTHETIC LURES.

F R Holbrook M S Fujimoto
J Econ Entomol 62(4):962-963
15 Aug 1969 421 J822

Attractants, Ceratitis capitata, Chlordane, Chlorinated hydrocarbons, Cuc-lure, Dacus cucurbitae, Fruit, Insect traps, Lindane, Naled, Organophosphorus compounds, Trimedlure, Vegetables. Traps placed from 1 to 15 feet above ground in fruit and truck crop area.

10033-69

STUDIES AND SUGGESTIONS ON THE BEHAVIOUR OF MOTHS AT LIGHT.

J D Holloway
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 2):31-45 REF
May 1967 420 S08

Aging, Insect behavior, Insect migration, Light, Moths, Population.

10034-69

IN VITRO COLONIZATION OF THE GOAT BITING LICE, BOVICOLA CRASSIPES AND B. LIMBATA.

D E Hopkins W F Chamberlain
Entomol Soc Amer Ann 62(4):826-828
Jul 1969 420 EN82

Bovicola, Insect biology, Insect nutrition, Insect rearing, Mallophaga.

10035-69

TEMPERATURE EFFECTS ON EMBRYONIC DEVELOPMENT IN INSECTS.

R W Howe
Annu Rev Entomol 12:15-42 REF
1967 421 AN72

Bibliography, Insect eggs, Insect morphology, Insect physiology, Reviews, Temperature.

10036-69

LETHARGY, A NEW VIRUS OF MELOLONTHA MELOLONTHA L. LARVAE (COLEOPTERA, SCARABAEIDAE). (FR)

B Hurpin C Vago P Robert G Meynadier
Entomophaga 12(3):311-315
1967 421 EN835

Insect diseases, Larvae, Melolontha melolontha, Viruses. English abstract.

10037-69

METEOROLOGICAL ASPECTS OF INSECT MIGRATIONS.

G W Hurst
Endeavour 28(104):77-81 REF
May 1969 472 EN2

Insect migration, Myzus persicae, Phytomctra biloba, Schistocerca gregaria, Spodoptera exigua.

10038-69

MYXOMYCETES AS FOOD FOR OTHER ORGANISMS.

B Ing
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 1):18-23 REF
Mar 1967 420 S08

Insect nutrition, Myxomycetes.

10039-69

DESCRIPTION, BIOLOGY, AND IMPORTANCE OF A NEW SPECIES OF ALLANTONEMATIDAE (NEMATODA), PARASITE OF THE APHIDIOPHAGOUS COCCINELLIDAE: PARASYLENCHUS COCCINELLINAE, N. SP. (FR)

G Ipert D. van Waerebeke
Entomophaga 13(2):107-119 REF
1968 421 EN835

Allantonematidae, Biology, Coccinellidae, Nematodes, Physiology, Taxonomy. English abstract.

10040-69

LABORATORY STUDIES OF EUCELATORIA ARMIGERA, A TACHINID PARASITE OF HELIOTHIS SPP.

C G Jackson D E Bryan R Patana
J Econ Entomol 62(4):907-909 REF
15 Aug 1969 421 J822

Eucelatoria armigera, Heliopsis, Insect biology, Insect rearing, Parasitic insects, Tachinidae, Temperature, Zoogeography. Hawaiian records erroneous.

10041-69

LEACHING OF THE NUCLEAR-POLYHEDROSIS VIRUS OF TRICHOPLUSIA NI FROM SOIL.

R P Jaques
J Invertebrate Pathol 13(2):256-263
Mar 1969 421 J826

- A J McIlachlan
Hydrobiologia 33(2):237-249
29 May 1969 410 H992
Chironomidae, Food habits, Insect behavior, Insect rearing, Larvae, Substrates.
- 10067-69**
EYES OF THE FEMALE TWO-SPOTTED SPIDER MITE, TETRANYCHUS URTICAE. I. MORPHOLOGY.
W D McEnroe
Entomol Soc Amer Ann 62(3):461-466 REF
May 1969 420 EN82
Eyes, Insect morphology, Tetranychus urticae.
The anterior eyes of the female Tetranychus urticae (Koch) on the basis of their structure, can serve as scanning-point detectors. The posterior eyes are not shielded and appear to be non-directional receptors.
- 10068-69**
DEVELOPMENT OF THE BAIT PRINCIPLE FOR BOLL WEEVIL CONTROL. IV. FIELD TESTS WITH A BAIT CONTAINING A FEEDING STIMULANT AND THE SPOOROZOANS GLUCEA GASTI AND MATTESIA GRANDIS.
R E McLaughlin T C Cleveland R J Daum M R Bell
J Invertebrate Pathol 13(3):429-441
May 1969 421 J826
Anthonomus grandis, Baits, Biological control (insects), Field studies, Glucea gasti, Insect diseases, Mattesia grandis, Microsporidia.
- 10069-69**
RADIATION SENSITIVITY OF TWELVE SPECIES OF ARTHROPODS.
E F Menhinick D A Crossley
Entomol Soc Amer Ann 62(4):711-717 REF
Jul 1969 420 EN82
Arthropoda, Blatta orientalis, Blattella germanica, Gamma rays, Insect physiology, Periplaneta americana, Radiation, Tenebrio molitor.
- 10070-69**
ERETMOCERUS CORNI HALD. (HYM., APHELINIDAE), A PARASITE OF SIPHONINUS PHILLYREAE HALID. (HOM., ALEYRODIDAE). (IT)
I Mentzelos
Entomophaga 12(4):351-353
1967 421 EN835
Aleyrodidae, Aphelinidae, Predaceous insects, Zoogeography, English abstract.
- 10071-69**
AGE-DISTRIBUTION AND ABUNDANCE IN POPULATIONS OF FLOUR BEETLES. I. EXPERIMENTAL STUDIES.
D B Mertz
Ecol Monogr 39(1,WINTER):1-31 REF
1969 410 EC72
Aging, Insect biology, Insect ecology, Population, Tribolium castaneum.
- 10072-69**
FIELD OBSERVATIONS ON PERIODICITY AND SITE PREFERENCE IN OVIPOSITION BY Aedes Aegypti (L.) AND RELATED MOSQUITOES (DIPTERA: CULICIDAE) IN KENYA.
G A H McClelland
Roy Entomol Soc London Proc Ser A Gen Entomol 43(10-12):147-154 REF
31 Dec 1968 420 L84PA
Aedes aegypti, Color, Insect behavior, Insect eggs, Oviposition.
- 10073-69**
STARVATION-INDUCED ACTIVITY IN COCKROACH MALPIGHIAN TUBULES.
J Meyers T Miller
Entomol Soc Amer Ann 62(4):725-729
Jul 1969 420 EN82
Insect physiology, Malpighian tubes, Periplaneta americana, Starvation.
- 10074-69**
COCKROACH HEART RESPONSE TO CARDIO-ACCELERATORS.
T Miller
Entomol Exp Appl 12(1):53-61 REF
1969 421 EN895
Dorsal vessel, Electrophysiology, Nervous system, Periplaneta americana.
- 10075-69**
ANATOMICAL STUDIES OF THE OVIPOSITIONAL SITE OF PLANT HOPPERS AND LEAF HOPPERS ON RICE.
B C Misra P Israel
Indian J Entomol 30(2):178
Jun 1968 420 IN23
Insect behavior, Nephrotettix, Nilaparvata lugens, Oviposition, Plant physiology, Rice.
- 10076-69**
A MODEL ACCOUNTING FOR SYMPATRY IN WATER MITES.
R Mitchell
Amer Natur 103(932,JUL-AUG):331-346
Aug 1969 470 AM36
Insect adaptation, Insect ecology, Mites, Parasitic insects, Population.
- 10077-69**
IMMUNE REACTION IN INSECTS. I. LYSOZYME AS THE FUNDAMENTAL ANTIBACTERIAL FACTOR IN THE HUMORAL PREVENTIVE MECHANISM OF THE INSECTS. (GE)
W Mohrig B Messner
Biol Zentralbl 87(4):439-470, REF
Jul 1968 442.8 B523
Bacteria, Bactericides, Blood, Enzymes, Experimental insects, Immunochimistry, Insect biochemistry, Muramidase, English and Russian summaries.
- 10078-69**
THE ABSORPTION OF P,P'-DDE BY LARVAE OF AGLAIS URTICAE (LEPIDOPTERA: NYMPHALIDAE).
F Moriarty
Entomol Exp Appl 12(1) 81-84
1969 421 EN895
Chlorinated hydrocarbons, Cuticle, Dichloro-2,2-bis(p-chlorophenyl) ethylene, 1,1-, Hemolymph, Insecticides, Larvae, Nymphalidae.
- 10079-69**
WATER UPTAKE AND EMBRYONIC DEVELOPMENT IN EGGS OF CHORTHIPPUS BRUNNEUS THUNBERG (SALTATORIA: ACRIDIDAE).
F Moriarty
J Exp Biol 50(2):327-333
Apr 1969 442.8 B77
Acrididae, Insect eggs, Insect physiology, Osmotic pressure, Water.
- 10080-69**
BIOLOGY AND DESCRIPTION OF IMMATURE STAGES OF ORTHACHETA HIRTIPES, A PREDATOR OF CORDILURA SPP.
S E Neff J B Wallace
Entomol Soc Amer Ann 62(4):785-790 REF
Jul 1969 420 EN82
Anthomyiidae, Insect behavior, Insect biology, Larvae, Predaceous insects, Pupae.
- 10081-69**
ENTOMOCOENOLOGICAL AND BIOLOGICAL STUDIES IN ROSA DAMASCENA MILL. PLANTATIONS. II. COLEOPTERA. (RUS)
V Nikolova
Bulgarska Akad Nauk Zool Inst Muz 12v 26:152-155
1968 410.9 B8721
Coleoptera, Insect nutrition, Insect taxonomy, Population, Rosa. Article in English and Russian.
- 10082-69**
NUTRITION OF XYLEBORUS FERRUGINEUS. I. ETHANOL IN DIETS AS A TUNNELING (FEEDING) STIMULANT.
D M Norris J M Baker
Entomol Soc Amer Ann 63(3):592-594
May 1969 420 EN82
Ethyl alcohol, Feeding, Insect behavior, Insect nutrition, Stimulants, Xyleborus ferrugineus.
When ethanol was added to artificial diets, female (fungus-free) X. ferrugineus (F.) (Coleoptera: Scolytidae) tunneled farther than in the absence of ethanol. On 1 diet, the beetles reproduced only when ethanol was added to stimulate more tunneling (feeding). Ethanol also stimulated beetle tunneling in a diet that was nutritionally inadequate for development of a complete parthenogenetic generation of fungus-free X. ferrugineus.
- 10083-69**
VITELLOGENIC BLOOD PROTEIN SYNTHESIS BY INSECT FAT BODY.
M L Pan W J Bell W H Telfer
Science 165(3891):393-394 REF
25 Jul 1969 470 SCI2
Antibodies, Blood proteins, Fat body, Hyalophora cecropia, Oogenesis, Periplaneta americana, Radioactive tracers, Tissue culture.
- 10084-69**
EFFECT OF DIFFERENT FOOD PLANTS ON THE LARVAL AND POST-LARVAL DEVELOPMENT ON DIACRISIA OBLIQUA WALKER.
N D Pandey D R Yadava T P S Teotia
Indian J Entomol 30(3):229-234
Sep 1968 420 IN23
Diacrisia obliqua, Food plants, Insect biology, Insect nutrition, Insect physiology, Larvae.
- 10085-69**
THE PREDATORY AND REPRODUCTIVE BEHAVIOUR OF RHINOCORIS BICOLOR AND R. TROPICUS (HEMIPTERA: REDUVIIDAE).
A H Parker
Entomol Exp Appl 12(1):107-117
1969 421 EN895
Insect behavior, Insect rearing, Predaceous insects, Reduviidae, Reproduction, Sex behavior.
- 10086-69**
THE ARTIFICIAL FEEDING OF PHOSPHAMIDON TO MYZUS PERSICAE: II. THE EFFECTS OF PHOSPHAMIDON ON LIQUID UPTAKE THROUGH A PARAFILM MEMBRANE.
W H Parry J B Ford
Entomol Exp Appl 12(1):1-18 REF
1969 421 EN895
Food habits, Insect behavior, Insect physiology, Myzus persicae, Phosphamidon, Toxicology.
- 10087-69**
NEW PARASITE RECORDS ON HYMENIA RECURVALIS (FABRICIUS) (LEPIDOPTERA: PYRALIDAE).
B Parshad R P Singh M I. Srivastava
Indian J Entomol 30(3):248
Sep 1968 420 IN23
Braconidae, Hymenia recurvalis, Natural control (insects), Parasitic insects.
- 10088-69**
NEW RECORDS OF PARASITES OF PLUTELLA MACULIPENNIS CURT. IN GUJARAT, INDIA.
V C Patel H K Patel
Indian J Entomol 30(1):86
Mar 1968 420 IN23
Parasitic insects, Plutella maculipennis, Surveys, Zoogeography.
- 10089-69**
COMMON INHIBITORY MOTORNEURONES IN INSECTS.
K G Pearson S J Bergman
J Exp Biol 50(2):445-471 REF
Apr 1969 442.8 B77

Electrophysiology, Insect physiology, *Locusta migratoria*, Muscles, Nervous system, *Periplaneta americana*, *Schistocerca gregaria*.

10090-69

A KILLING AGENT FOR USE IN LIGHT TRAPS.

D C F Perrott
New Zeal Entomol 4(2):37-38
Apr 1969 421 N48

Ceramhycidae, Dichlorvos, Insect collecting equipment, Light traps, Noctuidae.

10091-69

PUPARIAL DURATION IN GLOSSINA MOR-SITANS ORIENTALIS UNDER CONDITIONS OF CONSTANT TEMPERATURE.

R J Phelps P M Burrows
Entomol Exp Appl 12(1):33-43 REF
1969 421 EN895

Glossina morsitans, Metamorphosis, Pupae, Temperature.

10092-69

LETHAL TEMPERATURES FOR PUPARIA OF GLOSSINA MOR-SITANS ORIENTALIS.

R J Phelps P M Burrows
Entomol Exp Appl 12(1):23-32
1969 421 EN895

Glossina morsitans, Longevity, Pupae, Temperature.

10093-69

OENOCYTES: FORM AND FUNCTION.

B J R Philogenc
Entomol Soc Quebec Ann 12(1):3-13 REF
Jan 1967 420 EN822

Cuticle, Insect physiology, Molting (insects), Secretion.

10094-69

DIPLOGASTERID NEMATODES (DIPLOGASTERIDAE: RHABDITIDA) AND THEIR RELATIONSHIP TO INSECT DISEASE.

G O Poinar
J Invertebrate Pathol 13(3):447-454 REF
May 1969 421 J826

Diplogasteridae, *Galleria mellonella*, Insect diseases, Mortality, Reviews, Rhabditiis.

10095-69

A SIMPLE COLLECTOR FOR REMOVING SOIL INSECTS FROM AN OIL/WATER INTER-FACE.

R J B Power
New Zeal Entomol 4(2):3-5
Apr 1969 421 N48

Insect collecting equipment, Soil insects.

10096-69

INHIBITANCE OF DDT-RESISTANCE IN MUSCA DOMESTICA NEBULIFABR.

S J Rahman N H Khan
Indian J Entomol 30(1):69-76
Mar 1968 420 IN23

Chlorinated hydrocarbons, DDT, Inheritance, Insect rearing, Insecticide resistant insects, *Musca domestica*, Organophosphorus compounds.

10097-69

NEW RECORD OF CIANLIOPS FALLAX SCOTT. (HEMIPTERA: LYGAEIDAE) ON MOONG AND URID (PIIASEOLUS SPP.).

R R Rawat H R Sahu
Indian J Entomol 30(2):179
Jun 1968 420 IN23

Beans, Insect morphology, Insect outbreaks, Lygaeidae.

10098-69

STUDIES ON PHOSPHOHEXOSEISOMERASE (D-GLUCOSE-6-PHOSPHATE KETOL ISOMERASE) FROM THE INDIAN HONEYBEE, APIS INDICA FABRICIUS.

S Ray N C Pant K N Mehrotra
Indian J Entomol 30(1):37-44 REF
Mar 1968 420 IN23

Apis indica, Enzymes, Insect biochemistry, Insect physiology, Isomerase.

10099-69

METHIOD FOR REPELLING BEES. PATENT 3,456,056.

J J Reich F P Reich
Us Patent Office Offic Gaz 864(3):968
15 Jul 1969 156.65 OF2

Acids, Bees, Insect repellents, Organic compounds, Patents.

10100-69

DAMAGE TO TESTES AND RECOVERY OF FERTILITY IN BOLL WEEVILS FED CHEMOSTERILANTS.

L H Reinecke W Klassen J F Norland
Entomol Soc Amer Ann 63(3):511-525 REF
May 1969 420 EN82

Anthonomus grandis, Chemosterilants, Fertility, Insect behavior, Insect histology, Sex behavior, Testes.

10101-69

MARKING AND RECAPTURE OF CALIFOR-NIA RED SCALE FOR FIELD STUDIES.

R E Rice D S Moreno
Entomol Soc Amer Ann 63(3):558-560
May 1969 420 EN82

Aonidiella aurantii, Insect traps, Methodology, Paints.

10102-69

COMPARISON OF EFFECTS OF IRRADIATION ON THE PRIMARY SPERMATOGENIA AND MATURE SPERM OF THREE SPECIES OF DIP-TERA.

J G Riemann B J Thorson
Entomol Soc Amer Ann 63(3):613-617 REF
May 1969 420 EN82

Cochliomyia macellaria, Insect physiology, *Musca domestica*, *Phormia regina*, Spermatogenesis, X-rays.

10103-69

THE DEFENSIVE BEHAVIOUR OF THE STICK INSECT ONCOTOPHASMA MARTINI (GRIF-FINI) (ORTHOPTERA: PHASMATIDAE).

M H Robinson
Roy Entomol Soc London Proc Ser A Gen Entomol 43(10-12):183-187 REF
31 Dec 1968 420 L84PA

Insect behavior, Insect morphology, Insect protective devices, Phasmatidae.

10104-69

STEROL AND WATER-SOLUBLE REQUIRE-MENTS FOR LARVAE OF THE RED-BANDED LEAF ROLLER, ARGYROTAENIA VELU-TINANA.

G C Rock
Entomol Soc Amer Ann 63(3):611-613
May 1969 420 EN82

Argyrotaenia velutinana, Insect nutrition, Larvae, Sterols, Vitamins.

10105-69

SEX ATTRACTANT OF FEMALE DERMESTID BEETLE TROGODERMA INCLUSUM I.E CONTE.

J O Rodin R M Silverstein W E Burkholder J E Gorman
Science 165(3896):904-906
29 Aug 1969 470 SCI2

Attractants, Biological assay, Chemical analysis, Insect biochemistry, Pheromones, *Trogoderma in-c lusum*.

10106-69

ISOLATION AND BIOLOGICAL PROPERTIES OF THE JUVENILE HORMONE.

H Roller J S Bjerke L M Holthaus D W Norgard W H McShan
J Insect Physiol 15(3):379-389
Mar 1969 421 J825

Ecdysone, *Galleria mellonella*, Hormones, *Hyalophora cecropia*, Insect biochemistry, Insect histology, *Periplaneta americana*, *Tenebrio molitor*.

10107-69

ANATOMICAL INDICATORS FOR ASSESSING AGE OF MOSQUITOES: CHANGES IN OVARI-AN FOLLI-CLES.

B Rosay
Entomol Soc Amer Ann 63(3):605-611 REF
May 1969 420 EN82

Aedes nigromaculis, Aging, *Culex pipiens quinquefasciatus*, Insect physiology, Ovaries.

10108-69

KCL-INDUCED SPREADING DEPRESSION AND VENTILATION IN THE COCKROACH.

H D Rounds
Compar Biochem Physiol 24(2):653-655 REF
Feb 1968 444.8 C73

Insect physiology, Nerves, *Periplaneta americana*, Potassium chloride, Ventilation.

10109-69

BIOLOGICAL NOTES ON THE BEE TETRALONIA MINUTA AND ITS CLEP-TOPARASITE, MORGANIA HISTRIO TRANS-VAALENSIS (HYMENOPTERA: ANTHOPHORIDAE).

J G Rozen
Entomol Soc Wash Proc 71(1):102-107
Mar 1969 420 W27

Anthophorinae, Insect biology, *Morgania histrio transvaalensis*, Parasitic insects, *Tetralonia minuta*.

10110-69

FLEA BEETLES PHYLLOTRETA CRU-CIFERAEE GOEZE. (COLEOPTERA, CHRYSOMELIDAE) A NEW PEST OF STOCK FLOWER MATHIOLA SP. IN RAJASTHAN.

J N Sachan
Indian J Entomol 30(2):179
Jun 1968 420 IN23

Chrysomelidae, Insect outbreaks, *Mathiola*, Phyl-lotreta.

10111-69

ON THE EXPLOSION CHEMISTRY OF THE BOMBARDIER BEETLE. VI. ON THE CHEMIS-TRY OF THE SMALLEST BOMBARDIER BEE-TLE PAUSSUS FAVIERI. XLIII COMMUNICA-TION ON ARTHROPOD PROTECTIVE SUB-STANCE. (GE)

H Schildknecht K Koob
Naturwissenschaften 56(6):328
Jun 1969 474 N213

Carabidae, Insect biochemistry, Insect protective devices, Secretion.

10112-69

A NEW RECORD, DORYLUS LABIATUS SHUCK. (HYMENOPTERA: FORMICIDAE) AS A PREDATOR OF MICROTERMES MYCOPHAGUS DESN. (ISOPTERA: TER-MITIDAE).

S K Sharma O P Bohra
Indian J Entomol 30(3):243
Sep 1968 420 IN23

Formicidae, Natural control (insects), Predaceous insects, Termites.

10113-69

RETENTION OF INTRA-CELLULAR POTASSI-UM BY THE HOUSEFLY.

H H Shatoury
Entomol Exp Appl 12(1):19-22
1969 421 EN895

Histochemistry, Insect biochemistry, Insect physiology, *Musca domestica*, Potassium.

10114-69

SELECTION FOR LINDANE RESISTANCE IN DERMESTES MACULATUS DE GEER (COLEOPTERA, DERMESTIDAE).

D D Shaw C J Lloyd
J Stored Prod Res 5(1):69-72 REF
May 1969 421 J829

Chlorinated hydrocarbons, *Dermestes maculatus*, Insect biology, Insect rearing, Insecticide resistant insects, Insecticides, Lindane.

- 10115-69**
NOTES ON THE MALE GERM CELLS OF A BEETLE, *LEPTINOTARSA DECEMLINEATA*.
J W Shay E E Simmons W J Dohson
Entomol News (philadelphia) 80(7):185-191 REF
Jul 1969 421 EN88
Electron microscopy, Insect morphology, *Leptinotarsa decemlineata*, Reproductive organs, Spermatocytes, Spermatogenesis.
- 10116-69**
A SIMPLE APPARATUS FOR DIPPING TREATMENT OF INSECTS FOR VARYING PERIODS OF TIME.
O P Singh T P S Teotia
Indian J Entomol 30(3):251-253
Sep 1968 420 IN23
Chemosterilants, Dipping, Insect rearing equipment, Methodology.
- 10117-69**
OBSERVATIONS ON THE BIOLOGY OF *IATHIROMEROIDES* SP. (TRICHOGRAMMATIDAE: HYMENOPTERA) EGG PARASITE OF THE LEAF ROLLING WEEVIL, *APODERUS SISSU* MARSHALL (CURCULIONIDAE: COLEOPTERA) WITH NOTES ON THE HOST WEEVIL.
R P Singh B Parshad
Indian J Entomol 30(3):192-196
Sep 1968 420 IN23
Curculionidae, Insect biology, Parasitic insects, Trichogrammatidae.
- 10118-69**
NEW APPROACHES TO THE CONTROL OF PEST ORGANISMS.
C N Smith
Amer Soc Agron ASA Spec Publ 8:145-150
Nov 1966 64.9 AM3
Attractants, Chemosterilants, Insect behavior, Insect control, Insect rearing, Sterilization.
- 10119-69**
OVIPOSITION AND HATCHING IN TWO SPECIES OF TICKS IN RELATION TO MOISTURE DEFICIT.
D E Sonenshine J A Tigner
Entomol Soc Amer Ann 63(3):628-640 REF
May 1969 420 EN82
Amblyomma americanum, *Dermacentor variabilis*, Humidity, Insect eggs, Insect physiology, Mortality, Oviposition.
- 10120-69**
NEMATODE PARASITES OF THE FACE FLY AND THE ONION MAGGOT IN FRANCE AND DENMARK.
J G Stoffolano
J Econ Entomol 62(4):792-795 REF
15 Aug 1969 421 J822
Biological control (insects), Diptera, *Heterotylenchus aherrans*, *Heterotylenchus autumnalis*, *Hylemya antiqua*, Insect diseases, *Musca autumnalis*, Nematodes.
- 10121-69**
THE EFFECTS OF THE REMOVAL OF THE PARASITE *XENOS* (INSECTA STREPSIPTERA) ON THE PROTOCEREBRAL NEUROSECRETION OF ITS HOST *POLISTES* (HYM. VESPIDAE). (FR)
A Strambi
Acad Sci Compt Rend Ser D Sci Nat 264(23, 1ST SEMESTER):2646-2648
05 Jun 1967 505 P21
Insect physiology, *Polistes*, *Stylopidae*.
- 10122-69**
INHIBITION OF THE DEFENSE REACTION OF *DROSOPHILA MELANOGASTER* PARASITIZED SIMULTANEOUSLY BY THE WASPS *PSEUDEUCOILA BOCHEI* AND *PSEUDEUCOILA MELLIPES*.
F A Streams L Greenberg
J Invertebrate Pathol 13(3):371-377 REF
May 1969 421 J826
Cynipidae, *Drosophila melanogaster*, Insect behavior, Insect physiology, Insect protective devices, *Pseudeucoila bochei*, *Pseudeucoila mellipes*.
- 10123-69**
SEASONAL EVOLUTION OF THE HONEY BEE THERMOGENESIS, OXYGEN CONSUMPTION OF THE ISOLATED BEE AT FIVE DIFFERENT TEMPERATURES IN SUMMER AND IN WINTER. (FR)
T Stussi M L Harmelin
Paris Soc Biol Compt Rend 160(7):1503-1506
14 Jan 1967 442.9 P21
Apis mellifera, Insect evolution, Insect physiology, Oxygen, Seasonal variation, Temperature.
- 10124-69**
THE EFFECT OF *PERILLUS BIOCULATUS* (FABR.) (HET., PENTATOMIDAE) ON THE POPULATION DYNAMICS OF THE POTATO BEETLE. (GE)
A Szmidi W Wegorek
Entomophaga 12(4):403-408
1967 421 EN835
Biological control (insects), *Leptinotarsa decemlineata*, *Perillus bioculatus*, Population, Predaceous insects. English abstract.
- 10125-69**
VARIABILITY IN INSECTICIDE TOLERANCE OF EIGHTEEN HONEY-BEE COLONIES.
A S Tahori Z Sohel M Soller
Entomol Exp Appl 12(1):85-98 REF
1969 421 EN895
Apis mellifera, Chlorinated hydrocarbons, DDT, Endrin, Insecticides, Organophosphorus compounds, Ronnel, Toxicology, Trichlorfon.
- 10126-69**
A STRAIN OF NUCLEAR-POLYHEDROSIS VIRUS CAUSING EXTENSIVE CELLULAR HYPERTROPHY.
Y Tanada T Hukuhara G Y Chang
J Invertebrate Pathol 13(3):394-409 REF
May 1969 421 J826
Hypertrophy, Insect diseases, Polyhedroses, *Pseudaleitia unipuncta*.
- 10127-69**
ON THE OVIPOSITION BEHAVIOUR AND DEVELOPMENT OF *SITOPHILUS ORYZAE* LINN. IN VARIOUS NATURAL FOODS.
T P S Teotia V S Singh
Indian J Entomol 30(2):119-124 REF
Jun 1968 420 IN23
Insect behavior, Insect nutrition, Insect physiology, Oviposition, *Sitophilus oryzae*.
- 10128-69**
TOXICITY OF SELECTED ACARICIDES TO SUSCEPTIBLE AND RESISTANT STRAINS OF *TETRANYCHUS URTICAE* KOCH.
G F Thiele R A Harrison
New Zealand J Sci 12(2):380-394 REF
Jun 1969 514 N482
Acaricides, Binapacryl, Carhamates, Carbonates, Dicofol, Insecticide resistant insects, Organophosphorus compounds, *Tetranychus urticae*, Toxicology.
- 10129-69**
EXPERIMENTS ON LARVAL DIAPAUSE IN THE CARABID *PTEROSTICHUS VULGARIS* L. (GE)
H U Thiele I Krehan
Entomol Exp Appl 12(1):67-73
1969 421 EN895
Carabidae, Insect physiology, Larvae, Light, Metamorphosis, Temperature. English abstract.
- 10130-69**
EFFECTS OF EXOGENOUS MOULTING HORMONES ON PUPARIUM FORMATION IN *CALIPHORA*.
J A Thomson D H S Horn
Australian J Biol Sci 22(3):761-765 REF
Jun 1969 442.8 AU72
Calliphora, Insect hormones, Insect physiology, Molting (insects), Pupae.
- 10131-69**
LABORATORY EVALUATION OF INSECTICIDES AGAINST WHITE-FRINGED WEEVIL (*GRAPHOGNATHUS LEUCOLOMA* (BOJEMAN)) (COLEOPTERA: CURCULIONIDAE)) LARVAE.
D H Todd
New Zeal J Agr Res 11(4):903-910 REF
Nov 1968 23 N4892
Chemical control (insects), Chlorinated hydrocarbons, Curculionidae, Dieldrin, Diethyl O-(2-quinoxaliny) phosphorothioate, O,O-, Diethyl O-2-pyrazinyl phosphorothioate, O,O-, Ethyl S-phenyl ethylphosphonodithioate, O-, *Graphognathus leucoloma*, Heptachlor, Insect pests, Insecticide trials, Insecticides, Larvae, Lindane, Soils.
- 10132-69**
A RECORD OF DIURNAL FLIGHT IN *DYTISCUS*.
R W J Uffen
S London Entomol Natur Hist Soc Proc Trans 7(6,PT 1):14
Mar 1967 420 SO8
Dytiscidae, Insect behavior, Insect flight.
- 10133-69**
FUSEAUX VIRUS OF A SOUTH AMERICAN SCARABAEIDAE. (FR)
C Vago A Amargier B Hurpin G Mcynadier J L Duthoit
Entomophaga 13(4):373-376
1968 421 EN835
Insect diseases, Scarabaeidae. English abstract.
- 10134-69**
THE HISTOPATHOLOGY OF A NUCLEAR POLYHEDROSIS IN LARVAE OF THE CABBAGE LOOPER, *TRICHOPLUSIA NI*, RELATED TO SYMPTOMS AND MORTALITY.
P V Vail I M Hall
J Invertebrate Pathol 13(2):188-198
Mar 1969 421 J826
Insect diseases, Larvae, Mortality, Nuclear polyhedrosis virus, *Trichoplusia ni*.
- 10135-69**
A SUPPLEMENTARY LIST OF THE HOST-PLANTS OF LAC INSECTS.
R K Varshney T P S Teotia
Bombay Natur Hist Soc J 64(3):488-511 REF
Dec 1967 513 B63
Catalogs, *Lacciferidae*, Plants, Zoogeography.
- 10136-69**
SENSITIVITY TO GAMMA RADIATION OF *TRIBOLIUM CONFUSUM* EGGS AT VARIOUS DEVELOPMENTAL STAGES.
A Vereecke C Perelents
Entomol Exp Appl 12(1):62-66
1969 421 EN895
Gamma rays, Insect eggs, *Tribolium confusum*.
- 10137-69**
BEETLE.
E F Vevei
Pesticides 1(10):22-24
Jun 1968 SB951.P43
Chemical control (insects), Chlorinated hydrocarbons, Coleoptera, Formulations, Insect identification, Insecticides, Organophosphorus compounds.
- 10138-69**
IDENTIFICATION OF HYDROCARBONS FROM *NOVOMESSOR COCKCRELLI*.
K Vick W A Drew D J McGurk E J Eisenbraun G R Waller
Entomol Soc Amer Ann 62(4):723-725
Jul 1969 420 EN82
Hydrocarbons, Insect biochemistry, Methodology, *Novomessor*.
Procedures and evidence are presented regarding the identification of hydrocarbons found to be present in the gasters of *Novomessor cockcrelli* (Andre) (Hymenoptera: Formicidae). Tridecane,

ENTOMOLOGY

10139-69

n-tetradecane, n-pentadecane, n-hexadecane, n-heptadecane, n-octadecane, and n-nonadecane were identified.

10139-69

REFINED DEFENSIVE MECHANISMS IN CHRYSOMELA SCRIPTA.

J B Wallace M S Blum

Entomol Soc Amer Ann 63(3):503-506

May 1969 420 EN82

Chemical analysis, Chrysomelidae, Insect biochemistry, Insect protective devices, Larvae, Pupae, Salicylaldehyde.

10140-69

NOTES ON THE NATURAL HISTORY OF TENEBRIONIDAE (COLEOPTERA) IN CANTERBURY.

J C Watt

New Zeal Entomol 4(2):47-49

Apr 1969 421 N48

Insect biology, Tenebrionidae.

10141-69

CONTINUOUS LABORATORY CULTURE OF THE LOCUST BORER, MEGACYLLENE ROBINIAE.

E H Wollerman C Adams G C Heaton

Entomol Soc Amer Ann 63(3):647-649

May 1969 420 EN82

Insect biology, Insect rearing, Megacyllene robiniae, Methodology.

10142-69

SPECTRAL EFFICIENCY AS FUNCTION OF LATENCY IN THE VISUAL MECHANISM OF INSECT (TENEBRIO MOLITOR L.).

U Yinon

Experientia 25(7):711

15 Jul 1969 475 EX7

Insect physiology, Light, Tenebrio molitor, Vision.

10143-69

SEXUAL DIMORPHISM IN NEUTRAL LIPID METABOLISM IN THE INDIAN-MEAL MOTH, PLODIA INTERPUNCTELLA (HUBNER).

W J Yurkiewicz

Ohio J Sci 69(2):70-73 REF

Mar 1969 410 OH3

Glycerides, Insect biochemistry, Insect metabolism, Insect physiology, Lipids, Plodia interpunctella.

Males of last instar Indian-meal moths contain slightly more neutral lipid per gram live weight than do females. The qualitative composition of the various neutral fractions is similar in both sexes. During the pupal period, the female catabolizes considerably more triglyceride than the male, resulting in a much lower triglyceride content in the newly emerged adult female. There is an almost equal rate of lipid utilization in both sexes during the first three days of adult life.

10144-69

ETOLOGY AS THE DETERMINING FACTOR OF THE NUMERICAL DISTRIBUTION OF THE SPECIES IN THE FAUNA. (IT)

E Zavattari

Aevad Naz Ital Entomol Atti 8:28-40

1960 420 AC2

Insect biology, Insect ecology, Insect morphology, Parasitic insects, Population, Zoogeography.

10145-69

THE PARASITISM OF GAMASID MITES (GAMASOIDEA) ON BIRDS. (RUS)

A A Zemskaia

Zool Zhur 48(4):512-517

Apr 1969 410 R92

Birds, Insect ecology, Mites, Parasitic insects. English abstract.

BIBLIOGRAPHY**GENETICS**

10146-69

EVOLUTION OF FITNESS. IV. GENETIC EVOLUTION OF INTER-SPECIFIC COMPETITIVE ABILITY IN DROSOPHILA.

F J Ayala

Genet Soc Amer Rec 61(3):737-747 REF

Mar 1969 442.9 G28

Drosophila, Insect evolution, Insect genetics, Population.

10147-69

ETHYL METHANESULFONATE (EMS) INDUCED MUTATIONS IN DROSOPHILA MELANOGASTER.

J B Bishop W R Lee

Genetics 61(2,PT 2,SUPPL):S4-S5

1969 442.8 G28

Drosophila melanogaster, Ethyl methanesulfonate, Insect genetics, Insect mutation.

10148-69

INTERACTION BETWEEN CHRONIC IRRADIATION, VIBRATION, AND CENTRIFUGATION IN THE PRODUCTION OF GENETIC EFFECTS IN DROSOPHILA.

L S Browning

Genetics 61(2,PT2,SUPPL):S7-S8

1969 442.8 G28

Centrifugation, Chromosomes, Drosophila, Gamma rays, Insect genetics, Vibration.

10149-69

ON THE DETERMINATION OF INSECT AND MITE RESISTANCE TO PESTICIDES. THE INFLUENCE OF THESE PRODUCTS IN SUBLETHAL DOSES ON ANIMALS AND IN THE TROPHIC EFFECT FOLLOWING BIOCHEMICAL REPERCUSSIONS ON PLANTS. (FR)

F Chaboussou

Rev Zool Agr Appl 67(10-12, 4TH

TRIMESTER):105-138 REF

1968 410.9 SO12

Chlorinated hydrocarbons, DDT, Insect genetics, Insect nutrition, Insecticide resistant insects, Lindane, Organophosphorus compounds, Parathion, Plants, Population.

10150-69

HOMOLOGOUS LINES OF CHROMOSOME POLYMORPHISM IN THE NATURAL POPULATIONS OF ADIRONDACK BLACK FLY (DIPTERA, SIMULIDAE). (RUS)

L A Chubareva N A Petrova

Tsitologiya 10(10):1248-1256 REF

Oct 1968 442.8 T78

Chromosomes, Genetics, Insect populations, Polymorphism, Simuliidae. English summary.

10151-69

MEIOSIS IN THE GRASSHOPPER: CHIASMATA FREQUENCY AFTER ELEVATED TEMPERATURE AND X-RAYS.

K Church D E Wimber

Can J Genet Cytol 11(1):209-216 REF

Mar 1969 443.8C16

Autoradiography, Chromosomes, Insect genetics, Meiosis, Melanoplus, Temperature, X-rays.

10152-69

A THIRD LOCUS (IPO) AFFECTING PYRIDOXAL OXIDASE IN DROSOPHILA MELANOGASTER.

J F Collins E Glassman

Genet Soc Amer Rec 61(4):833-839 REF

Apr 1969 442.9 G28

Chromosomes, Drosophila melanogaster, Enzymes, Insect genetics.

10153-69

CHROMOSOMAL POLYMORPHISM AND GENETIC LOAD IN DROSOPHILA PSEUDOOSCURA.

D W Crumpacker V M Salceda

Genet Soc Amer Rec 61(4):859-873 REF

Apr 1969 442.9 G28

Drosophila pseudoobscura, Genes, Insect genetics, Polymorphism.

10154-69

CHROMOSOME BEHAVIOR UNDER THE INFLUENCE OF CLARET-NONDISJUNCTIONAL IN DROSOPHILA MELANOGASTER.

D G Davis

Genet Soc Amer Rec 61(3):577-594 REF

Mar 1969 442.9 G28

Chromosomes, Cytogenetics, Drosophila melanogaster, Insect genetics.

10155-69

SEGREGATION DISTORTER IN D. MELANOGASTER MALES: AN EFFECT OF FEMALE GENOTYPE ON THE SEGREGATION RATIO.

R E Denell

Genetics 61(2,PT 2,SUPPL):S13

1969 442.8 G28

Chromosomes, Drosophila melanogaster, Insect genetics, Sex.

10156-69

POPULATION GENETICS IN THE AMERICAN TROPICS. IV. TEMPORAL CHANGES EFFECTED IN NATURAL POPULATIONS OF DROSOPHILA MELANOGASTER FROM COLOMBIA.

H F Hoenigsberg L A Granobles L E Castro

Genetica 40(2):201-215 REF

1969 442.8 G282

Drosophila melanogaster, Insect genetics, Population, Seasonal variation.

Samples of Drosophila melanogaster were taken each month over several years from a locality in Fusagasuga, Columbia. Temporal shifts in gene frequencies were found. These reflect important adaptive changes in the populations, and the kind of gene pool modifications that are necessary for the better occupation of local temporal niches.

10157-69

AUTOSOMAL FRAGMENTATIONS AND FUSIONS IN ODONATA AND THEIR EVOLUTIONARY IMPLICATIONS.

B Kianta

Genetica 40(2):158-180 REF

1969 442.8 G282

Chromosomes, Cytogenetics, Insect evolution, Odonata.

10158-69

CHANGES IN CHROMOSOMES INDUCED BY DIFFERENT DNA VIRUS IN CELLS OF RHYNCHOSCIARA ANGELAE.

C Pavan A B da Conha

Genetics 61(2,PT 2,SUPPL):S46-S47

1969 442.8 G28

Cells, Chromosomes, Cytogenetics, Deoxyribonucleic acid, Insect diseases, Rhynchosciara, Viruses.

10159-69

A MOLECULAR APPROACH TO THE STUDY OF GENIC HETEROZYGOSITY IN NATURAL POPULATIONS. IV. PATTERNS OF GENIC VARIATION IN CENTRAL, MARGINAL AND ISOLATED POPULATIONS OF DROSOPHILA PSEUDOOSCURA.

S Prakash R C Lewontin J L Hubby

Genet Soc Amer Rec 61(4):841-858 REF

Apr 1969 442.9 G28

Biochemistry, Drosophila pseudoobscura, Insect genetics, Population, Proteins.

10160-69

POSITION EFFECT ON DNA TRANSCRIPTION AND REPLICATION.

P A Roberts

Genetics 61(2,PT 2,SUPPL):S50

1969 442.8 G28

Chromosomes, Deoxyribonucleic acid, Drosophila melanogaster, Insect genetics, Lethal factor, Pupae, Vibration.

10161-69

EXPERIMENTAL EVIDENCE FOR FACTORS AFFECTING THE RELATIVE EFFICIENCY OF INDIRECT TO DIRECT SELECTION IN TRIBOLIUM CASTANEUM.

E Scheinberg

Can J Genet Cytol 11(1):86-96 REF

Mar 1969 443.8 C16

Insect genetics, Insect rearing, Statistical analysis, *Tribolium castaneum*.

10162-69

THE ROLE OF SEXUALITY IN DOSAGE COMPENSATION IN DROSOPHILA.

P D Smith J C Lucchesi

Genet Soc Amer Rec 61(3):607-618 REF

Mar 1969 442.9 G28

Chromosomes, *Drosophila*, Insect genetics, Sex.

10163-69

BIOCHEMICAL GENETICS OF INSECTICIDE RESISTANCE IN THE HOUSEFLY.

M Tsukamoto

Residue Rev 25:289-314 REF

1969 389.9 R314

Genes, Insect biochemistry, Insect genetics, Insecticide resistant insects, *Musca domestica*.

MEDICAL ENTOMOLOGY

10164-69

A NEW SPECIES OF AEDES (STEGOMYIA) FROM THAILAND (DIPTERA: CULICIDAE).

Y-M Huang

Entomol Soc Wash Proc 71(2):234-239

Jun 1969 420 W27

Aedes scutoi, Culicidae, Insect biology, Insect morphology, Insect physiology, Insect taxonomy, Insect vectors, Larvae, Pupae, Zoogeography.

10165-69

RESEARCH ON THE SYNANTROPIC FLIES IN THE SOFIA AREA. IN REGARD TO THEIR EPIDEMIOLOGICAL IMPORTANCE. (RUS)

V Lavciev E Nestorova

Bulgarska Akad Nauk Zool Inst Muz Izv 23:5-31 REF

1967 410.9 B8721

Diptera, Human diseases, Insect vectors. French abstract.

10166-69

ALLERGIC RESPONSES TO INSECTS.

S Shulman

Annu Rev Entomol 12:323-346 REF

1967 421 AN72

Allergies, Bibliography, Chemistry, Human diseases, Insects, Reviews.

CROP PROTECTION

10167-69

PESTICIDES AND PLOWS.

B D Ball

Sugar Beet J 32(3,SPRING):16-17

1969 66.8 SU38

Pesticides, Plant pest control, Plows.

10168-69

IN YOUR GARDEN - WEEDS: ROBBERS, BUT NOT ALWAYS BAD.

Metabele

Rhodesian Farmer 39(11):31

26 Jul 1968 24 R347

Economic plants, Gardens, Mulches, Plant nutrition, Plant protection, Strawberries, Weeds.

10169-69

CHEMICAL PREPARATIONS IN THE SERVICES OF AGRICULTURE AND FORESTRY. (SE)

A Srekajs S Pamie V Mance

3-487

1967 S585.S6

Agriculture, Forestry, Pesticides, Plant pest control.

DISEASES

10170-69

FUNGICIDAL CONTROL OF RICE DISEASES.

D V W Abeygunawardena

Trop Agr & Pradeniya & 74(1-2, JAN-JUN):15-26 REF

Jun 1968 26 T751

Antibiotics, Blast, Chemical control (plant diseases), Fungicides, Mercury compounds, Pellicularia, Plant diseases, Rice, Seed-borne plant diseases, *Xanthomonas oryzae*.

10171-69

CONTROL OF BARLEY LOOSE SMUT IN WISCONSIN IN 1966 AND 1967.

R W Ahrens D C Army G L Worf L J Wrage

U S Agr Res Serv CR (42):15-17

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungicides, Fungus diseases (plants), Loose smut, *Ustilago nuda*.

10172-69

DESIGNATION USED, CHEMICAL NAME, SOURCE, AND TRADEMARK NAME OF EACH FUNGICIDE MENTIONED IN THIS COMPILATION.

Anonymous

U S Agr Res Serv CR (42):34-36

May 1968 aSB608.G6M6

Fungicides, Tables (data), Trademarks.

10173-69

EFFECT OF CL-50, A NEW SYNTHETIC FUNGICIDE ON CERTAIN FUNGI.

S H Ashrafi G M Ali S Hafiz R I Zuberi

Pakistan J Sci Indus Res 11(1):46-51

Jan 1968 475 P174

Alternaria solani, *Aspergillus niger*, Chemical control (plant diseases), Copper, Fungicides, Fungus cultures, *Fusarium*, *Helminthosporium hawaiiense*, Zinc.

10174-69

CHEMICAL CONTROL OF LOOSE SMUT IN BARLEY IN MINNESOTA.

E E Bantari

U S Agr Res Serv CR (42):19-20

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Loose smut, Systemic fungicides, *Ustilago nuda*.

10175-69

NUTRITION OF THE SILVER-LEAF PATHOGEN STEREOUM PURPUREUM (PERS.) FRI.

D J Beever

New Zealand J Sci 12(2):268-275 REF

Jun 1969 514 N482

Carbon, Fungus diseases (plants), Plant diseases, Plant nutrition, *Stereum purpureum*, Thiamine.

10176-69

INTERACTION BETWEEN CHILLI MOSAIC AND POWDERY MILDEW IN TOBACCO.

K C Chadha S P Raychaudhuri

Indian Phytopathol 21(2):171-175

Jun 1968 464.8 IN2

Chilis, Fungus diseases (plants), Mosaic, Plant diseases, Powdery mildew, Tobacco, Virus diseases (plants).

10177-69

A LEAF SPOT DISEASE OF CYAMOPSIS TETRAGONOLOBA CAUSED BY CURVULARIA LUNATA IN INDIA.

J N Chand P S Verma

Indian Phytopathol 21(2):239-240

Jun 1968 464.8 IN2

Curvularia, *Cyamopsis tetragonoloba*, Fungus diseases (plants), Leaf spot.

10178-69

POST-INFECTION CHANGES IN THE SUGAR CONTENT OF LEAF-SPOT INFECTED BARLEY.

R Dayal M M Joshi

Indian Phytopathol 21(2):221-222

Jun 1968 464.8 IN2

Barley, Fungus diseases (plants), *Helminthosporium sativum*, Leaf spot, Plant biochemistry, Plant diseases, Sugars.

10179-69

CHEMOTHERAPY OF LOOSE SMUT OF BARLEY IN CANADA.

L V Edgington Ontario Guelph Univ.

U S Agr Res Serv CR (42):20-21

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Drug therapy, Fungicides, Fungus diseases (plants), Loose smut, Seed treatment.

10180-69

STUDIES ON THE INFECTION OF CUCUMBER MOSAIC VIRUS. V. THE OBSERVATION OF EPIDERMAL CELL IN THE LOCAL LESION.

Y Ehara T Misawa

Tohoku J Agr Res 19(3):166-172

Oct 1968 22.5 T574

Cucumber mosaic virus, Necrosis, Plant histology, Plant injuries, Virus diseases (plants).

10181-69

METHODS OF DETERMINATION OF THE SYSTEMIC AND FUNGICIDAL PROPERTIES OF CHEMICALS APPLIED TO PLANTS WITH EMPHASIS ON CONTROL OF VERTICILLIUM WILT WITH THIABENDAZOLE AND BENLATE.

D C Erwin

World Rev Pest Cont 8(1,SPRING):6-22 REF

1969 79.8 W89

Benomyl, Biological assay, Chemical structure, Cotton, Fungus diseases (plants), Methodology, Systemic fungicides, Thiabenzolyl-benzimidazole, 2-(4-, *Verticillium*.

10182-69

LIST OF PUBLICATIONS ON FUNGUS AND INSECT DEFECTS IN FOREST PRODUCTS.

(059):34P REF

Oct 1967 aZ5354.P2U5

Bibliography, Chemical control (plant diseases), Fungus diseases (plants), Insect pests.

10183-69

INFLUENCE OF LIGHT ON SPORULATION BY *HELMINTHOSPORIUM STENOSPILUM*.

T E Freeman H H Luke

Phytopathology 59(3):271-273

Mar 1969 464.8 P56

Cynodon dactylon, *Helminthosporium stenospilum*, Light, Sporulation.

10184-69

IR-2, A GERM PLASM BANK OF VIRUS-FREE FRUIT TREE CLONES.

P R Fridlund

Hortscience 3(4, WINTER):227-229

1968 SB1.H6

Crop varieties, Fruit, Virus diseases (plants).

10185-69

FREEING ALFALFA CLONES FROM ALFALFA MOSAIC VIRUS BY HEAT TREATMENT.

F I Froshesier

Phytopathology 59(3):391-392 REF

Mar 1969 464.8 P56

Alfalfa, Heat treatment, Mosaic (alfalfa), Viruses.

10186-69

VERTICILLIUM WILT OF TOBACCO. VI. THE INFLUENCE OF ROOTS AND STEMS ON VERTICILLIUM WILT SYMPTOMS IN TOBACCO.

L N Gibbins D S C Wright

New Zeal J Agr Res 11(4):789-796 REF

Nov 1968 23 N4892

10187-69

Fungus diseases (plants), Plant disease resistance, Plant diseases, Plant grafting, Roots, Stems, Tobacco, Verticillium dahliae, Wilt.

10187-69

A NEW TOMATO VIRUS FOUND IN THE ESTONIAN SSR (ASPERMY-VIRUS). (RUS)

M Goldin S Villemson

Akad Nauk Est Ssr Izv Ser Biol 16(3):241-246

1967 442.9 AK18

Aspermy, Tomatoes, Virus diseases (plants), English and Estonian abstracts.

10188-69

RHIZOCTONIA LEAF ROT OF COLOCASIA IN INDIA.

R K Grover R D Prasher

China Plant Protect Bull 16(1):6-7

Feb 1968 464.9 C47

Dasheen, Fungus diseases (plants), Mercury chloride, Potassium permanganate, Rhizoctonia, Rot.

10189-69

A SYSTEMIC OXATHIIN FUNGICIDE TO CONTROL LOOSE SMUTS, COVERING SMUTS, SEED ROTS, AND SEEDLING BLIGHTS OF WHEAT, BARLEY, OATS, AND SORGHUM.

E D Hansing

U S Agr Res Serv CR (42):11-15

May 1968 aSB608.G6M6

Barley, Blight, Chemical control (plant diseases), Covered smut, Fungus diseases (plants), Loose smut, Oats, Oxathiins, Rot, Sorghum, Systemic fungicides, Wheat.

10190-69

FUNGICIDAL COMPOSITION CONTAINING ZINC DITHIOCARBAZATE. PATENT 3,458,638.

R Hatta J Kinugawa H Yamamoto I Sumina B

Tamura S Suzuki

Us Patent Office Offic Gaz 864(5):1646

29 Jul 1969 156.65 OF2

Fungicides, Patents, Zinc dithiocarbamate.

10191-69

EFFECT OF CHEMICAL TREATMENTS ON THE CONTROL OF.

T T Herhert

U S Agr Res Serv CR (42):9-11

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungicides, Fungus diseases (plants), Loose smut, Ustilago nuda.

10192-69

CONTROL OF LOOSE SMUT OF WHEAT AND BARLEY IN ARKANSAS WITH FUNGICIDES.

J P Jones R D Barnett

U S Agr Res Serv CR (42):3

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Loose smut, Systemic fungicides, Wheat.

10193-69

SEED-MYCOFLORA OF MUSK-MELON.

G L Khandelwal R Prasad

Bull Grain Technol 7(1):26-30

Mar 1969 TS2120.B8

Agrosan GN, Aspergillus, Chemical control (plant diseases), Fungicides, Rhizopus, Thiram.

10194-69

CHEMICAL CONTROL OF WHEAT AND BARLEY LOOSE SMUT.

R L Kiesling

U S Agr Res Serv CR (42):5-7

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Fungus diseases (plants), Loose smut, Oxathiins, Systemic fungicides, Thiazole, Wheat.

10195-69

EFFECT OF TWO SYSTEMIC FUNGICIDES ON CONTROL OF LOOSE SMUT IN WHEAT.

R A Kilpatrick O G Merkle

U S Agr Res Serv CR (42):29

May 1968 aSB608.G6M6

Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Loose smut, Systemic fungicides, Wheat.

10196-69

EFFECTIVENESS OF FUNGICIDES IN CONTROLLING BARLEY LOOSE SMUT.

D M Kline

U S Agr Res Serv CR (42):28

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Chloroneb, Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungicides, Fungus diseases (plants), Loose smut, Thiocarbamates, Thiram.

10197-69

THE EPIPHYTIC OF YELLOW ORANGE LEAF DISEASE OF RICE IN 1966 IN THAILAND.

H A Lamey P Surin S Disthaporn L Wathanakol

China Plant Protect Bull 15(4):67-69 MAP

Aug 1967 464.9 C47

Epiphytic, Leaf rust, Rice, Surveys, Virus diseases (plants).

10198-69

STANDARDIZATION OF THE INTERNATIONAL RACE NUMBERS OF PYRICULARIA ORYZAE.

K C Ling S H Ou

Phytopathology 59(3):339-342 REF

Mar 1969 464.8 P56

Fungus diseases (plants), Piricularia oryzae, Rice.

10199-69

EFFICACY OF OXATHIIN FUNGICIDES FOR CONTROL OF LOOSE SMUT IN BARLEY.

R H Littrell D D Morcy

U S Agr Res Serv CR (42):17-18

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Systemic fungicides, Ustilago nuda.

10200-69

PRELIMINARY OBSERVATIONS ON THE TREATMENT OF WHEAT AND BARLEY WITH A FUNGICIDE TO CONTROL LOOSE SMUT IN ENGLAND.

R C F Macer

U S Agr Res Serv CR (42):23-25

May 1968 aSB608.G6M6

Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Systemic fungicides, Ustilago nuda, Ustilago tritici, Wheat.

10201-69

COLLETOTRICHUM NIGRUM FROM EGG-PLANT. A NEW RECORD FROM INDIA.

S B Mather H C Phatak

Indian Phytopathol 21(2):235-236

Jun 1968 464.8 IN2

Collectotrichum, Eggplant, Fungus diseases (plants).

10202-69

THE FUNGITOXIC MECHANISMS IN QUINOLINE COMPOUNDS AND THEIR CHELATES.

G L McNew H Gershon

Residue Rev 25:107-122

1969 389.9 R314

Agricultural chemistry, Fungicides, Fungus diseases (plants), Physiology, Quinoline.

10203-69

SOME OBSERVATIONS ON CYNIPS QUERCUS FOLII L. GALLS ON QUERCUS ROBUR L. IN BYDGOSZCZ PROVINCE. (PO)

Z Michno-Zatorska

Soc Sci Torunensis Stud Sect D (bot) 8(1-2):19-24 REF

1967 451 T65

Cynipid leaf galls, Cynipidae, Gall-making insects, Plant diseases, Plant galls, Plant physiology, Quercus robur. English summary.

10204-69

EFFECT OF CYTOKININS ON TOBACCO MOSAIC VIRUS PRODUCTION IN LOCAL-LESION AND SYSTEMIC HOSTS.

G E Milo B I S Srivastava

Virology 38(1):26-31 REF

May 1969 448.8 V81

Cytokinins, Kidney beans, Leaves, Mosaic, Plant diseases, Plant injuries, Tobacco, Tobacco mosaic virus, Virology, Virus diseases (plants).

10205-69

MODE OF ACTION OF AGRICULTURAL ANTIBIOTICS DEVELOPED IN JAPAN.

T Misato

Residue Rev 25:93-106 REF

1969 389.9 R314

Agricultural chemistry, Antibiotics, Chemical reactions, Plant physiology.

10206-69

TRANSLLOCATION OF TOBACCO RINGSPOT VIRUS IN CUCUMBER AND ZINNIA.

B J Moore J M McGuire

Ark Acad Sci Proc 22:67-71

1968 500 AR42

Cucumbers, Nematode vectors, Plant disease transmission, Plant nematodes, Ring spot, Tobacco, Virus diseases (plants), Xiphinema americanum.

10207-69

FUNGICIDAL CONTROL OF SMUT DISEASES OF CEREALS.

J G Moseman

U S Agr Res Serv CR (42):36P

May 1968 aSB608.G6M6

Chemical control (plant diseases), Fungicides, Fungus diseases (plants), Grain, Smut.

10208-69

TOXIC METABOLITE OF ASPERGILLUS NIGER AND ITS ROLE IN ONION ROT DISEASE.

A Narain O Prakash

Indian Phytopathol 21(2):217-220 REF

Jun 1968 464.8 IN2

Aspergillus niger, Biological assay, Fungus diseases (plants), Onions, Plant diseases, Plant metabolism, Seeds, Toxins.

10209-69

DELETERIOUS EFFECT OF CERTAIN FUNGITOXICANTS ON THE FORMATION OF MYCORRHIZAE ON CORN BY ENDOGONE FASCICULATA AND ON CORN ROOT DEVELOPMENT.

O Neisham M B Linn

Phytopathology 59(3):297-300

Mar 1969 464.8 P56

Chemical control (plant diseases), Corn, Endogone fasciculata, Fungus diseases (plants).

10210-69

STUDIES ON THE BIOSYNTHESIS OF TMV. I. A SYSTEM APPROACHING A SYNCHRONIZED VIRUS SYNTHESIS IN A TOBACCO LEAF.

T Nilsson-Tillgren I. Kolehmainen-Seveus D von Wettstein

Z Vererbungslhre 104(2):124-141 REF

28 May 1969 442.8 Z34

Electron microscopy, Mosaic, Synthesis, Tobacco, Tobacco mosaic virus, Virus diseases (plants).

10211-69

BREEDING FOR RUST RESISTANCE. ADVANCES IN GENETICS GIVE HOPE FOR TOTAL IMMUNITY.

B P Pal

Indian Farming 19(1):5-7

Apr 1969 22 IN283

Crop varieties, Fungus diseases (plants), Plant breeding, Plant disease resistance, Rust, Wheat.

- 10212-69**
THE PRESENCE OF TRISTEZA VIRUS IN CERTAIN SPECIES OF CITRUS IN CYPRUS.
 A Papisolomontos C V Economides
China Plant Protect Bull 16(1):8-9
 Feb 1968 464.9 C47
 Citrus, Surveys, Tristeza, Virus diseases (plants).
- 10213-69**
SURVIVAL OF ROOT-INFECTING FUNGI IN SOIL. XII. GERMINATION AND SURVIVAL OF ENDOCONIDIA AND CHLAMYDOSPORES OF THIELAVIOPSIS BASICOLA IN FALLOW SOIL AND IN SOIL ADJACENT TO GERMINATING BEAN SEED.
 G C Papavizas P B Adams
Phytopathology 59(3):371-378 REF
 Mar 1969 464.8 P56
 Beans, Chlamydosporas, Fungus diseases (plants), Soils, Thielaviopsis hasicola.
- 10214-69**
CHEMICAL CONTROL OF LOOSE SMUT IN BARLEY.
 V D Pederson
U S Agr Res Serv CR (42):4
 May 1968 aSB608.G6M6
 Barley, Ciptan, Chemical control (plant diseases), Chlorinated hydrocarbons, Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Loose smut, Seed treatment, Systemic fungicides, Thiram.
- 10215-69**
HETEROBASIDIUM ANNOSUM.
 D N Pegler J M Waterston
Commonwealth Mycol Inst Cmi Desc Path Fungi Bact (SET 20):192
 1968 462.7 C73
 Air-borne plant diseases, Coniferae, Fungus diseases (plants), Plant diseases, Plant geography, Polyporus, Taxonomy.
- 10216-69**
PIHELINUS IGNIARIUS.
 D N Pegler J M Waterston
Commonwealth Mycol Inst Cmi Desc Path Fungi Bact (SET 20):194
 1968 462.7 C73
 Air-borne plant diseases, Fungus diseases (plants), Plant diseases, Plant geography, Polyporus, Populus, Rot, Salix, Trees.
- 10217-69**
PIHELINUS POMACEUS.
 D N Pegler J M Waterston
Commonwealth Mycol Inst Cmi Desc Path Fungi Bact (SET 20):196
 1968 462.7 C73
 Air-borne plant diseases, Fungus diseases (plants), Plant diseases, Plant geography, Plums, Polyporus, Rot, Taxonomy.
- 10218-69**
INONOTUS HISPIDUS.
 D N Pegler J M Waterston
Commonwealth Mycol Inst Cmi Desc Path Fungi Bact (SET 20):193
 1968 462.7 C73
 Air-borne plant diseases, Fraxinus, Fungus diseases (plants), Plant diseases, Plant geography, Polyporus hispidus, Taxonomy, Trees.
- 10219-69**
EVIDENCE FOR RESTRICTION OF A PLANT VIRUS TO PHLOEM CELLS.
 W C Price
Indian Phytopathol 21(2):159-166 REF
 Jun 1968 464.8 IN2
 Electron microscopy, Phloem, Plant diseases, Plant physiology, Tristeza, Virus diseases (plants).
- 10220-69**
RESULTS OBTAINED WITH A SYSTEMIC OXATHIIN FUNGICIDE IN FRANCE.
 G Richard J Cognet
U S Agr Res Serv CR (42):21-23
 May 1968 aSB608.G6M6
 Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Systemic fungicides, Ustilago avenae, Ustilago nuda.
- 10221-69**
ELEMENTS FOR THE DIFFERENTIATED APPLICATION OF QUARANTINE AND CONTROL MEASURES OF POTATO CANKER. (RUM)
 A Savulescu A Puscasu
Probl Agr 21(2):36-43 MAP REF
 1969 21 R862
 Canker, Plant disease control, Plant quarantine, Potatoes, Synchytrium endohoticum, Zoogeography.
- 10222-69**
THE SYSTEMIC FUNGICIDE 2,3-DIHYDRO-5-CARBOXANILIDO-6-METHYL-1,4-OXATHIIN.
 B von Schmelting M Kulka
U S Agr Res Serv CR (42):1-2
 May 1968 aSB608.G6M6
 Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Loose smut, Systemic fungicides, Ustilago nuda, Ustilago tritici, Wheat.
- 10223-69**
MERCURY-RESISTANT PYRENOPHORA AVENAE IN NEW ZEALAND SEED OATS: A COMPARISON OF SIX DIFFERENT COMPOUNDS AS SEED DISINFECTANTS.
 J E Sheridan V Vachrahorn
New Zeal J Agr Res 11(4):812-816
 Nov 1968 23 N4892
 Agar, Antiseptics, Chemical control (plant diseases), Fungicide resistant fungi, Fungicides, Fungus diseases (plants), Leaf spot, Mercury compounds, Oats, Pyrenophora avenae, Seedling hight, Seedlings, Seeds.
- 10224-69**
LOCAL LESION HOST FOR GRASSY SHOOT VIRUS OF SUGARCANE.
 G R Singh
Cur Sci 38(6):148
 20 Mar 1969 475 SCI23
 Aphididae, Biological assay, Grassy shoot, Insect vectors, Plant injuries, Sugarcane, Virus diseases (plants).
- 10225-69**
COMPARISON OF MYCELIAL AND SCLEROTIAL INOCULUM OF MACROPHOMINA PHASEOLI IN THE MORTALITY OF PINE SEEDLINGS UNDER VARYING SOIL CONDITIONS.
 W H Smith
Phytopathology 59(3):379-382 REF
 Mar 1969 464.8 P56
 Fungus diseases (plants), Macrophomina phascoli, Mortality, Pinus, Seedlings.
- 10226-69**
STUDIES ON PHYSIOLOGY OF HELMINTHOSPORIUM AUSTRALIENSE THE CAUSAL AGENT OF A LEAF SPOT DISEASE OF BAJRA.
 B S Thind J N Chand
Indian Phytopathol 21(2):190-194
 Jun 1968 464.8 IN2
 Fungus diseases (plants), Helminthosporium, Pearl millet, Plant biochemistry, Plant diseases, Plant physiology.
- 10227-69**
A NECROTIC TYPE VIRUS OCCURRING ON A WEED IN GERMANY.
 J P Varma
Indian Phytopathol 21(2):176-181
 Jun 1968 464.8 IN2
 Compositae, Mosaic, Necrosis, Plant diseases, Tobacco, Virus diseases (plants), Weeds.
- 10228-69**
PRELIMINARY NOTE ON THE OCCURRENCE OF BLACK POINT DISEASE OF WHEAT IN INDIA.
 D Vir K L Adeakha L M Joshi K D Pathak
Indian Phytopathol 21(2):234-235
 Jun 1968 464.8 IN2
 Alternaria tenuis, Fungus diseases (plants), Helminthosporium, Plant diseases, Wheat.
- 10229-69**
SEED TREATMENT TRIAL, 1967.
 H A H Wallace
U S Agr Res Serv CR (42):8
 May 1968 aSB608.G6M6
 Barley, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin, 2,3-, Fungus diseases (plants), Oats, Seed treatment, Smut, Stinking smut, Systemic fungicides, Wheat.
- 10230-69**
VERTICILLIUM WILT OF TOBACCO. VIII. MOVEMENT OF CONIDIA OF VERTICILLIUM DAHLIAE KLEB. IN TOBACCO PLANTS.
 D S C Wright
New Zeal J Agr Res 11(4):803-811 REF
 Nov 1968 23 N4892
 Conidia, Fungus diseases (plants), Plant disease resistance, Plant disease transmission, Plant diseases, Roots, Tobacco, Verticillium dahliae, Wilt.
- 10231-69**
VERTICILLIUM WILT OF TOBACCO. VII. PATHOGENICITY OF ISOLATES OF VERTICILLIUM DAHLIAE KLEB. ON NEW ZEALAND TOBACCO.
 D S C Wright J M Biss
New Zeal J Agr Res 11(4):797-802 REF
 Nov 1968 23 N4892
 Fungus diseases (plants), Microorganisms, Plant diseases, Tobacco, Verticillium dahliae, Wilt.
- 10232-69**
RESPONSE TO PARASITES.
 C E Yarwood
Annu Rev Plant Physiol 18:419-438 REF
 1967 450 AN78
 Bacterial diseases (plants), Bibliography, Fungus diseases (plants), Photosynthesis, Plant injuries, Plant metabolism, Plant respiration, Reviews, Virus diseases (plants).

ARTHROPODS

- 10233-69**
GROWERS JOIN FORCES TO BATTLE THE BOLL WEEVIL.
 Anonymous
Chem Coun 1:10-11
 1969 421 C42
 Anthonomus grandis, Azinphosmethyl, Chemical control (insects), Cotton, Crop yields, Curculionidae, Hibernation, Insect pests, Insect physiology, Insecticide application, Insecticides, Organophosphorus compounds, Spraying, Ultra-low-volume spraying.
- 10234-69**
COMMON LEAFHOPPER-PLANTHOPPER POPULATIONS AND INCIDENCE OF TUNGRO VIRUS IN DIAZINON-TREATED AND UNTREATED RICE PLOTS.
 S H Bac M D Pathak
J Econ Entomol 62(4):772-775
 15 Aug 1969 421 J822
 Chemical control (insects), Diazinon, Inazuma dorsalis, Insect vectors, Nephrotettix, Nilaparvata lugens, Organophosphorus compounds, Plant disease transmission, Rice, Sogatella furcifera, Tungro, Virus diseases (plants).

- 10235-69**
THE BIOLOGY, MODE OF ATTACK AND DAMAGE CAUSED BY THE THRIPS, (HAPLOTHRIPS TRITICI KURD) TO WHEAT CROPS. (RUM)
 E Banita
Probl Agr 21(2):14-19
 1969 21 R862

Chemical control (insects), Haplothrips, Insect behavior, Insect biology, Organophosphorus compounds, Plant injuries, Wheat. English, French and Russian abstracts.

10236-69
EUROPEAN RED MITE AND TWO-SPOTTED SPIDER MITE CONTROL ON APPLES IN CALIFORNIA.

W C Batiste A Berlowitz
J Econ Entomol 62(4):779-781
15 Aug 1969 421 J822

Acaricides, Apples, Chemical control (insects), Mites, Organophosphorus compounds, Panonychus ulmi, Tetranychus urticae.

10237-69
A COMPARISON OF MALATHION, DIAZINON, FENITROTHION AND DICHLORVOS FOR CONTROL OF SITOPHILUS ORYZAE (L.) AND RHYZOPERTHA DOMINICA (F.) IN WHEAT.

B R Champ R W Steele B G Genn K D Elms
J Stored Prod Res 5(1):21-48 REF
May 1969 421 J829

Chemical control (insects), Diazinon, Dichlorvos, Fenthion, Insecticides, Malathion, Organophosphorus compounds, Rhyzopertha dominica, Sitophilus oryzae, Wheat.

10238-69
COMPARATIVE EFFICIENCY OF TRANSMISSION OF ASTER YELLOWS BY ELYMANA VIRESCENS AND MACROSTELLES FASCIFRONS AND THE RELATIVE CONCENTRATION OF THE CAUSAL AGENT IN THE VECTORS.

L N Chiykowski R C Sinha
J Econ Entomol 62(4):883-886 REF
15 Aug 1969 421 J822

Barley, Elymana virescens, Insect vectors, Macrosteles fascifrons, Plant disease transmission, Virus diseases (plants), Yellows.

10239-69
ALTERNATIVE HOST PLANTS OF TOBACCO LEAF-MINER (PIITHORIMAEA OPERCULELLA (ZELL.)).

I C Cunningham
Queensland J Agr Anim Sci 26(1):107-111
Mar 1969 23 Q37

Leaf miners, Phthorimaea operculella, Plants, Surveys.

10240-69
DISTRIBUTION OF LARVAL AND PUPAL INSTARS OF PLUSIA ARGENTIFERA GUEN. ON TOBACCO PLANTS.

I C Cunningham
Queensland J Agr Anim Sci 26(1):113-116
Mar 1969 23 Q37

Distribution, Larvae, Noctuidae, Plusiinae, Pupae, Tobacco.

10241-69
THE COLONIZATION AND SUCCESS IN GREECE OF SOME IMPORTED APHYTIS SPP. (HYM. APHELINIDAE) PARASITIC ON CITRUS SCALE INSECTS (HOM. DIASPIDIDAE).

P DeBacca I C Argyriou
Entomophaga 12(4):325-342 MAP
1967 421 EN835

Aphytis, Biological control (insects), Citrus, Diaspididae.

10242-69
BIOLOGY AND CONTROL OF LEOPARD MOTH ON PEAR TREES IN THE UNITED ARAB REPUBLIC.

M E Eldefrawi I Hanhal S M Hammad
China Plant Protect Bull 15(4):70-76 REF
Aug 1967 464.9 C47

Azinphosmethyl, Cartharyl, Chemical control (insects), Chlorinated hydrocarbons, DDT, Insect biology, Insecticides, Malathion, Pears, Trichlorfon, Zeugera pyrina.

10243-69
THE STEM BORER SESAMIA BOTANEPHAGA TAMS AND BOWDEN (LEP., NOCTUIDAE) AND THE MAIZE CROP IN CENTRAL ASHANTI, GHANA.

Endrody-Younga
Ghana J Agr Sci 1(2):103-131 REF
1968 S19.G5

Bionomics, Climate, Corn, Crop losses, Crop yields, Insect outbreaks, Insect pests, Insect physiology, Noctuidae. French summary.

10244-69
BEES AS PESTS.

D C Erwin
World Rev Pest Contr 8(1, SPRING):4
1969 79.8 W89
Apidae, Cotton, Insect pollinators, Plant breeding.

10245-69
A REVIEW OF THE USE OF INSECTICIDES ON THE MAIN AGRICULTURAL CROPS OF THE WORLD--3. SECTION 3: COTTON.

A D Hanna
World Rev Pest Contr 8(1, SPRING):23-45 REF
1969 79.8 W89

Chemical control (insects), Cotton, Insect control, Insecticides, Plant injuries, Reviews, Zoogeography.

10246-69
TWENTY-SIX VARIETIES OF FORAGE CROPS EVALUATED FOR RESISTANCE TO FEEDING BY MELANOPLUS SANGUINIPES.

G B Hewitt
Entomol Soc Amer Ann 62(4):737-741
Jul 1969 420 EN82

Forage plants, Melanoplus sanguinipes, Plant pest resistance.

10247-69
SPRAY DROPLET SIZE IN THE CONTROL OF SPRUCE BUDWORM, BOLL WEEVIL, BOLLWORM AND CABBAGE LOOPER.

C M Himel A D Moore
J Econ Entomol 62(4):916-918
15 Aug 1969 421 J822

Aerial spraying, Anthonomus grandis, Carbamates, Chemical control (insects), Choristoneura fumiferana, Cotton, Dimethylamino-3,5-xylyl methylcarbamate, 4-, Environment, Forest insects, Heliothis zea, Leaves, Methyl parathion, Particle size determination, Pesticide residues, Pyrethrum, Spraying, Trichoplusia ni.

10248-69
ORGANOPHOSPHORUS ACARICIDES FOR CONTROLLING THE TWO-SPOTTED SPIDER MITE ON STRAWBERRIES.

A F Howland J Wilcox L I Butler D A George
J Econ Entomol 62(4):939-940
15 Aug 1969 421 J822

Acaricides, Chemical control (insects), Demeton, Dicofol, Dimethoate, Disulfoton, Mites, Organophosphorus compounds, Phorate, Soil sanitation, Spraying, Strawberries, Tetranychus urticae.

10249-69
SYMPOSIUM ON THE PRINCIPLES OF THE APPLICATION OF MICROBIOLOGICAL PREPARATIONS IN NATURE. (FR)

B Hurpin
Entomophaga 13(4):265-269
1968 421 EN835

Bacillus thuringiensis, Biological control (insects), Dendrolimus spectabilis, Insect ecology, Porthetria dispar, Symposia.

10250-69
ATHERIGONA SP. (ANTHOMYIIDAE: DIPTERA) AS A PEST OF WHEAT IN RAJASTHAN.

H C Joshi R M Khan
Indian J Entomol 30(3):238
Sep 1968 420 IN23

Anthomyiidae, Plant injuries, Wheat, Zoogeography.

10251-69
TREATMENT OF MUSTARD AND RADISH SEEDS FOR THE CONTROL OF MUSTARD SAWFLY, ATHALIA PROXIMA KLUG. AT SEEDLING STAGE.

M G Jotwani T D Yadav P Sircar P B Mookherjee
Indian J Entomol 30(2):133-136
Jun 1968 420 IN23

Athalia proxima, Brassica, Chemical control (insects), Chlorinated hydrocarbons, Ethylthio)cthyl O,O-dimethyl phosphorodithioate, S-(2-, Insecticides, Lindane, Organophosphorus compounds, Phorate, Phosphamidon, Radishes, Seed treatment.

10252-69
BIOLOGICAL CONTROL OF OLIVE SCALE, PARLATORIA OLEAE (COLVEE), IN A DECIDUOUS FRUIT ORCHARD IN CALIFORNIA.

C E Kennett
Entomophaga 12(5):461-474
1967 421 EN835

Biological control (insects), Fruit, Insect biology, Orchards, Parlatoria oleae.

10253-69
EASY-TO-KILL PESTS OF FRUIT TREES...CODLING MOTH.

H F Lower
S Australia J Agr 72(5):179-182
Dec 1968 23 S084

Azinphosmethyl, Carbamates, Cartharyl, Chemical control (insects), Fruit, Insect morphology, Insect pests, Insect traps, Insecticides, Laspeyresia pomonella, Metamorphosis, Olethreutidae, Organophosphorus compounds, Spraying.

10254-69
CONTRIBUTION TO THE KNOWLEDGE OF THE NATURAL ENEMIES OF BISSETIA STENIELLUS (HAMPSON) (LEP.: PYRALIDAE).

K C Mather
Entomophaga 12(5):443-448 REF
1967 421 EN835

Bissetia steniceilus, Braconidae, Ichneumonidae, Natural control (insects), Predaceous insects, Pyralidae, Sugarcane.

10255-69
STRUCTURE, STABILITY, AND ENERGY FLOW IN PLANTS AND ARTHROPODS IN A SERICEA LESPEDEZA STAND.

E F Menhinick
Ecol Monogr 37(3, SUMMER):255-272 REF
1967 410 EC72

Arthropoda, Ecology, Energy, Field studies, Insect ecology, Lespedeza cuneata, Population.

10256-69
THE FIRST LARGE-SCALE EXPERIMENTATION WITH THE BIOLOGICAL CONTROL OF THE OLIVE FLY (DACUS OLEAE GMEL.) BY MEANS OF OPIUS CONCOLOR SZEPL. SICULUS MON. IN SICILY. (FR)

S Monastero P Delanoue
Entomophaga 12(4):381-398 MAP
1967 421 EN835

Biological control (insects), Dacus oleae, Opius concolor. English abstract.

10257-69
SUSCEPTIBILITY OF SEVERAL FOREST INSECTS OF BRITISH COLUMBIA TO COMMERCIALY PRODUCED BACILLUS THURINGIENSIS. II. LABORATORY AND FIELD PATHOGENICITY TESTS.

O N Morris
J Invertebrate Pathol 13(2):285-295 REF
Mar 1969 421 J826

Acleris variana, Bacillus thuringiensis, Biological control (insects), Epinotia tsugana, Forest insects, Hyphantria cunea, Malacosoma pluviale, Melanophia imitata, Mortality, Thuricide, Vanessa cardui.

- 10258-69**
EFFICIENCY OF THREE COLONIES OF MELON APHIDS AS TRANSMITTERS OF TRISTEZA VIRUS.
P A Norman R A Sutton
J Econ Entomol 62(4):968
15 Aug 1969 421 J822
Aphis gossypii, Insect vectors, Oranges, Plant disease transmission, Tristeza, Virus diseases (plants).
- 10259-69**
NEW RECORD OF HYMENOPTEROUS PARASITES OF PHYTOMYZA ATRICORNIS (MEIGEN), A SERIOUS PEST OF PEA.
S C Odak S V Dhãmdhere A S Kaurava
Indian J Entomol 30(3):250
Sep 1968 420 IN23
Eulophidae, Natural control (insects), Opus, Parasitic insects, Peas, Phytomyza atricornis.
- 10260-69**
THE EFFECT OF REMOVAL OF ARTHROPOD PREDATORS ON AN INFESTATION OF BREVICORYNE BRASSICAE (HEMIPTERA, APIIIDAE) ON BRUSSELS SPROUTS.
E Pollard
Entomol Exp Appl 12(1):118-124 REF
1969 421 EN895
Brevicoryne brassicae, Brussels sprouts, Cerambycidae, Population, Predaceous insects, Syrphidae.
- 10261-69**
NOTES AND CONSIDERATIONS ON THE CONTROL OF THE CYPRESS MOTH, CATORIA UNIPENNARIA (GUEN.) (LEPIDOPTERA, GEOMETRIDAE). (SP
A Saldarriaga V L Posada O
Agr Trop 25(3):143-145
Mar 1969 26 AG8
Biological control (insects), Chemical control (insects), Dichlorvos, Geometridae.
- 10262-69**
TOXICITY OF EIGHT INSECTICIDES TO THE COCCINELLID PREDATOR CHILOMENES SEXMACULATA FABR..
J M Satpathy G K Padhi D N Dutta
Indian J Entomol 30(2):130-132
Jun 1968 420 IN23
Chemical control (insects), Chilomenes sexmaculata, Chlorinated hydrocarbons, Insecticides, Organophosphorus compounds, Toxicology.
- 10263-69**
CHEMICAL CONTROL OF DROSICHA MANGIFERAE (GREEN), A SERIOUS PEST OF CITRUS SPP. IN MADHYA PRADESH.
D K Saxena R R Rawat
Indian J Entomol 30(1):66-68
Mar 1968 420 IN23
Chemical control (insects), Chlorinated hydrocarbons, Citrus, Diazinon, DDT, Drosicha mangiferae, Endrin, Insecticides, Malathion, Organophosphorus compounds, Parathion.
- 10264-69**
CONTROL OF FLORIDA RED SCALE IN FLORIDA WITH THE PARASITE APIHYTIS HOLOXANTHUS.
A G Selhime M H Muma W A Simanton C W McCoy
J Econ Entomol 62(4):954-955
15 Aug 1969 421 J822
Aphytis holoxanthus, Biological control (insects), Chrysomphalus aonidum, Citrus, Parasitic insects, Population.
- 10265-69**
INTEGRATED CONTROL OF INSECTS. A CHALLENGE FOR SCIENTISTS.
R. F. Smith
Agr Sci Rev 7(1, 1ST QUARTER):1-5
1969 431.3 AG893
Insect biology, Insect ecology, Integrated control (insects), Reviews.
- 10266-69**
STUDIES ON THE CONTROL OF THE RED HAIRY CATERPILLAR, AMSACTA MOOREI BUTLER.
B P Srivastava R K Mishra
Indian J Entomol 30(2):125-129 REF
Jun 1968 420 IN23
Aldrin, Amsacta moorei, Benzene hexachloride, Chemical control (insects), Chlordane, Chlorinated hydrocarbons, Dichlorvos, Insecticides, Organophosphorus compounds, Parathion.
- 10267-69**
NEEDLE MINER INFESTATIONS IN LODGEPOLE PINE EAST OF THE SIERRA CREST.
G R Struble
USDA Forest Serv Res Note PSW- (177):2P
1968 A99.9 F7652
Coleotechnites milleri, Defoliation, Forest insects, Insect pests, Insect physiology, Insect populations, Pinus contorta, Zoogeography.
- 10268-69**
PRELIMINARY STUDIES ON THE INTEGRATED CONTROL OF THE PEST COMPLEX ON COWPEA, VIGWA UNGUICULATA WALP., IN NIGERIA.
T A Taylor
J Econ Entomol 62(4):900-902
15 Aug 1969 421 J822
Bacillus thuringiensis, Cowpeas, Insect pests, Integrated control (insects), Lepidoptera, Lindane.
- 10269-69**
CONTROL OF BRACHYRHINUS CRIBRICOLLIS INJURING ORNAMENTALS.
G P Wene
J Econ Entomol 62(4):941-942
15 Aug 1969 421 J822
Brachyrhinus cribricollis, Carhamates, Carharyl, Chemical control (insects), Chlordane, Chlorinated hydrocarbons, Chloro-1-(2,4,5-trichlorophenyl)vinyl dimethyl phosphate, 2-, Insecticides, Organophosphorus compounds, Ornamental plants, Oxydemetonmethyl, Spraying.
- 10270-69**
STUDIES ON INSECT DAMAGE AND GERMINATION OF SEEDS. III. GERMINATION OF WHEAT JOWAR AND MAIZE SEEDS DAMAGED BY THE DEVELOPING GRUBS OF SITOPHILUS ORYZAE L. AND RHIZOPERtha DOMINICA F..
T D Yadav P Sircar M G Jotwani
Indian J Entomol 30(1):83-84
Mar 1968 420 IN23
Corn, Crop losses, Rhizopertha dominica, Seed germination, Sitophilus oryzae, Wheat.

NEMATODES

- 10271-69**
NEMATOCIDES. PATENT 3,457,353.
W Hafner E Kopp K Milles
Us Patent Office Offic Gaz 864(4):1322
22 Jul 1969 156.65 OF2
Chemical control (nematodes), Nematocides, Patents, Sodium monochloroacetaldehyde bisulfite, Sulfites.

WEEDS

- 10272-69**
BIOLOGICAL CONTROL OF CUSCUTA SPP. II. BIOLOGY AND HOST-PLANT RANGE OF MELANAGROMYZA CUSCUTAE HIERING (DIPT. AGROMYZIDAE).
G M Baloch A I Mohyuddin M A Ghani
Entomophaga 12(5):481-489
1967 421 EN835
Biological control (weeds), Cuscuta, Insect biology, Melanagromyza, Phytophagous insects.
- 10273-69**
METABOLISM OF TRIFLURALIN IN PEANUTS AND SWEET POTATOES.
P K Biswas W Hamilton
Weed Sci 17(2):206-211 REF
Apr 1969 79.8 W41
Biological assay, Cucumbers, Herbicides, Peanuts, Plant metabolism, Sweetpotatoes, Toxicology, Trifluralin.
- 10274-69**
BIOCHEMICAL BASIS FOR PLANT COMPETITION.
C C Black T M Chen R H Brown
Weed Sci 17(3):338-344 REF
Jul 1969 79.8 W41
Competition, Light, Literature, Photosynthesis, Plant biochemistry, Plant ecology, Plant physiology, Surveys, Temperature, Weeds.
- 10275-69**
RESPONSE OF TROPICAL VEGETATION TO HERBICIDES.
R W Bovey C C Dowler J D Diaz-Colon
Weed Sci 17(3):285-290
Jul 1969 79.8 W41
Cacodylic acid, Chemical control (weeds), D, 2,4-, Diquat, Herbicides, Picloram, T, 2,4,5-, Tropical plants.
- 10276-69**
LIGHT INTENSITY AND THE ABSORPTION AND TRANSLOCATION OF 2,4,5-T BY WOODY PLANTS.
H A Brady
Weed Sci 17(3):320-322
Jul 1969 79.8 W41
Absorption, Herbicides, Ilex opaca, Pinus palustris, Plant physiology, Quercus nigra, Quercus stellata, T, 2,4,5-, Translocation.
- 10277-69**
INFLUENCE OF WEED COMPETITION ON SORGHUM GROWTH.
O C Burnside G A Wicks
Weed Sci 17(3):332-334
Jul 1969 79.8 W41
Competition, Crop yields, Plant ecology, Plant physiology, Population, Sorghum, Weeds.
- 10278-69**
METABOLISM OF ORGANIC PESTICIDE CHEMICALS IN HIGHER PLANTS.
J E Casida L Lykken
Annu Rev Plant Physiol 20:607-636 REF
1969 450 AN78
Amides, Anilides, Carhamates, Chlorinated hydrocarbons, Fungicides, Herbicides, Insecticides, Organic compounds, Plant metabolism, Reviews, Toxicology, Triazines.
- 10279-69**
AFRICAN FEATHER GRASS--A WEED WORTH WATCHING.
F R H Chapman
S Australia J Agr 72(6):212-213
Jan 1969 23 SO84
Bromacil, Chemical control (weeds), DPA, Herbicides, Monuron, Pennisetum macrourum, Trichloroacetic acid, Weeds.
- 10280-69**
EFFECTS OF SEVERAL HERBICIDES ON YEW AND JAPANESE MAPLES.
L L Danielson C May
Weed Sci 17(2):142-144 REF
Apr 1969 79.8 W41
Acer palmatum, Amitrole, Dinoseb, Diuron, Herbicides, CIPC, Sesone, Simazine, Taxus, Trifluralin.
- 10281-69**
CONTROL OF AQUATIC PLANTS WITH DITHIOTHIOUNDECANOIC ACID. PATENT 3,432,286.
Us Patent Office Offic Gaz 860(2):524
11 Mar 1969 156.65 OF2

10307-69
HERBICIDE SCREENING TESTS DURING 1967 IN AGRICULTURAL CROPS AND POTTED HERBS. (DU)

J Stryckers M van Himme
Ghent Landbouwhoogeschool Centrum Onkruidonderzoek Mededel (7):1-15
 1967 79.9 G342M
 Biological assay, Crops, Herbicide application, Herbicides, Herbs.

10308-69
ABSORPTION AND PENETRATION OF PICLORAM IN POTATO TUBER DISCS.

C R Swanson J R Baur
Weed Sci 17(3):311-314
 Jul 1969 79.8 W41
 Absorption, Chromatography, Herbicides, Penetration, Picloram, Plant physiology, Potatoes, Temperature, Toxicology.

10309-69
SEED DORMANCY AND GERMINATION IN ECOTYPES OF JOHNSONGRASS.

R B Taylorson C G McWhorter
Weed Sci 17(3):359-361 REF
 Jul 1969 79.8 W41
 Light, Plant ecology, Potassium nitrate, Seed dormancy, Seed germination, Sorghum halepense, Temperature, Weeds.

10310-69
CONTROL OF GREEN RABBITBRUSH AND BIG SAGEBRUSH WITH 2,4-D AND PICLORAM.

P T Tueller R A Evans
Weed Sci 17(2):233-235
 Apr 1969 79.8 W41
 Agropyron, Artemisia tridentata, Chemical control (weeds), Chrysothamnus, D, 2,4-, Picloram, Weed control.

10311-69
EFFECTS OF 2,4,5-T DURING THE APPROACH OF WOODY PLANT DORMANCY.

R P Upehurch J A Keaton H D Coble
Weed Sci 17(2):229-233 REF
 Apr 1969 79.8 W41
 Acer rubrum, Herbicides, Plant dormancy, Quercus laevis, T, 2,4,5-.

10312-69
RESPONSE OF SOYBEANS TO 2,4-D, DICAMBA, AND PICLORAM.

L M Wax I. A Knuth F W Slife
Weed Sci 17(3):388-393 REF
 Jul 1969 79.8 W41
 D, 2,4-, Dicamba, Herbicide application, Herbicides, Picloram, Plant physiology, Soybeans.

10313-69
ACCURATELY PREDICTING A HERBICIDES POTENTIAL.

J W Whitworth W P Anderson
Weed Sci 17(3):290-293
 Jul 1969 79.8 W41
 Biological assay, Chemical control (weeds), Field test, Herbicides.

10314-69
A SPRAYER FOR APPLICATION OF SMALL AMOUNTS OF HERBICIDES TO FLATS.

M Wilcox
Weed Sci 17(2):263-264 REF
 Apr 1969 79.8 W41
 Herbicides, Methodology, Pesticide application, Spraying.

10315-69
EPTC EFFECTS ON SICKLEPOD PETIOLAR FATTY ACIDS.

R E Wilkinson W S Hardcastle
Weed Sci 17(3):335-338 REF
 Jul 1969 79.8 W41
 Cassia obtusifolia, Ethyl N,N-dipropylthiocarbamate, Fatty acids, Herbicides, Plant biochemistry, Plant physiology.

10316-69
THE EFFECTS OF TWO PHYTOBLAND OILS ON THE POSTEMERGENCE ACTIVITY OF BROMOXNYL AND DNBP APPLIED IN TWO SPRAY VOLUMES IN ALFALFA.

H P Wilson R D Illicki
Northeast Weed Contr Conf Proc 22:294-298
 03 Jan 1968 79.9 N814
 Alfalfa, Bromoxnyl, Chemical control (weeds), Dinoseb, Plant injuries.

10317-69
EFFECTS OF HIGH RATES OF TRIFLURALIN AND VERNOLATE ON SOYBEAN YIELD AND GROWTH.

E L Wisk R H Cole
Northeast Weed Contr Conf Proc 22:482-486
 03 Jan 1968 79.9 N814
 Chemical control (weeds), Crop yields, Plant injuries, Propyl n,n-dipropylthiocarbamate, Soybeans, Trifluralin.

OTHER PESTS

10318-69
METABOLISM OF STRYCHNINE NITRATE APPLIED FOR THE CONTROL OF THE BEAR.

T Inukai
Residue Rev 25:315-318
 1969 389.9 R314
 Bears, Chemical control (pests), Crop losses, Livestock, Pest control, Strychnine.

10319-69
USE OF METALDEHYDE AS DUSTS AND SPRAYS TO CONTROL THE GIANT AFRICAN SNAIL ACHATINA FULICA BOWDICH.

M R G K Nair N M Das A Jacob
Indian J Entomol 30(1):58-60
 Mar 1968 420 IN23
 Achatina fulica, Chemical control (pests), Dusting, Metaldehyde, Molluscicides, Snails, Spraying.

10320-69
OBSERVATIONS ON THE CONTROL OF ACHATINA FULICA BOWDICH, THE GIANT AFRICAN SNAIL WITH METHYLDEHYDE.

P D Srivastava Y N Srivastava J Singh
Indian J Entomol 30(2):175-176
 Jun 1968 420 IN23
 Achatina fulica, Baits, Chemical control (pests), Metaldehyde, Molluscicides, Snails.

10321-69
ROLE OF HERMIT CRABS IN THE BIOLOGICAL CONTROL OF ACHATINA FULICA (BOWDICH) ON THE ANDAMANS.

P D Srivastava
Indian J Entomol 30(3):217-219
 Sep 1968 420 IN23
 Achatina fulica, Biological control (pests), Crabs, Plant pest control, Population.

10322-69
GULELLA (INDOENEA) BICOLOR (HUTTON), A PREDATOR OF GIANT AFRICAN SNAIL ACHATINA FULICA BOWDICH.

P D Srivastava
Indian J Entomol 30(3):240-241
 Sep 1968 420 IN23
 Achatina fulica, Biological control (pests), Snails, Zoogeography.

10323-69
RELATIONSHIP BETWEEN AMOUNT OF THINNING, TIME OF CARE, AND DAMAGES CAUSED BY RED DEER. (GE)

J Steiner
Sozialistische Forstwirtschaft (18):365-369
 1968 99.8 W143
 Deer, Forest cutting systems, Time, Tree injuries.

LIVESTOCK PROTECTION

DISEASES

10324-69
VITAMIN A METABOLISM IN PROTEIN DEFICIENCY.

H R Adhikari U K Vakil A Sreenivasan
J Biochem 5(3):132-137, REF
 Sep 1968 385 J822
 Biochemistry, Deficiency diseases, Metabolism, Proteins, Rats, Vitamin A.

10325-69
INCIDENCE OF BLUETONGUE REPORTED CALENDAR YEAR 1967.

4P MAP
 Jul 1968 A41.9 R317IN
 Bluetongue, Epidemiology, Livestock diseases, Sheep, Virus diseases (animals).

10326-69
A SALMONELLA TYPHIMURIUM INVOLVED IN THE REGULATION OF ISOLEUCINE, VALINE AND LEUCINE BIOSYNTHESIS.

R R Alexander J M Calvo
Genet Soc Amer Rec 61(3):539-556 REF
 Mar 1969 442.9 G28
 Amino acids, Biochemistry, Genetics, Salmonella typhimurium.

10327-69
TOXOPLASMA GONDII: ISOLATION OF SAMPLES STARTING FROM THE DIAPHRAGMS OF CLINICALLY HEALTHY PIGS SLAUGHTERED IN SAO PAULO, BRAZIL. (POR)

V do Amhril R Macruz
Sao Paulo Inst Biol Arq 36(1):JAN-MAR):47-54
 Mar 1969 442.9 SA6
 Animal diseases, Swine, Toxoplasma gondii.

Eight strains of Toxoplasma gondii were isolated from diaphragms of 25 apparently healthy pigs obtained from the slaughter-houses of Sao Paulo city and to be bound for human consumption. One of the eight strains was not virulent for mice and was detected only in histological section of material from mice after the fifth blind passage.

10328-69
HOG CHOLERA AND OTHER COMMUNICABLE SWINE DISEASES. MISCELLANEOUS AMENDMENTS.

R J Anderson
Fed Regist 34(100):8153-8157
 24 May 1969 L1.451
 Hog cholera, Legislation, Livestock diseases, Swine.

10329-69
OPERATOR CONSTITUTIVE MUTATIONS IN THE LEUCINE OPERON OF SALMONELLA TYPHIMURIUM.

J M Calvo P Margolin H E Umberger
Genet Soc Amer Rec 61(4):777-787 REF
 Apr 1969 442.9 G28
 Biochemistry, Genes, Leucine, Salmonella typhimurium.

10330-69
INACTIVATED HOG CHOLERA VIRUS VACCINE. PATENT 3,456,053.

J G Crawford
Us Patent Office Offic Gaz 864(3):967
 15 Jul 1969 156.65 OF2
 Hog cholera vaccines, Hog cholera virus, Patents, Swine.

10331-69
VACCINATED CATTLE.....CAN HARBOR FOOT AND MOUTH DISEASE.

Agr Res 17(11):7
 May 1969 1.98 AG84
 Cattle, Disease transmission, Foot-and-mouth disease, Immunity, Livestock diseases, Pharynx, Virology, Virus diseases (animals).

10332-69

10332-69
FOOT LAMENESS IN PIGS.K J Dobson
S Australia J Agr 72(6):227-230
Jan 1969 23 SO84

Baths, Concrete, Drug therapy, Feet, Foot rot (animals), Infectious diseases, Lameness, Livestock diseases, Swine, Ulcers.

10333-69

10333-69
MUTAGENIC EFFECTS OF TEPA AND METEPA IN MICE.S S Epstein Y Bishop
Genetics 61(2,PT 2,SUPPL):S16
1969 442.8 G28

Animal genetics, Chemosterilants, Metepa, Mice, Tapa.

Mutagens

10334-69

10334-69
CONTROL METHOD OF INACTIVATED VACCINES AGAINST THE NEWCASTLE DISEASE BY MEANS OF THE TITULATION OF NEUTRALIZING ANTIBODIES. (SP)J M Grillo Torrado P B de Muslerio P A Arieta
Rev Invest Agropecuar Ser 4 Patol Anim 4(6):65-80
1967 41.8 R3227

Antibodies, Chickens, Methodology, Newcastle disease vaccines, Serological tests. English abstract.

10335-69

10335-69
BLOAT ON DOLICHOS LABLAB.R I Hamilton G Ruth
Trop Grasslands 2(2):135-136
Oct 1968 SB197.A117

Animal diseases, Animal nutrition, Bloat, Cattle, Grazing, Hyacinth dolichos, Legumes, Surface-active agents.

10336-69

10336-69
THE RELATIVE INCIDENCE OF VIBRIO FETUS INFECTION IN DAIRY AND BEEF CATTLE IN NEW SOUTH WALES.D Jakovljevic H E R Beattie
Australian Vet J 45(6):275-278
Jun 1969 41.8 AU72

Cattle, Surveys, Vibrio fetus.

10337-69

10337-69
TETRACYCLINE ANTIBIOTIC COMPOSITIONS FOR ORAL USE. PATENT 3,454,697.A Joyner C K Piercy
Us Patent Office Offic Gaz 864(2):575
08 Jul 1969 156.6 F02

Antibiotics, Chlorotetracycline, Demethylchlorotetracycline, Patents, Tetracycline.

10338-69

10338-69
ISOLATION OF SALMONELLA PULLORUM FROM A CASEOUS NODULAR IN THE ORBITAL REGION OF A CHICK ARBOR ACRES BREED. (POR)J R July A Nakano
Sao Paulo Inst Biol Arq 36(1 JAN-MAR):55-57
Mar 1969 442.9 SA6

Chickens, Eyes, Salmonella pullorum. English abstract.

10339-69

10339-69
SURVEY OF YEASTLIKE FUNGI AND TISSUE CHANGES IN ESOPHAGOGASTRIC REGION OF STOMACHS OF SWINE.W L Kadel D C Kelley E H Coles
Amer J Vet Res 30(3):401-408 REF
Mar 1969 41.8 AM3A

Candida albicans, Esophagus, Fungi, Gastrointestinal system, Keratinization, Livestock diseases, Mycosis, Stomach, Swine, Ulcers.

10340-69

10340-69
ONTOGENY OF THE IMMUNE RESPONSE. V. FURTHER CHARACTERIZATION OF 19 S GAMMA G- AND 7 S GAMMA G-IMMUNOGLOBULINS IN THE TRUE PRIMARY IMMUNE RESPONSE IN GERMFREE, COLOSTRUM-DEPRIVED PIGLETS.Y B Kim S G Bradley D W Watson
J Immunol 101(2):224-236,REFAug 1968 448.8 J8232
Baby pigs, Germ-free life, Globulins, Immunity.

10341-69

10341-69
ANALYTICAL STUDIES ON EXTRACTS OF LITOMOSOIDES CARINII. (GE)G Lammler B Enders H Zahner
Z Parasitenk 32(3):254-265 REF
16 Jun 1969 442.8 Z33F

Animal extracts, Biochemistry, Electrophoresis, Filariasis, Hexoses, Nitrogen, Proteins, Rodents. English abstract.

10342-69

10342-69
THE COMPARATIVE PATHOLOGY OF DUCK PLAGUE IN WILD ANSERIFORMES.L Leibovitz
J Wildlife Manage 33(2):294-303
Apr 1969 410 J827

Aquatic birds, Duck plague, Ducks, Geese, Virus diseases (animals), Wildlife diseases.

10343-69

10343-69
ON THE EFFECT OF MOLDS ON VARIOUS ANIMAL SPECIES. PART 2. (GE)M Lenz
Z Angew Zool 55(4):385-425 REF
1968 449.8 Z36

Animal physiology, Animals, Aspergillus niger, Bibliography, Mycosis, Termites. English abstract.

10344-69

10344-69
EQUINE VACCINES AND VACCINATIONS.M Lyall
Auburn Vet 25(SPRING):100-103
1969 41.8 AU1

Equine encephalomyelitis vaccines, Equine influenza vaccines, Equine rhinopneumonitis vaccines, Horses, Immunization, Strangles (horses), Tetanus, Vaccines.

10345-69

10345-69
BABESIA ARGENTINA: SERUM CHANGES IN INFECTED CALVES.D F Mahoney B V Goodger
Exp Parasitol 24(3):375-382 REF
Jun 1969 436.8 EX7

Babesia argentina, Calves, Fibrinogen, Serum.

10346-69

10346-69
RUBBER-VINE (CRYPTOSTEGIA GRANDIFLORA) TOXICITY FOR RUMINANTS.M D McGavin
Queensland J Agr Anim Sci 26(1):9-19
Mar 1969 23 Q37

Livestock diseases, Poisonous plants, Ruminants, Toxicity, Weeds.

10347-69

10347-69
THE OCCURRENCE OF EPHEMERAL FEVER OF CATTLE IN VICTORIA IN 1968.I Morgan M D Murray
Australian Vet J 45(6):271-274 MAP
Jun 1969 41.8 AU72

Cattle, Ephemeral fever, Epizootic diseases, Surveys.

10348-69

10348-69
CASE OF RABIES IN GUINEA PIG WITH LONG INCUBATION PERIOD. (POR)M R Nilsson
Sao Paulo Inst Biol Arq 36(1 JAN-MAR):59-61
Mar 1969 442.9 SA6

Animal histology, Biological assay, Guinea pigs, Inclusion bodies, Rabies. English abstract.

Two guinea pigs were inoculated intramuscularly with rabies virus from the brain of a dog. This brain was maintained at -20 degrees C. for 10 months before inoculation. The titer of this virus was 10 to the minus 2.6/0.025 ml. when tested in adult mice by the intracerebral inoculation. A guinea pig died 373 days after inoculation and his brain was positive for rabies by detection of Negri bodies and by mouse inoculation test, with incubation period of 7-8 days.

10349-69

10349-69
RABIES DIAGNOSIS. OBSERVATIONS ON STRAINS OF VIRUS WITH LOW PATHOGENICITY. (POR)M R Nilsson
Sao Paulo Inst Biol Arq 36(1 JAN-MAR):63-65
Mar 1969 442.9 SA6

Bats, Diagnosis, Livestock, Mice, Rabies virus, Vectors, Virulence.

10350-69

10350-69
OFFICIAL PROCEEDINGS. SECOND ANNUAL PACIFIC NORTHWEST ANIMAL NUTRITION CONFERENCE, AT PACIFIC SCIENCE CENTER, SEATTLE, WASHINGTON, NOVEMBER 9-10, 1967.104P REF
Nov 1967 SF95.P3
Animal nutrition, Conferences, Deficiency diseases, Feeds.

10351-69

10351-69
AN OUTBREAK OF VIBRIOSIS IN SHEEP IN NEW SOUTH WALES.G E Robards G R Peart H Acland
Australian Vet J 45(6):279-280
Jun 1969 41.8 AU72

Sheep, Surveys, Vibriosis.

10352-69

10352-69
EFFECT OF MANGANESE AND COBALT ON ASCORBIC ACID METABOLISM IN RATS.N Sasmal D Mukherjee N C Kar G C Chatterjee
J Biochem 5(3):123-125 REF
Sep 1968 385 J822

Ascorbic acid, Cobalt sulfate, Manganese chloride, Metabolism, Rats.

10353-69

10353-69
RESEARCH ON THE EFFECT OF THE ENTOMOPHAGOUS FUNGI BEAVERIA BASSIANA (BALS.) VUILL. AND METARRHIZIUM ANISOPLIAE (METSCH.) SOROK. ON WARM-BLOODED ANIMALS. (GE)B Schaefferberg
Entomophaga 13(2):175-182 REF
1968 421 EN835

Allergics, Beauveria bassiana, Entomogenous fungi, Mammals, Metarrhizium anisopliae, Toxicology. English summary.

10354-69

10354-69
EIMERIA TENELLA SCHIZONTS AND MEROZOITES IN MACROPHAGES AS SHOWN BY ELECTRON MICROSCOPY. (GE)E Scholtyssek R G Strout A Haberkorn
Z Parasitenk 32(3):284-296 REF
16 Jun 1969 442.8 Z33F

Animal diseases, Eimeria tenella, Electron microscopy, Morphology. English abstract.

10355-69

10355-69
MEDICAL AND VETERINARY CHEMICALS. VOL.1, PARTS I AND II.R Slack A W Nincham
Oxford, Pergamon Press. 254P
1968 RS79.S4

Antibiotics, Drugs, Malaria, Tuberculosis, Veterinary medicine, Viruses.

10356-69

10356-69
GAS CHROMATOGRAPHIC METHOD FOR DETERMINATION OF DIETHYLSTILBESTROL IN FEEDS.I E Smiley E D Schall
Ass Offic Anal Chem J 52(1):107-109
Jan 1969 381 AS7

Bis-(trimethylsilyl)acetamide, N,O-, Chemical analysis, Chromatography, Dicestrol diacetate, Diethylstilbestrol, Feed additives.

10357-69

10357-69
PROBLEMS IN RAISING DUCKS.K J Staples
S Australia J Agr 72(6):202-207
Jan 1969 23 SO84

LIVESTOCK PROTECTION

10383-69

Akad Nauk Sssr Gel'mintol Lab Tr 19(5, SUPPL):7-239 REF

1967 436.9 AK1

Animal diseases, Diagnosis, Histology, Human diseases, Morphology, Nematodes, Spiruridae, Taxonomy.

10383-69

TRANSMISSION OF HISTOMONIASIS WITH MALE HETERAKIS GALLINARUM (NEMATODA).

W T Springer J Johnson W. M Reid

Parasitology 59(2):401-405 REF

May 1969 448.8 P21

Blackhead, Disease transmission, Epizootic diseases, Heterakis gallinarum, Poultry diseases, Turkeys.

COMMODITY PROTECTION

STORAGE DISEASES

10384-69

TREATED WATER CURBS TOMATO DECAY.

Anonymous

Agr Res 17(11):14

May 1969 1.98 AG84

Bacterial diseases (plants), Chemical control (plant diseases), Chlorine, Sodium hypochlorite, Storage diseases, Surface-active agents, Tomatoes, Water treatment.

ARTHROPODS

10385-69

WHARF BORER.

Anonymous

Nat Pest Cont Ass Tech Release 16-69:1-4

29 Jul 1969 423.9 N213T

Chemical control (insects), Insect behavior, Insect biology, Insect identification, Insecticides, *Nacerdes melanura*, Zoogeography.

10386-69

ODOROUS HOUSE ANT FEEDS ON PHOTOGRAPHIC FILM.

L R Brown

J Econ Entomol 62(4):955-956

15 Aug 1969 421 J822

Feeding, Film, Formicidae, Gelatin, Insect behavior, Insect pests, *Tapinoma sessile*.

10387-69

THE CONTROL OF INSECTS IN BAGGED GRAIN BY THE INJECTION OF DICHLORVOS.

A A Green D R Wilkin

J Stored Prod Res 5(1):11-19

May 1969 421 J829

Chemical control (insects), Dichlorvos, Grain, Insecticides, Organophosphorus compounds, *Oryzaephilus surinamensis*, *Sitophilus granarius*, Stored products.

10388-69

STUDIES ON THE INCIDENCE AND EXTENT OF DAMAGE DUE TO INSECT PESTS IN STORED SEEDS--I. CEREAL SEEDS.

P B Mookherjee M G Jotwani P Sircar T D

Yadav

Indian J Entomol 30(1):61-65

Mar 1968 420 IN23

Crop losses, Grain, Stored-product insects, Surveys.

10389-69

OBSERVATIONS ON PROLONGED GRAIN STORAGE WITH FORCED AERATION IN ISRAEL.

S Navarro E Donahaye M Calderon

J Stored Prod Res 5(1):73-81 REF

May 1969 421 J829

BIBLIOGRAPHY

Aeration, Insect pests, Stored products, Temperature, Wheat.

10390-69

ANALYSIS OF GRAIN STORAGE PROBLEMS IN INDIA.

S Pradhan

Indian J Entomol 30(1):94-103

Mar 1968 420 IN23

Air, Chemical control (insects), Containers, Grain, Humidity, Oxygen, Storage, Stored product insects, Temperature.

10391-69

BIOLOGICAL STUDIES IN GHANA IN THE CONTROL OF CADRA CAUTELLA (WLK.), THE TROPICAL WAREHOUSE MOTH.

J Rawnsley

Ghana J Agr Sci 1(2):155-159

1968 S19.G5

Biological control (insects), *Cadra cautella*, Chemical control (insects), Ghana, Insect pests, Stored products, Warehouses. French summary.

ENVIRONMENTAL CONTAMINATION

10392-69

SURFACE HYDROLOGY AND PESTICIDES.

W F Barthel D A Parsons L L McDowell E H

Grissinger

Amer Soc Agron ASA Spec Publ 8:128-144

Nov 1966 64.9 AM3

Chlorinated hydrocarbons, Hydrology, Pesticide analysis, Pesticide residues, Pesticides, Sulfur, Water pollution.

10393-69

OBSERVATIONS ON THE DECLINE OF WATER MILFOIL AND OTHER AQUATIC PLANTS, MARYLAND, 1962-1967.

H J Elser

Northeast Weed Contr Conf Proc 22:487

03 Jan 1968 79.9 N814

Aquatic plants, Aquatic weeds, Microorganisms, *Myriophyllum spicatum*.

10394-69

EGGS AND CHLORINATED HYDROCARBONS.

D C Erwin

World Rev Pest Contr 8(1,SPRING):4

1969 79.8 W89

Birds, Chlorinated hydrocarbons, Dichloro-2,2-bis(p-chlorophenyl) ethylene, 1,1-, DDT, Eggs.

10395-69

RESEARCH ON POLLUTION OF CROPS, SOIL AND SHALLOW BODIES OF WATER IN LIGURIA, THROUGH RESIDUES OF SOME ORGANOCHEMICAL PESTICIDES. (IT)

S Kanitz G Castello

Giornate Fitopatol 49-55 REF

26 Mar 1967 SB599.G5

Adipose tissue (animals), Aldrin, Chlorinated hydrocarbons, Chlorine, Crops, Dieldrin, DDT, Endrin, Lindane, Organic compounds, Pesticide residues, Soil contamination, Tables (data), Water pollution.

10396-69

POTENTIALS FOR REMOVING PESTICIDES FROM WATER.

F K Kawahara A W Breidenbach

Amer Soc Agron ASA Spec Publ 8:122-127

Nov 1966 64.9 AM3

Chlorinated hydrocarbons, Pesticide analysis, Pesticide residues, Pesticides, Water, Water pollution, Water treatment.

10397-69

PESTICIDES AND CLAY MINERALS.

G W Kunze

Amer Soc Agron ASA Spec Publ 8:49-70 REF

Nov 1966 64.9 AM3

Carbamates, Chlorinated hydrocarbons, Clay minerals, Fumigants, Organophosphorus compounds, Pesticide residues, Pesticides, Rainfall, Soil leaching, Soil texture.

10398-69

MOVEMENT OF PESTICIDES IN THE SOIL.

H E LeGrand

Amer Soc Agron ASA Spec Publ 8:71-77

Nov 1966 64.9 AM3

Pesticide residues, Soils, Waste disposal, Water.

10399-69

DETERMINATION AND MEASUREMENT OF INSECTICIDE DUST PARTICLES IN ATMOSPHERES ADJACENT TO ORCHARDS.

G B MacCollom D B Johnstone B Parker

Bull Environ Contamination Toxicol 3(6,NOV-DEC):368-374

Dec 1968 RA1270.P35A1

Fisheries, Food analysis, Insecticides, Metals, Orchards, Spectrophotometry.

10400-69

INFLUENCE OF PESTICIDES ON SOIL MICROBES AND SOIL PROPERTIES.

J P Martin

Amer Soc Agron ASA Spec Publ 8:95-107 REF

Nov 1966 64.9 AM3

Decomposition, Pesticide residues, Plant physiology, Soil microorganisms, Soil properties, Soils, Toxicology.

10401-69

THE FATE OF PHENYL N,N'-DIMETHYLPHOSPHORDIAMIDATE IN SOIL.

R W Meikle P H Christie

Bull Environ Contamination Toxicol 4(2,MAR-APR):88-103

Apr 1969 RA1270.P35A1

Chromatography, Degradation, Electrophoresis, Nematocides, Phenyl N,N'-dimethylphosphorodiamidate, Radioisotopes, Soils.

10402-69

CONSEQUENCES OF INSECTICIDE USE OF NONTARGET ORGANISMS.

L D Newsom

Annu Rev Entomol 12:257-286 REF

1967 421 AN72

Air, Animals, Bibliography, Birds, Chlorinated hydrocarbons, Fish, Humans, Insecticide residues, Insecticides, Plants, Soils, Water, Wildlife.

10403-69

WATER FLORAE AS INDICATORS OF IRRIGATION WATER CONTAMINATION BY DDT.

G W Ware M K Dee W P Cahill

Bull Environ Contamination Toxicol 3(6,NOV-DEC):333-338

Dec 1968 RA1270.P35A1

Aquatic plants, DDT, Indicator plants, Insecticides, Irrigation, Plant water relations, Water analysis, Water pollution.

RESIDUES

10404-69

GLC DETERMINATION OF RESIDUES OF DISULFOTON, OXYDEMOTONMETHYL, AND THEIR METABOLITES IN TOBACCO PLANTS.

M C Bowman M Beroza C R Gentry

Ass Offic Anal Chem J 52(1):157-162 REF

Jan 1969 381 AS7

Chemical analysis, Chromatography, Disulfoton, Insecticide residues, Oxydemetonmethyl, Tobacco.

10405-69

DDT IN FATS ON ANTARCTIC ANIMALS.

H V Brewerton

New Zealand J Sci 12(2):194-199

Jun 1969 514 N482

Aquatic animals, Chlorinated hydrocarbons, Chromatography, DDT, Fats, Insecticide residues, Insecticides.

10406-69
PROBLEMS WITH DDT IN FISH CULTURE OPERATIONS.

J P Cuerrier J A Keith E Stone
Natur Can 94(3,MAY-JUN):315-320
Jun 1967 410 N216
DDT, Feed, Fish, Fishery products, Insecticide residues, Roe, Trout.

10407-69
PESTICIDE RESIDUES IN THE ECOSYSTEM.

E H Dustman L F Stickle
Amer Soc Agron ASA Spec Publ 8:109-121 REF
Nov 1966 64.9 AM3
Chlorinated hydrocarbons, DDT, Pesticide application, Pesticide residues.

10408-69
UPTAKE OF DIELDRIN BY ISOLATED PERFUSED GILLS OF RAINBOW TROUT.

P O Fromm R C Hunter
Can Fish Res Board J 26(7):1939-1942
Jul 1969 442.9 C16J
Animal physiology, Chlorinated hydrocarbons, Cyclohexene compounds, Dieldrin, Fish, Insecticide residues, Insecticides, Trout.

10409-69
COLLABORATIVE STUDY OF CONFIRMATIVE PROCEDURES BY SINGLE SWEEP OSCILLOGRAPHIC POLAROGRAPHY FOR THE DETERMINATION OF ORGANOPHOSPHORUS PESTICIDE RESIDUES IN NONFATTY FOODS.

R J Gajjan
Ass Offic Anal Chem J 52(4):811-817 REF
Jul 1969 381 AS7
Chemical analysis, Diazinon, Food contamination, Insecticide residues, Malathion, Methodology, Methyl parathion, Organophosphorus compounds, Parathion, Polarography.

10410-69
GAS CHROMATOGRAPHIC DETERMINATION OF RESIDUES OF DALAPON IN SEVERAL SUBSTRATES.

M E Getzendaner
Ass Offic Anal Chem J 52(4):824-831
Jul 1969 381 AS7
Animal extracts, Chemical analysis, Chromatography, Dalapon, Herbicide residues, Plant extracts.

10411-69
INDUSTRY'S CONCERN WITH PESTICIDE RESIDUES.

R Hansberry
Amer Soc Agron ASA Spec Publ 8:10-17
Nov 1966 64.9 AM3
Aldrin, Corn, Cotton, Endrin, Fish, Heptachlor epoxide, Insecticide residues, Pesticide residues, Rice, Soils.

10412-69
EXTRACTION AND GAS-LIQUID CHROMATOGRAPHIC DETERMINATION OF VERNOLATE IN SOIL.

H P Hermanson M Siewierski K Helrich
Ass Offic Anal Chem J 52(1):175-177
Jan 1969 381 AS7
Chemical analysis, Chromatography, Herbicide residues, Soils, Vernolate.

A gas-liquid chromatographic system using flame photometric detection was developed for the separation and measurement of residue quantities of vernolate and 1-propanethiol in soil. With 3 per cent Apiezon L on Chromosorb G column, the limit of detection was 0.003 mg for either compound.

10413-69
MODIFICATIONS OF THE MICROMETHOD OF SAMPLE CLEANUP FOR THIN-LAYER AND GAS CHROMATOGRAPHIC SEPARATION AND DETERMINATION OF COMMON ORGANIC PESTICIDE RESIDUES.

A M Kadoum
Bull Environ Contamination Toxicol 3(6,NOV-DEC):354-359
Dec 1968 RA1270.P35A1
Chemistry, Chromatography, Methodology, Organic compounds, Pesticide residues.

10414-69
ACTIVATION AND STANDARDIZATION OF PURIFIED SILICA GEL FOR COLUMN CHROMATOGRAPHIC CLEANUP OF PESTICIDE RESIDUE EXTRACTS.

A M Kadoum
Bull Environ Contamination Toxicol 4(2,MAR-APR):120-127
Apr 1969 RA1270.P35A1
Chemical analysis, Chromatography, Methodology, Pesticide residues, Silica gels.

10415-69
SURVIVAL OF LYOPHILIZED BACILLUS POPILLIAE IN SOIL.

A J Lingg K J McMahon
Appl Microbiol 17(5):718-720 REF
May 1969 448.3 AP5
Bacillus popilliae, Humidity, Longevity, Lyophilization, Soil microorganisms.

10416-69
ANALYSIS OF GRAINS FOR MULTIPLE RESIDUES OF ORGANIC FUMIGANTS.

B Malone
Ass Offic Anal Chem J 52(4):800-805 REF
Jul 1969 381 AS7
Chemical analysis, Distillation, Fumigants, Grain, Methodology, Methyl bromide, Pesticide residues.

10417-69
NOTICE OF FILING OF PETITION FOR FOOD ADDITIVES.

M McCart
Fed Regist 34(94):7826-7827
16 May 1969 L1.451
Bagasse, Dimethyl-3-(alpha,alpha,alpha-trifluoromethyl)urca, 1,1-, Food additives, Herbicide residues, Tolerances.

10418-69
METHODS OF DETERMINING PESTICIDES IN FOOD PRODUCTS. (JPRS 34,946).

A A Pokrovskiy et. al.
5P
07 Apr 1966 TRANSL. 15920
Food, Methodology, Organic compounds, Organophosphorus compounds, Pesticide residues. Translation from Metody Opredeleniya Pestitsidov v Dishchevykh Produktakh, page 2, 1967.

10419-69
PEACOCK PLASMA, A USEFUL CHOLINESTERASE SOURCE FOR INHIBITION RESIDUE ANALYSIS OF INSECTICIDAL CARBAMATES.

G Voss
Bull Environ Contamination Toxicol 3(6,NOV-DEC):339-347
Dec 1968 RA1270.P35A1
Birds, Blood plasma, Carbamates, Chemical analysis, Cholinesterases, Insecticide residues, Methodology.

10420-69
TRAPPING OF DIELDRIN LOST FROM AQUATIC ALGAE CULTURES.

W B Wheeler
Ass Offic Anal Chem J 52(4):760-764
Jul 1969 381 AS7
Algae, Chemical analysis, Chemistry, Chromatography, Dieldrin, Distillation, Insecticide residues.

10421-69
EXTRACTION, SEPARATION, AND GLC DETECTION OF SILVEX AND ITS PROPYLENE GLYCOL ETHER ESTER IN FISH TISSUE.

P W Williams J I Teasley
Ass Offic Anal Chem J 52(4):782-785 REF

Jul 1969 381 AS7
Animal extracts, Chemical analysis, Chemistry, Fish, Quantitative analysis, Silvex.

TOXICOLOGY

10422-69
BIODEGRADATION OF PESTICIDES.

M Alexander
Amer Soc Agron ASA Spec Publ 8:78-84
Nov 1966 64.9 AM3
Biodegradation, Enzymes, Metabolism, Microorganisms, Pesticides, Toxicology.

10423-69
ENDRIN INDUCED ALTERATIONS IN BOUND CARBOHYDRATES IN RAT SERUM.

R L Coleman
Bull Environ Contamination Toxicol 3(6,NOV-DEC):348-351
Dec 1968 RA1270.P35A1
Animal physiology, Blood serum, Carbohydrates, Endrin, Glycoproteins, Pesticides, Rats, Toxicology.

10424-69
SPECIFICITY AND MECHANISM IN THE ACTION OF SALIGENIN CYCLIC PHOSPHORUS ESTERS.

M Eto
Residue Rev 25:187-200 REF
1969 389.9 R314
Biochemistry, Insects, Organophosphorus compounds, Physiology, Toxicity.

10425-69
DEGRADATION AND DISAPPEARANCE OF ORTHO, PARA ISOMER OF TECHINICAL DDT IN LIVING AND DEAD AVIAN TISSUES.

M C French D J Jefferies
Science 165(3896):914-916 REF
29 Aug 1969 470 SC12
Animal metabolism, Birds, DDT, Insecticides, Isomers, Toxicology.

10426-69
THE IN VITRO METABOLISM OF ORGANOPHOSPHORUS INSECTICIDES BY TISSUE HOMOGENATES FROM MAMMAL AND INSECT.

K Fukunaga J I Fukami T Shishido
Residue Rev 25:223-249 REF
1969 389.9 R314
Animal metabolism, Degradation, Insect metabolism, Organophosphorus compounds, Tissue culture, Tissue extracts.

10427-69
STRUCTURE OF PESTICIDES AND DECOMPOSITION BY SOIL MICROORGANISMS.

D D Kaufman
Amer Soc Agron ASA Spec Publ 8:85-94 REF
Nov 1966 64.9 AM3
Chemical structure, Chlorinated hydrocarbons, Decomposition, Pesticide residues, Soil microorganisms, Soils.

10428-69
RESEARCHES ON GALEGA SPECIES REGARDING THEIR CONTENT OF TOXINS BY MEANS OF BIOLOGICAL METHODS. 1. TOXICITY OF GOATS-RUE (GALEGA OFFICINALIS L.) FOR WARMBLOODED ANIMALS. (GE

H. Kohler
Biol Zentralbl 88(2, MAR-APR):165-177 REF
Apr 1969 442.8 B523
Mice, Plant extracts, Poisonous plants, Toxins. English abstract.

10429-69
DELAYED LETHAL EFFECT OF 2,4-DICHLOROPHENOXYACETIC ACID ON BACTERIA.

C A Lamartiniere L T Hart A D Larson

TOXICOLOGY

10430-69

Bull Environ Contamination Toxicol 4(2,MAR-APR):113-119

Apr 1969 RA1270.P35A1

Aerobacter aerogenes, D, 2,4-, Enzymes, Herbicides, Inhibitors, Micrococcaecae, Pseudomonas fluorescens, Staphylococcus aureus, Toxicology.

10430-69

THE DIFFERENCE IN SENSITIVITY TO THE STERILIZING ACTION OF O,O-DIETHYL-O-PARANITROPHENYL THIOPHOSPHATE OF THE EMBRYONIC TESTICLES OF QUAILS AND CHICKENS IN IN VITRO CULTURE. (FR) Y Lutz-Ostertag R Meinie!*Paris Soc Biol Compt Rend* 162(8-9):1471-1472

03 Mar 1969 442.9 P21

Animal physiology, Chickens, Parathion, Quail, Testes, Tissue culture.

PLANT PHYSIOLOGY & BIOCHEMISTRY

10431-69

CELL PHYSIOLOGY INVESTIGATIONS OF THE ACTION OF NEW TRIAZINE DERIVATIVES ON PETIOLE EPIDERMIS OF SOLANUM TUBEROSUM L. (GE)

S Auerbach P Pruefer G Weise

Biol Zentralbl 87(4):425-438, REF

Jul 1968 442.8 B523

Cells, Epithelium, Herbicides, Leaves, Plant physiology, Potatoes, Triazines. English summary. Leaf-stalk epidermis used.

10432-69

PHYSIOLOGICAL AND BIOCHEMICAL CONTRIBUTION TO FUME DAMAGE RESEARCH. 8. PHYSIOLOGICAL INVESTIGATIONS OF THE ACTION OF SO₂ ON THE METABOLISM OF CONIFER NEEDLES IN WINTER. (GE)

S Boertiz

Biol Zentralbl 87(4):489-506, REF

Jul 1968 442.8 B523

Air pollution, Coniferae, Environment, Picea abies, Picea omorika, Pine needles, Pinus sylvestris, Plant biochemistry, Plant hardness, Plant injuries, Plant metabolism, Plant physiology, Sulfur dioxide. English and German summaries.

10433-69

DISCOVERY OF SINIGRIN AS A PHAGOSTIMULANT BY ATHALIA PROXIMA KLUG. (HYMENOPTERA: TENTHREDINIDAE).

J K Bogawat B K Srivastava

Indian J Entomol 30(1):89

Mar 1968 420 IN23

Athalia proxima, Glycosides, Plant biochemistry, Sinigrin, Tenthredinidae.

10434-69

INFLUENCE OF ATRAZINE (2-CHLORO-4-ETHYLAMINO-6-ISOPROPYLAMINO-5-TRIAZINE) ON AUXIN METABOLISM OF PLANTS.

E Ebert Ch J V Assche

Experientia 25(7):758-759 REF

15 Jul 1969 475 EX7

Atrazine, Herbicides, Plant biochemistry, Plant hormones, Plant metabolism, Plant physiology.

10435-69

VARIATIONS OF THE CULTURE OF FUSARIUM MONILIFORME INDUCED BY N-NITROETHYLUREA AND ETHYL METHANESULFONATE. (RUS)

L I Erokhhina

Genetika 4(11):101-110 REF

1968 QH431.A1G4

Ethyl methanesulfonate, Fungus cultures, Fusarium moniliforme, Gibberellins, Plant genetics, Urea compounds. English summary.

10436-69

PLANT GROWTH REGULATORS.

D C Erwin

BIBLIOGRAPHY*World Rev Pest Contr* 8(1,SPRING):5

1969 79.8 W89

Bibliography, Literature, Plant growth regulator.

10437-69

THE CORRELATION BETWEEN PHYSIOLOGICAL ACTIVITY AND PHYSIOCHEMICAL PROPERTY OF THE SUBSTITUTED PHENOLS.

T Fujita M Nakajima

Residue Rev 25:319-326 REF

1969 389.9 R314

Chemical activation, Chemical structure, Mathematical analysis, Phenols, Phytotoxicity, Plant biochemistry.

10438-69

EFFECT OF DICHLORO DIPHENYL TRICHLORO-ETHANE (DDT) ON LEGHEMOGLOBIN CONTENT OF ROOT NODULES OF PHASEOLUS AUREUS (GREEN GRAM).

A C Gaur R P Pareek

Experientia 25(7):777

15 Jul 1969 475 EX7

DDT, Hemoglobin (plants), Insecticides, Mung beans, Plant biochemistry, Plant physiology, Roots, Toxicology.

10439-69

CYTOKININS AND TRANSFER RIBONUCLEIC ACIDS. II. PRESENCE OF CYTOKININS IN DIFFERENT AMINO-ACID SPECIFIC TRANSFER RIBONUCLEIC ACIDS OF BREWER'S YEAST AS REVEALED BY THE GROWTH RESPONSE OF TOBACCO-PITH CALLUS TISSUE AND SCORZONERA CROWN-GALL TISSUE.

M Giannattasio G Jeannin A Kovoor

Physiol Plant 22(3):458-461

05 Jun 1969 450 P564 (1)

Cytokinins, Plant biochemistry, Ribonucleic acid, Scorzonera, Tissue culture, Tobacco, Yeasts.

10440-69

COMPETITION BETWEEN FLAX AND WILD BUCKWHEAT.

R D Gruenhagen J D Nalewaja

Weed Sci 17(3):380-384 REF

Jul 1969 79.8 W41

Competition, Flax, Light, Plant ecology, Polygonum convolvulus, Population, Water, Weeds.

10441-69

VOLATILE METABOLITES FROM DIMETHYLDITHIOCARBAMATE FUNGICIDE RESIDUES.

J W Hylin B H Chin

Bull Environ Contamination Toxicol 3(6,NOV-DEC):322-332 REF

Dec 1968 RA1270.P35A1

Chemistry, Ferbam, Fungicides, Papayas, Pesticide residues, Plant metabolism, Radioactive tracers, Volatile substances.

10442-69

PROGRESS REPORT ON SHADE TREE INHIBITION. (ABSTRACT).

R R Johnson P E Spangler J E Esposito

Northeast Weed Contr Conf Proc 22:512

03 Jan 1968 79.9 N814

Plant growth inhibitors, Pruning, Shade trees.

10443-69

ON THE INHIBITORY EFFECT OF YEAST RIBONUCLEIC ACID ON THE INFECTION OF NICOTIANA GLUTINOSA BY TOBACCO MOSAIC VIRUS.

M Meneghini M R Musumeci W B C Moraes

Sao Paulo Inst Biol Arq 36(1,JAN-MAR):5-7

Mar 1969 442.9 SA6

Nicotiana glutinosa, Plant physiology, Ribonucleic acid, Tobacco mosaic virus, Yeasts.

10444-69

THE MODE OF ACTION OF MALEIC HYDRAZIDE: INHIBITION OF GROWTH.

L D Nooden

Physiol Plant 22(2):260-270 REF

04 Apr 1969 450 P564 (1)

Corn, Maleic hydrazide, Mitosis, Plant biochemistry, Plant growth inhibitors.

10445-69

PESTICIDE EFFECT ON PHOSPHORUS ABSORPTION FROM FERTILIZER-PESTICIDE MIXTURE APPLIED TO A TROPICAL SOIL WITH LOW AVAILABLE PHOSPHORUS VALUE.

C S Ofori

Ghana J Agr Sci 1(2):99-102

1968 S19.G5

Absorption, Aldrin, Chlorinated hydrocarbons, Corn, Dieldrin, Fertilizers, Pesticides, Phosphorus, Plant biochemistry, Soil properties, Tropical agriculture. French summary.

10446-69

BIOCHEMICAL STUDIES ON THE TERPENE METABOLISM IN SWEET POTATO ROOT TISSUE WITH BLACK ROT. EFFECT OF C10- AND C15-TERPENOLS ON ACETATE-2-14C INCORPORATION INTO IPOMEAMARONE.

I Oguni K Oshima H Imaseki I Uritani

Agr Biol Chem 33(1):50-62

Jan 1969 385 AG8B

Ceratozystis fimbriata, Farnesol, Geraniol, Metabolism, Sweetpotatoes.

10447-69

COLCHICINE-INDUCED TETRAPLOID AZALEAS.

R L Pryor L C Frazier

Hortscience 3(4,WINTER):283-286

1968 SB1.H6

Azalea, Chromosomes, Colchicine, Crop varieties, Plant abnormalities, Polyploidy.

10448-69

A SURVEY OF THE CHEMICAL COMPOSITION OF POTAMGETON AND MYRIOPHYLLUM IN NEW JERSEY.

D N Riemer S J Toth

Weed Sci 17(2):219-223

Apr 1969 79.8 W41

Aquatic plants, Chemical analysis, Myriophyllum, Plant biochemistry, Potamogeton, Surveys, Weeds.

10449-69

DEGRADATION OF P32-BROMOPHOS BY MICROORGANISMS AND SEEDLINGS.

J Stenersen

Bull Environ Contamination Toxicol 4(2,MAR-APR):104-112

Apr 1969 RA1270.P35A1

Bromophos, Degradation, Insecticides, Microbiological degradation, Plant metabolism, Radioactive tracers, Seedlings.

10450-69

THE EFFECT OF N-DIMETHYL AMINO SUCINAMIC ACID (ALAR) ON SIZE, SHAPE AND MATURITY OF DELICIOUS APPLES.

D T Sullivan

Hortscience 3(1,SPRING):18

1968 SB1.H6

Apples, Crop yields, Plant growth inhibitors, Spraying, Succinic acid, 2,2-dimethylhydrazide.

10451-69

PHOTOCONTROL OF ROUGH CINQUEFOIL SEED GERMINATION AND ITS ENHANCEMENT BY TEMPERATURE MANIPULATION AND KNO₃.

R. B. Taylorson

Weed Sci 17(2):144-148 REF

Apr 1969 79.8 W41

Light, Plant physiology, Potassium nitrate, Potentilla, Seed germination, Temperature.

10452-69

REVERSION OF SENESCENCE: EFFECTS OF 2,4-DICHLOROPHENOXYACETIC ACID AND INDOLEACETIC ACID ON RESPIRATION, ETHYLENE PRODUCTION, AND RIPENING OF BANANA FRUIT SLICES.

M Vendrell

Australian J Biol Sci 22(3):601-610 REF

CHEMISTRY

10478-69

10478-69 CONVERSION OF HEPTACHLOR TO ITS EPOXIDE.

J Singh

Bull Environ Contamination Toxicol 4(2,MAR-APR):77-79

Apr 1969 RA1270.P35A1

Chlorinated hydrocarbons, Heptachlor, Heptachlor epoxide, Oxidation, Synthesis.

10479-69

DISTRIBUTION RATIO OF SOME CHLORINATED HYDROCARBON INSECTI- CIDES BETWEEN HEXANE AND WATER.

S Voerman

Bull Environ Contamination Toxicol 4(2,MAR-APR):64-67

Apr 1969 RA1270.P35A1

Aldrin, Chemical analysis, Chlorinated hydrocarbons, Dieldrin, DDT, Heptachlor, Heptachlor epoxide, Hexane, Insecticides, Lindane, Solubility, Water.

10480-69

EVALUATION OF EXTRACTION AND CLEANUP METHODS FOR ANALYSIS OF DDT AND DDE IN GREEN ALFALFA.

G W Ware M K Dec

Bull Environ Contamination Toxicol 3(6,NOV-DEC):375-382

Dec 1968 RA1270.P35A1

Alfalfa, Chemical analysis, Chlorinated hydrocarbons, Chromatography, Dichloro-2,2-bis(p-chlorophenyl) ethylene, 1,1-, DDT, Electron capture, Extraction techniques, Insecticide residues, Insecticides.

BIBLIOGRAPHY

10481-69

REACTION OF AFLATOXIN B1 WITH ACETIC ACID-THIONYL CHLORIDE.

M Wiley A C Weiss N Bennett

Ass Offic Anal Chem J 52(1):75-76

Jan 1969 381 AS7

Acetyl-2-hydro-6-methoxydifurocoumarone, 1-, Aflatoxin, Chemical analysis, Isomers.

10482-69

NOTE ON VERSATILITY OF SILICONE DOW CORNING 11 SUBSTRATE FOR GAS CHRO- MATOGRAPHY OF PESTICIDES.

F C Wright J C Riner

Ass Offic Anal Chem J 52(4):879

Jul 1969 381 AS7

Chlorinated hydrocarbons, Chromatography, Methodology, Organophosphorus compounds, Pesticides.

ENGINEERING

10483-69

AN EVALUATION OF HERBICIDE INCOR- PORATION EQUIPMENT.

L E Bode K H Read M R Gebhardt C L Day

Mo Agr Exp Sta Res Bull (946):42P REF

Feb 1969 100 M693 (3)

Dairy equipment, Herbicide application, Herbicides, Trifluralin.

10484-69

AN EVALUATION OF HERBICIDE INCOR- PORATION EQUIPMENT.

L E Bode K H Read M R Gebhardt C L Day

Mo Agr Exp Sta Res Bull 946:42P

Feb 1969 100 M693 (3)

Agricultural engineering, Chemical control (weeds), Chromatography, Dairy equipment, Herbicides, Pesticide application, Trifluralin, Weed control.

INDUSTRY

ECONOMICS

10485-69

GROWING CHRISTMAS TREES ON A POWER LINE RIGHT-OF-WAY.

W P MacConnell J J Joslyn

Northeast Weed Contr Conf Proc 22:329-333

03 Jan 1968 79.9 N814

Brush control, Christmas trees, Costs, T, 2,4,5-

EDUCATION

10486-69

RESEARCH AND EDUCATION NEEDS IN THE USE OF PESTICIDES.

W C Shaw

Amer Soc Agron ASA Spec Publ 8:1-9

Nov 1966 64.9 AM3

Education, Pest control, Pesticides, Research.

SUBJECT INDEX

- ABDOMEN**
Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
- ABSORPTION**
Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999
Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276
Absorption and translocation of pyrazon by plants. 10287
Absorption and penetration of picloram in potato tuber discs. 10308
Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
- ACACIA FARNESIANA**
Chemical stimulation of ethylene evolution and bud growth. 10300
- ACANTHOCEPHALA**
The development of the body wall of *Polymorphus minutus* (Acanthocephala) in its intermediate host *Gammarus pulex*. 10370
Contribution to the research on the helminth fauna of wild birds in Thrace (southern Bulgaria) Acanthocephala. 10371
- ACARICIDES**
Histological, behavioral, and symptomatic effects of Pentac on *Tetranychus urticae*. 10018
Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
European red mite and two-spotted spider mite control on apples in California. 10236
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- ACARINA**
Mites of the super-family Gamasoidea on micromammalia in the western Balkan Range. 9911
A study of the mites of the Gamasoidea super-family (Parasitiformes) infesting small mammals on the Vitosha Mountain. 10364
- ACCIDENT PREVENTION**
Insecticides, how to use them safely and effectively. 10466
- ACER PALMATUM**
Effects of several herbicides on yews and Japanese maples. 10280
- ACER PSEUDOPLATANUS**
Spaced-out gregariousness in sycamore aphids *Drepanosiphum platanoides* (Schrank) (Homoptera, Callaphididae). 10050
- ACER RUBRUM**
Effects of 2,4,5-T during the approach of woody plant dormancy. 10311
- ACETONE**
An integrated technique to study the effects of fumigants on respiration of insects. 9972
- ACETYL-2-HYDRO-6-METHOXYDIFUROCOUMARONE, 1-**
Reaction of aflatoxin B1 with acetic acid-thionyl chloride. 10481
- ACHATINA FULICA**
Use of metaldehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. 10319
Observations on the control of *Achatina fulica* Bowdich, the giant African snail with methaldehyde. 10320
Role of hermit crabs in the biological control of *Achatina fulica* (Bowdich) on the Andamans. 10321
Gulella (Indoeneae) bicolor (Hutton), a predator of giant African snail *Achatina fulica* Bowdich. 10322
ACIDS
Method for repelling bees. patent 3,456,056. 10099
- ACLERIS VARIANA**
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
- ACMOPOLYNEMA**
New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916
- ACRIDIDAE**
The external morphogenesis of grasshopper embryos. 9987
Development of *Chrotogonus trachypterus* (Blanch.) (Orthoptera: Pyrgomorphidae) in relation to different levels of temperature and humidity. 10026
Water uptake and embryonic development in eggs of *Chorthippus brunneus* Thunberg (Saltatoria: Acrididae). 10079
- ADENOSINE PYROPHOSPHATES**
The utilization of C14-labelled adenosine diphosphate during the in vitro respiration of housefly sarcosomes. 9984
- ADIPOSE TISSUE (ANIMALS)**
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- ADSORPTION**
Chemistry of herbicides. 10464
- Aedes Aegypti**
Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023
A more recent sensillary type on the antenna of female mosquitoes (*Aedes aegypti* L.). 10055
Field observations on periodicity and site preference in oviposition by *Aedes aegypti* (L.) and related mosquitoes (Diptera: Culicidae) in Kenya. 10072
- Aedes nigromaculis**
Anatomical indicators for assessing age of mosquitoes: changes in ovarian follicles. 10107
- Aedes seatoi**
A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- AERATION**
Observations on prolonged grain storage with forced aeration in Israel. 10389
- AERIAL SPRAYING**
Helicopter sprayers may rescue infested forests. 9959
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
- AEROBACTER AEROGENES**
Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429
- AERODYNAMICS**
Locust wind receptors. I. Transducer mechanics and sensory response. 9981
Locust wind receptors. III. Contribution to flight initiation and lift control. 9982
- AFLATOXIN**
Reaction of aflatoxin B1 with acetic acid-thionyl chloride. 10481
- AGAR**
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- AGING**
Studies and suggestions on the behaviour of moths at light. 10033
Age-distribution and abundance in populations of flour beetles. I. Experimental studies. 10071
Anatomical indicators for assessing age of mosquitoes: changes in ovarian follicles. 10107
Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452
- AGRICULTURAL CHEMISTRY**
The fungitoxic mechanisms in quinoline compounds and their chelates. 10202
Mode of action of agricultural antibiotics developed in Japan. 10205
- AGRICULTURAL ENGINEERING**
An evaluation of herbicide incorporation equipment. 10484
- AGRICULTURE**
Chemical preparations in the services of agriculture and forestry. 10169
- AGROPYRON**
Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310
- AGROSAN GN**
Seed-mycoflora of musk-melon. 10193
- AIR**
Analysis of grain storage problems in India. 10390
Consequences of insecticide use of nontarget organisms. 10402
- AIR POLLUTION**
Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO2 on the metabolism of conifer needles in winter. 10432
- AIR-BORNE PLANT DISEASES**
Heterobasidion annosum. 10215
Phellinus igniarius. 10216
Phellinus pomaceus. 10217
Inonotus hispidus. 10218
- ALDRIN**
Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395

SUBJECT INDEX

ALEYRODIDAE

- Industry's concern with pesticide residues. 10411
 Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
 Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479

ALEYRODIDAE

- Eretmocerus corni Hald. (Hym., Aphelinidae), a parasite of Siphoninus phillyreae Halid. (Hom., Aleyrodidae). 10070

ALFALFA

- Freeing alfalfa clones from alfalfa mosaic virus by heat treatment. 10185
 Effects of chlorpropham vapors on dodder seedlings. 10305
 The effects of two phytobland oils on the postemergence activity of bromoxynil and DNBP applied in two spray volumes in alfalfa. 10316
 Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480

ALGAE

- Trapping of dieldrin lost from aqueous algae cultures. 10420

ALLANTONEMATIDAE

- Description, biology, and importance of a new species of Allantonematidae (Nematoda), parasite of the aphidiphagous Coccinellidae: Parasitylenchus coccinellinae, n. sp. 10039

ALLERGIES

- Allergic responses to insects. 10166
 Research on the effect of the entomophagous fungi Beauveria bassiana (bals.) Vuill. and Metarrhizium anisopliae (Metsch.) Sorok. on warm-blooded animals. 10353

ALLOMORPHUS FRANZI

- Allomorphus franzi, n. gen., n. spec. (Coleoptera, Curculionidae), a new species and genus from Austria. 8. Contribution to the knowledge of the Palearctic Cossoninae. 9891

ALTERNARIA

- Chemistry of fungicides. 10476

ALTERNARIA SOLANI

- Effect of CL-50, a new synthetic fungicide on certain fungi. 10173

ALTERNARIA TENUIS

- Preliminary note on the occurrence of black point disease of wheat in India. 10228

AMARANTHACEAE

- Tall waterhemp competition in grain sorghum. 10285

AMARANTHIUS RETROFLEXUS

- Phytotoxicity of benzothiazole analogs of diphenamid. 10290

AMBLYOMMA AMERICANUM

- Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119

AMBROSIA

- Basis for selectivity of linuron on carrot and common ragweed. 10295

AMIBEN

- Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459

AMIDES

- Metabolism of organic pesticide chemicals in higher plants. 10278

AMINO ACIDS

- Variations in free amino acids in the larvae and pupae of *Cbilo zonellus*. 9994

- A *Salmonella typhimurium* involved in the regulation of isoleucine, valine and leucine biosynthesis. 10326

AMITROLE

- Effects of several herbicides on yews and Japanese maples. 10280

AMMONIUM THIOCYANATE

- Effects of ammonium thiocyanate on carbohydrate metabolism in the cotton plant. 10455

AMPHIPYRA BERBERA

- Amphipyra pyramidea* L. and *A. berbera* Rungs in Finland (Lepidoptera, Noctuidae). 9913

AMPHIPYRA PYRAMIDEA

- Amphipyra pyramidea* L. and *A. berbera* Rungs in Finland (Lepidoptera, Noctuidae). 9913

AMSACTA MOOREI

- Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266

ANAGRUS

- New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916

ANAGYRUS PSEUDOCOCCI

- Studies on an Israel strain of *Anagyrus pseudococci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. 9964

ANCYLOSTOMA CANINUM

- Notes on Parasitology: (A). Canine hookworm (*Ancylostoma caninum* (Ercolani 1859, Hall, 1913) and (B) Canina coccidiosis (*Eimeria canis*, Wenyon 1923). 10366

- Ancylostoma caninum*: Fine structure of intestinal epithelium. 10377

ANDRENA

- Pollens collected by species of *Andrena* (Hymenoptera: Apidae). 9986

ANILIDES

- Metabolism of organic pesticide chemicals in higher plants. 10278

ANIMAL DISEASES

- Toxoplasma gondii*: Isolation of samples starting from the diaphragms of clinically healthy pigs slaughtered in Sao Paulo, Brazil. 10327

- Bloat on *Dolichos lahlah*. 10335

- Eimeria tenella* schizonts and merozoites in macrophages as shown by electron microscopy. 10354

- The effect of gastro-intestinal secretions on taeniid egg membranes. 10374

- Spirurata of animals and humans and the diseases. 10382

ANIMAL EXTRACTS

- Analytical studies on extracts of *Litomosoides carinii*. 10341

- Gas chromatographic determination of residues of Dalapon in several substrates. 10410

- Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421

- Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472

ANIMAL GENETICS

- Mutagenic effects of TEPA and METEPA in mice. 10333

ANIMAL HISTOLOGY

- Case of rabies in guinea pig with long incubation period. 10348

ANIMAL METABOLISM

- Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425

- The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426

ANIMAL NUTRITION

- Bloat on *Dolichos lablab*. 10335

- Official proceedings. Second annual Pacific Northwest Animal Nutrition Conference, at Pacific Science Center, Seattle, Washington, November 9-10, 1967. 10350

- Physico-organic chemical approach to the mode of action of organophosphorus insecticides. 10014

- On the effect of molds on various animal species. Part 2. 10343

- Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408

- Endrin induced alterations in hound carbohydrates in rat serum. 10423

- The difference in sensitivity to the sterilizing action of O,O-dicthyl-O-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in in vitro culture. 10430

- ANIMALS
Ixodes pacificus Cooley and Kohls, 1943: Its life-history and occurrence. 9962

- On the effect of molds on various animal species. Part 2. 10343

- Consequences of insecticide use of nontarget organisms. 10402

- ANTENNAE
 A more recent sensillary type on the antenna of female mosquitoes (*Aedes aegypti* L.). 10055

- ANTHELMINTICS
 The course of naturally acquired helminth infections of horses given regular anthelmintic treatment. 10380

- ANTHOMYIIDAE
 Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. 10080

- Atherigona* sp. (Anthomyiidae: Diptera) as a pest of wheat in Rajasthan. 10250

- ANTHONOMUS GRANDIS
 The behavior of newly emerged boll weevils. 10016

- Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068

- Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100

- Growers join forces to battle the boll weevil. 10233

- Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
- ANTHOPHORINAE**
Biological notes on the bee *Tetralonia minuta* and its cleptoparasite, *Morgania histrio transvaalensis* (Hymenoptera: Anthophoridae). 10109
- ANTIBIOTICS**
Fungicidal control of rice diseases. 10170
Mode of action of agricultural antibiotics developed in Japan. 10205
Tetracycline antibiotic compositions for oral use. Patent 3,454,697. 10337
Medical and veterinary chemicals. Vol.1, parts I and II. 10355
- ANTIBODIES**
Vitellogenic blood protein synthesis by insect fat body. 10083
Control method of inactivated vaccines against the Newcastle disease by means of the titulation of neutralizing antibodies. 10334
The isolation of a strain of *Leptospira* serotype hardjo, from cattle in Queensland. 10358
- ANTISEPTICS**
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- AONIDIELLA AURANTII**
Marking and recapture of California red scale for field studies. 10101
- APANTELES CHILONIS**
Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. 10045
- APANTELES FLAVIPES**
Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. 10045
- APHELINIDAE**
A new species of *Mesidia* (Hymenoptera: Aphelinidae) from California. 9914
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006
Eretmocerus corni Hald. (Hym., Aphelinidae), a parasite of *Siphoninus phillyreae* Hafid. (Hom., Aleyrodidae). 10070
- APHIDIDAE**
Aphid fauna of Macedonia. 9943
Local lesion host for grassy shoot virus of sugarcane. 10224
- APHIS GOSSYPHII**
Efficiency of three colonies of melon aphids as transmitters of Tristeza virus. 10258
- APHYTIS**
The colonization and success in Greece of some imported *Aphytis* spp. (Hym. Aphelinidae) parasite on citrus scale insects (Hom. Diaspididae). 10241
- APHYTIS HOLOXANTHIUS**
Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264
- APICULTURE**
Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974
- APIDAE**
Bees as pests. 10244
- APIS INDICA**
Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974
Studies on phosphohexoseisomerase (d-glucose-6-phosphate ketol isomerase) from the Indian honeybee, *Apis indica* Fabricius. 10098
- APIS MELLIFERA**
Experimental infections with *Bacillus* larvae. I. A strain with a morphological marker. 10020
Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). 10057
Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123
Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
- APPLES**
European red mite and two-spotted spider mite control on apples in California. 10236
The effect of N-dimethyl amino succinamic acid (Alar) on size, shape and maturity of Delicious apples. 10450
Effects of gibberellin A3 on fruit shape and subsequent seed dormancy of apple. 10453
- AQUATIC ANIMALS**
DDT in fats on Antarctic animals. 10405
- AQUATIC BIRDS**
The comparative pathology of duck plague in wild Anseriformes. 10342
- AQUATIC INSECTS**
Presentation of aquatic heteropteran fauna II, aquatic Heteroptera from Evora, Portugal. 9922
The life histories and drifting of the Plecoptera and Ephemeroptera in a dartmoor stream. 10001
Aquatic insect communities of a small stream on Mont St. Hilaire, Quebec. 10060
- AQUATIC PLANTS**
Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306
Observations on the decline of water milfoil and other aquatic plants, Maryland, 1962-1967. 10393
Water flora as indicators of irrigation water contamination by DDT. 10403
A survey of the chemical composition of Potamogeton and *Myriophyllum* in New Jersey. 10448
- AQUATIC WEEDS**
Observations on the decline of water milfoil and other aquatic plants, Maryland, 1962-1967. 10393
- ARACHNIDA**
Thomisus onustus Walck. (Arachnida) recorded in error from Thursley Common Surrey. 9895
- ARANEIDA**
Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (Oligotomidae, Embioptera), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. 9978
- ARCTIIDAE**
The tiger moths of the county of Cumberland, New South Wales. 9900
- ARGAS**
The subgenus *Persicargas* (Ixodoidea, Argasidae, Argas). 7. *A. (P.) walkerae*, new species, a parasite of domestic fowl in southern Africa. 9908
- ARGINASE**
Arginine metabolism in *Ascaris lumbricoides*. Activity of arginine carboxylase and arginase. 10379
- ARGYROTAENIA VELUTINANA**
Sterol and water-soluble requirements for larvae of the red-banded leaf roller, *Argyrotaenia velutinana*. 10104
- ARTEMISIA TRIDENTATA**
Downy brome control by soil-active herbicides for revegetation of rangelands. 10283
Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310
- ARTHROPODA**
Radiation sensitivity of twelve species of arthropods. 10069
Structure, stability, and energy flow in plants and arthropods in a sericea *Lespedeza* stand. 10255
The development of the body wall of *Polymorphus minutus* (Acanthocephala) in its intermediate host *Gammarus pulex*. 10370
- ASCARIS**
Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris* muscle, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
- ASCARIS LUMBRICOIDES**
Arginine metabolism in *Ascaris lumbricoides*. Activity of arginine carboxylase and arginase. 10379
- ASCARIS LUMBRICOIDES SUUM**
Studies on lipid metabolism of *Ascaris* during starvation. 10368
- ASCORBIC ACID**
Effect of manganese and cobalt on ascorbic acid metabolism in rats. 10352
- ASILIDAE**
The family *Leptogastridae* (Diptera). 9927
- ASPERGILLIOSIS**
Problems in raising ducks. 10357
- ASPERGILLUS**
Seed-mycoflora of musk-melon. 10193
- ASPERGILLUS NIGER**
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208
On the effect of molds on various animal species. Part 2. 10343

SUBJECT INDEX

- ASPERMY**
A new tomato virus found in the Estonian SSR (Aspermy-virus). 10187
- ASPIDIOTUS**
The identification and distribution of *Quadraspidiotus* species (Homoptera: Diaspididae) on pome and stone fruits in Australia. 9876
- ASPIDIOTUS PYRI**
Note on *Prosopaltella aurantii* How. (Hym., Aphelinidae), parasite of *Quadraspidiotus pyri* Licht. in the Maritime Alps (Hom., Diaspididae). 9967
- ASTRAGALUS MISER**
Distribution of miserotoxin in varieties of *Astragalus miser* Dougl. ex Hook. 10454
- ATHALIA PROXIMA**
Effect of temperature on the development of mustard sawfly, *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 9976
Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
Discovery of sinigrin as a phagostimulant by *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 10433
- ATRAZINE**
Downy brome control by soil-active herbicides for revegetation of rangelands. 10283
Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434
Atrazine degradation in two soil profiles. 10477
- ATTRACTANTS**
Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023
Hexalure, an insect sex attractant discovered by empirical screening. 10025
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. 10105
New approaches to the control of pest organisms. 10118
- AUTORADIOGRAPHY**
Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151
- AZALEA**
Colchicine-induced tetraploid azaleas. 10447
- AZINPHOSMETHYL**
Growers join forces to battle the holl weevil. 10233
Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
Easy-to-kill pests of fruit trees...codling moth. 10253
- BABESIA ARGENTINA**
Babesia argentina: Serum changes in infected calves. 10345
- BABESIA BIGEMINA**
Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. 10012
- BABESIA OVIS**
Microscopical studies on the development of *Babesia ovis* in *Rhipicephalus bursa* (Ixodoidea). I. Development in female ticks after repletion. 10013
- BABY PIGS**
Ontogeny of the immune response. V. Further characterization of 19 S gamma G- and 7 S gamma G-immunoglobulins in the true primary immune response in germfree, colostrum-deprived piglets. 10340
- BACILLUS LARVAE**
Experimental infections with *Bacillus larvae*. I. A strain with a morphological marker. 10020
- BACILLUS POPILLIAE**
Course of sporulation of *Bacillus popilliae* in liquid medium containing activated carbon. 10029
Survival of lyophilized *Bacillus popilliae* in soil. 10415
- BACILLUS THURINGIENSIS**
Symposium on the principles of the application of microbiological preparations in nature. 10249
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- BACTERIA**
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077
- BACTERIAL DISEASES (INSECTS)**
Course of sporulation of *Bacillus popilliae* in liquid medium containing activated carbon. 10029
- BACTERIAL DISEASES (PLANTS)**
Response to parasites. 10232
Treated water curbs tomato decay. 10384
- BACTERICIDES**
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077
Method for combating micro-organisms. Patent 3,458,636. 10362
N-(substituted-benzoyl) aminoaceto- and aminopropionitriles. Patent 3,457,294. 10460
- BAGASSE**
Notice of filing of petition for food additives. 10417
- BAITS**
Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068
Observations on the control of *Achatina fulica* Bowdich, the giant African snail with methyldiacyde. 10320
- BANANAS**
Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452
- BARLEY**
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
Chemical control of loose smut in barley in Minnesota. 10174
- Post-infection changes in the sugar content of leaf-spot infected barley. 10178
Chemotherapy of loose smut of barley in Canada. 10179
A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189
Effect of chemical treatments on the control of. 10191
Control of loose smut of wheat and barley in Arkansas with fungicides. 10192
Chemical control of wheat and barley loose smut. 10194
Effectiveness of fungicides in controlling barley loose smut. 10196
Efficacy of oxathiin fungicides for control of loose smut in barley. 10199
Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
Chemical control of loose smut in barley. 10214
The systemic fungicide 2,3-dihydro-5-carbox-anilido-6-methyl-4-oxathiin. 10222
Seed treatment trial, 1967. 10229
Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostele fascifrons* and the relative concentration of the causal agent in the vectors. 10238
- BATHS**
Foot lameness in pigs. 10332
- BATS**
Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
- BEANS**
New record of *Chenlopius fallax* Scott. (Hemiptera: Lygaeidae) on moong and urid (*Phaseolus* spp.). 10097
Survival of root-infecting fungi in soil. XII. Germination and survival of endoconidia and chlamydospores of *Thielaviopsis basicola* in fallow soil and in soil adjacent to germinating bean seed. 10213
- BEARS**
Metabolism of strychnine nitrate applied for the control of the bear. 10318
- BEAUVERIA BASSIANA**
Research on the effect of the entomophagous fungi *Beauveria bassiana* (bals.) Vuill. and *Metarrhizium anisopliae* (Metsch.) Sorok. on warm-blooded animals. 10353
- BEE VENOM**
Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997
- BEEES**
Method for repelling bees. patent 3,456,056. 10099
- BENOMYL**
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181
- BENTONITE**
Use of inert particles for the diagnosis of sheep cisticercosis. Bentonite test. 10367

SUBJECT INDEX

BIRDS

- Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatidiosis. 10372
- BENZENE HEXACHLORIDE**
Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
- BIBLIOGRAPHY**
Temperature effects on embryonic development in insects. 10035
Allergic responses to insects. 10166
List of publications on fungus and insect defects in forest products. 10182
Response to parasites. 10232
Mechanisms of action of herbicides. 10299
On the effect of molds on various animal species. Part 2. 10343
Arginine metabolism in *Ascaris lumbricoides*. Activity of arginine carboxylase and arginase. 10379
Consequences of insecticide use of nontarget organisms. 10402
Plant growth regulators. 10436
- BINAPACRYL**
Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
- BIOCHEMISTRY**
A molecular approach to the study of genic heterozygosity in natural populations. IV. Patterns of genic variation in central, marginal and isolated populations of *Drosophila pseudoobscura*. 10159
Vitamin A metabolism in protein deficiency. 10324
A *Salmonella typhimurium* involved in the regulation of isoleucine, valine and leucine biosynthesis. 10326
Operator constitutive mutations in the leucine operon of *Salmonella typhimurium*. 10329
Analytical studies on extracts of *Litosomoides carinii*. 10341
Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris* muscle, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373
The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378
Arginine metabolism in *Ascaris lumbricoides*. Activity of arginine carboxylase and arginase. 10379
Specificity and mechanism in the action of saligenin cyclic phosphorus esters. 10424
Reactions of pesticides in soils. 10468
The insecticides; chemistry, mode of action, and toxicity. 10474
- BIODEGRADATION**
Biodegradation of pesticides. 10422
- BIOLOGICAL ASSAY**
Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
Biological interaction between plasticizers and insecticides. 10058
Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. 10105
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181
Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208
Local lesion host for grassy shoot virus of sugarcane. 10224
Metabolism of trifluralin in peanuts and sweet potatoes. 10273
Herbicide screening tests during 1967 in agricultural crops and potted herbs. 10307
Accurately predicting a herbicides potential. 10313
Case of rabies in guinea pig with long incubation period. 10348
- BIOLOGICAL CONTROL (INSECTS)**
Helicopter sprayers may rescue infested forests. 9959
Note on *Prospaltella aurantii* How. (Hym., Aphelinidae), parasite of *Quadraspidiotus pyri* Licht. in the Matitime Alps (Hom., Diaspididae). 9967
Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. 10045
Insect parasites of the green peach aphid, *Myzus persicae* Sulz. and their control potential. 10059
Laboratory and field experiments on the effectiveness of purified and non-purified nuclear polyhedral virus of *Lymantria dispar* L.. 10061
Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068
Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120
The effect of *Perillus bioculatus* (Fabr.) (Het., Pentatomidae) on the population dynamics of the potato beetle. 10124
The colonization and success in Greece of some imported *Aphytis* spp. (Hym. Aphelinidae) parasitic on citrus scale insects (Hom. Diaspididae). 10241
Symposium on the principles of the application of microbiological preparations in nature. 10249
Biological control of olive scale, *Parlatoria oleae* (Colvee), in a deciduous fruit orchard in California. 10252
The first large-scale experimentation with the biological control of the olive fly (*Dacus oleae* Gmel.) by means of *Opius concolor* Szepi. siculus Mon. in Sicily. 10256
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus*
- thuringiensis. II. Laboratory and field pathogenicity tests. 10257
Notes and considerations on the control of the cypress moth, *Catoria unipennaria* (Guen.) (Lepidoptera, Geometridae). 10261
Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264
Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391
- BIOLOGICAL CONTROL (PESTS)**
Role of hermit crabs in the biological control of *Achatina fulica* (Bowdich) on the Andamans. 10321
Gulella (*Indoeneea*) *bicolor* (Hutton), a predator of giant African snail *Achatina fulica* Bowdich. 10322
- BIOLOGICAL CONTROL (WEEDS)**
Biological control of *Cuscuta* spp. II. Biology and host-plant range of *Melanagromyza cuscutae* Hering (Dipt. Agromyzidae). 10272
- BIOLOGY**
Description, biology, and importance of a new species of Allantonematidae (Nematoda), parasite of the aphidiphagous Coccinellidae: *Parasitylenchus coccinellinae*, n. sp. 10039
On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373
The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378
- BIONOMICS**
The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
- BIOPHYSICS**
Physico-chemical and biophysical factors affecting the activity of pesticides. 10462
- BIPHENYL COMPOUNDS**
Biological interaction between plasticizers and insecticides. 10058
- BIRD RAPE**
Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
- BIRDS**
The parasitism of gamasid mites (Gamasoidea) on birds. 10145
Records of pupiparous Diptera (Hippoboscidae) on birds in India--III. 10365
Contribution to the research on the helminth fauna of wild birds in Thrace (southern Bulgaria) Acanthocephala. 10371
Eggs and chlorinated hydrocarbons. 10394
Consequences of insecticide use of nontarget organisms. 10402
Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419
Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425

SUBJECT INDEX

BIS(TRIFLUOROMETHYL)-3,4-DIFLUOROXYTENE, 2,2-

BIS(TRIFLUOROMETHYL)-3,4-DIFLUOROXYTENE, 2,2-
Method for combating micro-organisms. Patent 3,458,636. 10362

BIS-(TRIMETHYLSILYL)ACETAMIDE, N,O
Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356

BISSETIA STENIELLUS
Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254

BLABERIDAE
Three new species of genus *Blaptica*, Stal, 1874 (Diptera, Blaberidae of the Republic of Argentina). 9903

BLACKHEAD
Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383

BLAST
Fungicidal control of rice diseases. 10170

BLATTA ORIENTALIS
Radiation sensitivity of twelve species of arthropods. 10069

BLATTARIA
Neotropical cockroaches of the *Epilampra abdomennigrum* complex; a clarification of their systematics (Diptera, Blattaria). 9935
Spermatophores of the Blattaria. 10024

BLATTELLA GERMANICA
Radiation sensitivity of twelve species of arthropods. 10069

BLIGHT
A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189

BLOAT
Bloat on *Dolichos lalrah*. 10335

BLOOD
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077

BLOOD PLASMA
Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419

BLOOD PROTEINS
A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
Vitellogenic blood protein synthesis by insect fat body. 10083

BLOOD SERUM
Endrin induced alterations in bound carbohydrates in rat serum. 10423

BLUETONGUE
Incidence of bluetongue reported calendar year 1967. 10325

BOOPHILUS DECOLORATUS
Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. 10012

BOOPHILUS MICROPLUS
Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. 10012

BOTULISM
Problems in raising ducks. 10357

BOVICOLA
In vitro colonization of the goat biting lice, *Bovicola crassipes* and *B. limbata*. 10034

BRACHYRHINUS CRIBRICOLLIS
Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269

BRACONIDAE
Meteorus versicolor Wesm. var. *decoloratus* Ruthe (Hym., Braconidae), a new parasite of *Tbaumetopoca pityocampa* Schiff. (Lep., Thaumetopocidae). 9980

New parasite records on *Hymenia recurvalis* (Fabricius) (Lepidoptera: Pyralidae). 10087

Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254

BRAIN
The ultrastructure of the brain of the insect *Notonecta glauca* L. 10042

BRASSICA
Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251

Behavior of pyrazin in soil. 10286

BREVICORYNE BRASSICAE
The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (Homoptera, Aphididae) on brussels sprouts. 10260

BROMACIL
African feather grass--a weed worth watching. 10279

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

BROMOPHOS
Degradation of p32-bromophos by microorganisms and seedlings. 10449

BROMOXYNIL
The effects of two phytobland oils on the postemergence activity of bromoxynil and DNBP applied in two spray volumes in alfalfa. 10316

BROMUS TECTORUM
Downy home control by soil-active herbicides for revegetation of rangelands. 10283

BRUSH CONTROL
Growing Christmas trees on a power line right-of-way. 10485

BRUSSELS SPROUTS
The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (Homoptera, Aphididae) on brussels sprouts. 10260

BUPRESTIDAE
New species of *Chrysobothris* from the Pacific Northwest (Coleoptera: Buprestidae). 9870

CACODYLIC ACID
Response of tropical vegetation to herbicides. 10275

CADRA CAUTELLA
Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391

CALLAPHIDIDAE
Spaced-out gregariousness in sycamore aphids *Drepanosiphum platanoides* (Schrank) (Homoptera, Callaphididae). 10050

CALLIPHORA
Effects of exogenous moulting hormones on puparium formation in *Calliphora*. 10130

CALLIPHORA VICINA
Sindbis virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. 9969

CALVES
Babesia argentina: Serum changes in infected calves. 10345

CANDIDA ALBICANS
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339

CANKER
Elements for the differentiated application of quarantine and control measures of potato canker. 10221

CAPTAN
Chemical control of loose smut in barley. 10214
Chemistry of fungicides. 10476

CARABIDAE
The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). 10009

The effect of pupal predators on a population of winter moth, *Operophtera brumata* (L.) (Hydrimenidae). 10010

On the explosion chemistry of the bombardier beetle. VI. On the chemistry of the smallest bombardier beetle *Paussus favieri*. XLIII. Communication on arthropod protective substances. 10111

Experiments on larval diapause in the carabid *Pterostichus vulgaris* L. 10129

CARBAMATES
Compositions and methods for regulating the growth of plants. Patent 3,455,673. 10021

Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043

Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128

Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247

Easy-to-kill pests of fruit trees...codling moth. 10253

Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269

Metabolism of organic pesticide chemicals in higher plants. 10278

Pesticides and clay minerals. 10397

Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419

Chemistry of insecticides. 10463

Chemistry of herbicides. 10464

Insecticides, how to use them safely and effectively. 10466

Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471

Chemistry of fungicides. 10476

- CARBARYL**
Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
Easy-to-kill pests of fruit trees...codling moth. 10253
Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269
Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- CARBOHYDRATES**
Translocation of assimilates and dalapon in established johnsongrass. 10292
Endrin induced alterations in bound carbohydrates in rat serum. 10423
- CARBON**
Nutrition of the silver-leaf pathogen *Stereum purpureum* (Pers.) Fri. 10175
- CARBON DIOXIDE**
Studies on lipid metabolism of *Ascaris* during starvation. 10368
- CARBON-14**
Atrazine degradation in two soil profiles. 10477
- CARBONATES**
Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
- CARBOXYLASES**
Arginine metabolism in *Ascaris lumbricoides*. Activity of arginine carboxylase and arginase. 10379
- CARBOXYLESTERASE**
Degradation and anticholinesterase activity of disulfoton and phorate after ⁶⁰Co gamma irradiation. 10465
- CARROTS**
Basis for selectivity of linuron on carrot and common ragweed. 10295
- CASSIA OBTUSIFOLIA**
EPTC effects on sicklepod petiolar fatty acids. 10315
- CATALOGS**
List of insect and other invertebrate types in the Miguel Lillo Institute. (3rd list). 9902
A supplementary list of the host-plants of lac insects. 10135
- CATTLE**
Vaccinated cattle.....can harbor foot and mouth disease. 10331
Bloat on *Dolichos lablab*. 10335
The relative incidence of *Vibrio fetus* infection in dairy and beef cattle in New South Wales. 10336
The occurrence of ephemeral fever of cattle in Victoria in 1968. 10347
The isolation of a strain of *Leptospira*, serotype hardjo, from cattle in Queensland. 10358
The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363
- CECIDOMYIIDAE**
A note on the occurrence of fruit fly maggots of *Dacus cucurbitae* Coq. in cecidomyiid galls of *Coccinia indica* in Andhra Pradesh. 9998
- CELLS**
Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angelae*. 10158
Immune lysis of rabies virus-infected cells. 10361
Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431
- CENTRIFUGATION**
Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148
- CENTRODORA ITALICA**
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
- CERAMBYCIDAE**
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
A killing agent for use in light traps. 10090
The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (Homoptera, Aphididae) on brussels sprouts. 10260
- CERAPHRONIDAE**
Description of *Dendrocera* (*tmacrostigma*) *noumeae* sp. nov. from New Caledonia (*Ceraphronoidea*, *Megaspilidae*). 9885
- CERATITIS CAPITATA**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- CERATOCYSTIS FIMBRIATA**
Biochemical studies on the terpene metabolism in sweet potato root tissue with black rot. Effect of C10- and C15-terpenols on acetate-2-¹⁴C incorporation into ipomeamarone. 10446
- CERATOPOGONIDAE**
Description of the male, pupa, and larval habitat of *Nilobezzia brevicornis* (Diptera: *Ceratopogonidae*). 9963
- CEROPLASTES**
A comparative biological study of three ceroplastes species (Hem. Coccidae) and their natural enemies. 9990
- CHEMICAL ACTIVATION**
The correlation between physiological activity and physicochemical property of the substituted phenols. 10437
- CHEMICAL ANALYSIS**
Variations in free amino acids in the larvae and pupae of *Chilo zonellus*. 9994
Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). 10057
Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. 10105
Refined defensive mechanisms in *Chrysomela scripta*. 10139
Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356
GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404
Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- Gas chromatographic determination of residues of Dalapon in several substrates. 10410
Extraction and gas-liquid chromatographic determination of vernolate in soil. 10412
Activation and standardization of purified silica gel for column chromatographic cleanup of pesticide residue extracts. 10414
Analysis of grains for multiple residues of organic fumigants. 10416
Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419
Trapping of dieldrin lost from aqueous algae cultures. 10420
Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421
A survey of the chemical composition of Potamodgeton and *Myriophyllum* in New Jersey. 10448
Distribution of miserotoxin in varieties of *Astragalus miser* Dougl. ex Hook. 10454
Gas chromatographic determination of ethyl O,O-dimethylthiophosphoryl-1-phenyl acetate in technical grade cidial and its 50 percent liquid formulation. 10457
Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
Thin layer densitometric determination of rotenone and deguelin. 10461
Review of methods for mercury in pesticide formulations. 10469
Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472
Analysis of multiple pesticide residues--chemical identity and confirmation of results. 10473
Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
Reaction of aflatoxin B1 with acetic acid-thionyl chloride. 10481
- CHEMICAL CONTROL (INSECTS)**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: *Cureulionidae*)) larvae. 10131
Beetle. 10137
Growers join forces to battle the boll weevil. 10233
Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235
European red mite and two-spotted spider mite control on apples in California. 10236

SUBJECT INDEX

CHEMICAL CONTROL (NEMATODES)

- A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhizopertha dominica* (F.) in wheat. 10237
- Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
- A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245
- Spray droplet size in the control of spruce budworm, holl weevil, hollworm and cabbage looper. 10247
- Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug, at seedling stage. 10251
- Easy-to-kill pests of fruit trees...codling moth. 10253
- Notes and considerations on the control of the cypress moth, *Catoria unipennaria* (Guen.) (Lepidoptera, Geometridae). 10261
- Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fahr.. 10262
- Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263
- Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
- Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269
- Wharf horer. 10385
- The control of insects in hagged grain by the injection of dichlorvos. 10387
- Analysis of grain storage problems in India. 10390
- Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391
- CHEMICAL CONTROL (NEMATODES)**
Nematocides. Patent 3,457,353. 10271
- CHEMICAL CONTROL (PESTS)**
Metabolism of strychnine nitrate applied for the control of the hear. 10318
- Use of metaldehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. 10319
- Observations on the control of *Achatina fulica* Bowdich, the giant African snail with methldehyde. 10320
- CHEMICAL CONTROL (PLANT DISEASES)**
Fungicidal control of rice diseases. 10170
- Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
- Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
- Chemical control of loose smut in harley in Minnesota. 10174
- Chemotherapy of loose smut of harley in Canada. 10179

- List of publications on fungus and insect defects in forest products. 10182
- A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling hlights of wheat, barley, oats, and sorghum. 10189
- Effect of chemical treatments on the control of. 10191
- Control of loose smut of wheat and barley in Arkansas with fungicides. 10192
- Seed-mycoflora of musk-melon. 10193
- Chemical control of wheat and barley loose smut. 10194
- Effect of two systemic fungicides on control of loose smut in wheat. 10195
- Effectiveness of fungicides in controlling barley loose smut. 10196
- Efficacy of oxathiin fungicides for control of loose smut in barley. 10199
- Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
- Fungicidal control of smut diseases of cereals. 10207
- Deleterious effect of certain fungitoxicants on the formation of Mycorrhizae on corn by *Endogone fasciculata* and on corn root development. 10209
- Chemical control of loose smut in barley. 10214
- Results obtained with a systemic oxathiin fungicide in France. 10220
- The systemic fungicide 2,3-dihydro-5-carboxanilido-6-methyl,4-oxathiin. 10222
- Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- Seed treatment trial, 1967. 10229
- Treated water curbs tomato decay. 10384
- Chemistry of fungicides. 10476
- CHEMICAL CONTROL (WEEDS)**
Response of tropical vegetation to herbicides. 10275
- African feather grass--a weed worth watching. 10279
- Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
- A method for spraying individual trees. 10282
- Downy brome control by soil-active herbicides for revegetation of rangelands. 10283
- 1967 pre-emergence weed control in potatoes on Long Island. 10289
- Phytotoxicity of bemethylated analogs of diphenamid. 10290
- Repeated, foliar applications of herbicides on johnsongrass. 10291
- The response of fumitory to various herbicides. 10293
- Selective grass control with siduron. 10294
- Weed control in sugarheets. 10296

- Control of johnsongrass on drainage ditchbanks in sugarcane. 10297
- Reaction of flax to dicamba applied at several stages. 10301
- Effects of chlorpropham vapors on dodder seedlings. 10305
- Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306
- Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310
- Accurately predicting a herbicides potential. 10313
- The effects of two phytobland oils on the postemergence activity of bromoxynil and DNBP applied in two spray volumes in alfalfa. 10316
- Effects of high rates of trifluralin and vernolate on soybean yield and growth. 10317
- An evaluation of herbicide incorporation equipment. 10484
- CHEMICAL REACTIONS**
Mode of action of agricultural antibiotics developed in Japan. 10205
- Chemistry of insecticides. 10463
- Chemistry of herbicides. 10464
- CHEMICAL STRUCTURE**
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181
- Structure of pesticides and decomposition by soil microorganisms. 10427
- The correlation between physiological activity and physicochemical property of the substituted phenols. 10437
- Reactions of pesticides in soils. 10468
- CHEMICALS**
Hexalure, an insect sex attractant discovered by empirical screening. 10025
- Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
- CHEMISTRY**
Allergic responses to insects. 10166
- Modifications of the micromethod of sample cleanup for thin-layer and gas chromatographic separation and determination of common organic pesticide residues. 10413
- Trapping of dieldrin lost from aqueous algae cultures. 10420
- Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421
- Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441
- Review of methods for mercury in pesticide formulations. 10469
- The insecticides; chemistry, mode of action, and toxicity. 10474
- CHEMOSTERILANTS**
Damage to testes and recovery of fertility in holl weevils fed chemosterilants. 10100

SUBJECT INDEX

CHRISTMAS TREES

- A simple apparatus for dipping treatment of insects for varying periods of time. 10116
- New approaches to the control of pest organisms. 10118
- Mutagenic effects of TEPA and METEPA in mice. 10333
- CHENOPODIUM ALBUM**
Absorption and translocation of pyrazon by plants. 10287
- Phytotoxicity of bemethylated analogs of diphenamid. 10290
- CHEYLETIDAE**
Morphology and biology of a nest-producing mite, *Bakericheylya chanayi* (Acarina: Cheyletidae). 10015
- CHICKENS**
Control method of inactivated vaccines against the Newcastle disease by means of the titulation of neutralizing antibodies. 10334
- Isolation of *Salmonella pullorum* from a caseous nodular in the orbital region of a chick Arbor Acres breed. 10338
- The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378
- The difference in sensitivity to the sterilizing action of *O,O*-diethyl-*O*-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in *in vitro* culture. 10430
- CHILIS**
Interaction between chilli mosaic and powdery mildew in tobacco. 10176
- CHILO SUPPRESSALIS**
Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. 10045
- CHILO ZONELLUS**
Rearing of the maize stem borer, *Chilo zonellus* Swinhoe on artificial diet. 9988
- Variations in free amino acids in the larvae and pupae of *Chilo zonellus*. 9994
- CHILOMENES SEXMACULATA**
Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fabr.. 10262
- CHIRONOMIDAE**
Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorum brevibuca* Freeman (Chironomidae) under experimental conditions. 10066
- CHLAMYDOSPORES**
Survival of root-infecting fungi in soil. XII. Germination and survival of endoconidia and chlamydo spores of *Thielaviopsis basicola* in fallow soil and in soil adjacent to germinating bean seed. 10213
- CHLORANIL**
Chemistry of fungicides. 10476
- CHLORDANE**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
- Control of *Brachyrhinus eribricollis* injuring ornamentals. 10269
- Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
- CHLORINATED HYDROCARBONS**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
- Biological interaction between plasticizers and insecticides. 10058
- The absorption of *p,p'*-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
- Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096
- Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). 10114
- Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- Beetle. 10137
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- Chemical control of loose smut in barley. 10214
- Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
- Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
- Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fabr.. 10262
- Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263
- Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
- Control of *Brachyrhinus eribricollis* injuring ornamentals. 10269
- Metabolism of organic pesticide chemicals in higher plants. 10278
- Surface hydrology and pesticides. 10392
- Eggs and chlorinated hydrocarbons. 10394
- Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- Potentials for removing pesticides from water. 10396
- Pesticides and clay minerals. 10397
- Consequences of insecticide use of nontarget organisms. 10402
- DDT in fats on Antarctic animals. 10405
- Pesticide residues in the ecosystem. 10407
- Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
- Structure of pesticides and decomposition by soil microorganisms. 10427
- Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
- Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
- Chemistry of insecticides. 10463
- Insecticides, how to use them safely and effectively. 10466
- Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
- Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472
- Conversion of heptachlor to its epoxide. 10478
- Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
- Note on versatility of silicone Dow Corning 11 substrate for gas chromatography of pesticides. 10482
- CHLORINE**
Treated water curbs tomato decay. 10384
- Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- CHLORO-N-ISOPROPYLACETANILIDE, 2-**
Weed control in sugarbeets. 10296
- CHLORO-1-(2,4,5-TRICHLOROPHENYL)VINYL DIMETHYL PHOSPHATE, 2-**
Control of *Brachyrhinus eribricollis* injuring ornamentals. 10269
- CHLOROFORM**
An integrated technique to study the effects of fumigants on respiration of insects. 9972
- CHLORONEB**
Effectiveness of fungicides in controlling barley loose smut. 10196
- CHLOROPIDAE**
Chloropidae (Diptera), unknown in the fauna of Bulgaria. 9871
- CHLORTETRACYCLINE**
Tetracycline antibiotic compositions for oral use. Patent 3,454,697. 10337
- CHOLINESTERASES**
Physico-organic chemical approach to the mode of action of organophosphorus insecticides. 10014
- Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419
- CHORISTONEURA FUMIFERANA**
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
- CHRISTMAS TREES**
Growing Christmas trees on a power line right-of-way. 10485

SUBJECT INDEX

CHROMATOGRAPHY

CHROMATOGRAPHY

- The neutral lipids from various organs of the termite *Macrotermes goliath*. 9991
- Biological interaction between plasticizers and insecticides. 10058
- Behavior of pyrazon in soil. 10286
- Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304
- Absorption and penetration of picloram in potato tuber discs. 10308
- Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356
- The fate of phenyl N,N'-dimethylphosphordiamidate in soil. 10401
- GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404
- DDT in fats on Antarctic animals. 10405
- Gas chromatographic determination of residues of Dalapon in several substrates. 10410
- Extraction and gas-liquid chromatographic determination of vernolate in soil. 10412
- Modifications of the micromethod of sample cleanup for thin-layer and gas chromatographic separation and determination of common organic pesticide residues. 10413
- Activation and standardization of purified silica gel for column chromatographic cleanup of pesticide residue extracts. 10414
- Trapping of dieldrin lost from aqueous algae cultures. 10420
- Gas chromatographic determination of ethyl O,O-dimethyldithiophosphoryl-1-phenyl acetate in technical grade chidial and its 50 percent liquid formulation. 10457
- Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
- Thin layer densitometric determination of rotenone and deguelin. 10461
- Extraction and gas-liquid chromatographic determination of vernolate in soil. 10467
- Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
- Analysis of multiple pesticide residues--chemical identity and confirmation of results. 10473
- Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
- Note on versatility of silicone Dow Corning 11 substrate for gas chromatography of pesticides. 10482
- An evaluation of herbicide incorporation equipment. 10484
- ### CHROMOSOMES
- Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148

- Homologous lines of chromosome polymorphism in the natural populations of Adirondack black fly (Diptera, Simuliidae). 10150
- Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151
- A third locus (lpo) affecting pyridoxal oxidase in *Drosophila melanogaster*. 10152
- Chromosome behavior under the influence of claret-nondisjunctional in *Drosophila melanogaster*. 10154
- Segregation distorter in *D. melanogaster* males: An effect of female genotype on the segregation ratio. 10155
- Autosomal fragmentations and fusions in Odonata and their evolutionary implications. 10157
- Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angela*. 10158
- Position effect on DNA transcription and replication. 10160
- The role of sexuality in dosage compensation in *Drosophila*. 10162
- Colchicine-induced tetraploid azaleas. 10447
- ### CHRYSOBOTHRIS
- New species of *Chrysobothris* from the Pacific Northwest (Coleoptera: Buprestidae). 9870
- ### CHRYSOMELIDAE
- A new species of *Chrysomela* (Coleoptera, Chrysomelidae)-an important component of the Taimyr Peninsula biocoenoses. 9918
- Flea beetles *Phyllotreta cruciferae* Goetz. (Coleoptera, Chrysomelidae) a new pest of stock flower *Mathiola* sp. in Rajasthan. 10110
- Refined defensive mechanisms in *Chrysomela scripta*. 10139
- ### CHRYSOMPHALUS AONIDUM
- Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264
- ### CHRYSOTHAMNUS
- Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310
- ### CICADELLIDAE
- Study of the world Gyponinae (Homoptera: Cicadellidae). A synopsis of the genus *Clinonaria*. 9883
- ### CIPC
- Effects of several herbicides on yews and Japanese maples. 10280
- Effects of chlorpropham vapors on dodder seedlings. 10305
- ### CIRRHOSIS
- Schistosomal cirrhosis in pigs in Jabalpur, M. P.. 10381
- ### CITRUS
- The presence of tristeza virus in certain species of citrus in Cyprus. 10212
- The colonization and success in Greece of some imported *Aphytis* spp. (Hym. Aphelinidae) parasitic on citrus scale insects (Hom. Diaspididae). 10241
- Chemical control of *Drosicha mangiferae* (Green), a serious pest of Citrus spp. in Madhya Pradesh. 10263

- Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264
- ### CLAY MINERALS
- Pesticides and clay minerals. 10397
- ### CLIMATE
- The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
- ### COBALT SULFATE
- Effect of manganese and cobalt on ascorbic acid metabolism in rats. 10352
- ### COCCIDIOSIS
- Problems in raising ducks. 10357
- ### COCCINELLIDAE
- Scymnus* (*Sidis*) *hickei* Fursch, as a foe of *Pseudococcus citri* Risso. 9893
- Description, biology, and importance of a new species of Allantonematidae (Nematoda), parasite of the aphidiphagous Coccinellidae: *Parasitylenchus coccinellinae*, n. sp. 10039
- ### COCCOIDEA
- Contribution to the knowledge of the Coccidae from Brazil (Homoptera-Coccoidea). 9892
- ### COCHLIOMYIA MACELLARIA
- Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. 10102
- ### COLCHICINE
- Colchicine-induced tetraploid azaleas. 10447
- ### COLEOPTERA
- Entomocoenological and biological studies in Rosa damascena Mill. plantations. II. Coleoptera. 10081
- Beetle. 10137
- ### COLEOTECHNITES MILLERI
- Needle miner infestations in lodgepole pine east of the Sierra crest. 10267
- ### COLLECTOTRICHUM
- Collectotrichum nigrum* from eggplant. A new record from India. 10201
- ### COLOR
- Field observations on periodicity and site preference in oviposition by *Aedes aegypti* (L.) and related mosquitoes (Diptera: Culicidae) in Kenya. 10072
- ### COMPETITION
- Biochemical basis for plant competition. 10274
- Influence of weed competition on sorghum growth. 10277
- Yellow foxtail competition in grain sorghum. 10284
- Tall waterhemp competition in grain sorghum. 10285
- Competition between flax and wild buckwheat. 10440
- ### COMPOSITAE
- A necrotic type virus occurring on a weed in Germany. 10227
- ### CONCRETE
- Foot lameness in pigs. 10332
- ### CONFERENCES
- Official proceedings. Second annual Pacific Northwest Animal Nutrition Conference, at Pacific Science Center, Seattle, Washington, November 9-10, 1967. 10350

- CONIDIA**
Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230
- CONIFERAE**
Heterobasidion annosum. 10215
Physiological and biochemical contribution to fumc damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432
- CONIOPTERYGIDAE**
The genus *Heteroconis* Enderlein, 1905 (Neuroptera, Coniopterygidae). 9919
- CONTAINERS**
Analysis of grain storage problems in India. 10390
- COPPER**
Effect of CL-50, a new syntetic fungicide on certain fungi. 10173
- COPTOTERMES FORMOSANUS**
Foraging galleries of the Formosan subterranean termite, *Coptotermes formosanus*, in Louisiana. 10052
- COREIDAE**
Description of immature stages of Coreidae. 3. *Arebimerus alternus*. 9956
Description of immature stages of Coreidae. 1. *Euthochtha galcator*. 9957
Hydrogen-ion concentration and the digestive enzymes in *Cletus signatus* Walker (Heteroptera: Coreidae). 10063
- CORN**
Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
Deleterious effect of certain fungitoxicants on the formation of Mycorrhizae on corn by *Endogone fasciculata* and on corn root development. 10209
The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Gbana. 10243
Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Sitophilus oryzae* L. and *Rhizopertha dominica* F.. 10270
Industry's concern with pesticide residues. 10411
The mode of action of maleic hydrazide: Inhibition of growth. 10444
Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
- CORPORA ALLATA**
Female specific protein: Biosynthesis controlled by corpus allatum in *Leucophaea maderae*. 10002
- COSSONINAE**
Allomorphus franzi, n. gen., n. spec. (Coleoptera, Curculionidae), a new species and genus from Austria. 8. Contribution to the knowledge of the Palearctic Cossoninae. 9891
- COSTELYTRA ZEALANDICA**
Laboratory demonstration of a chemical sex attractant in *Costelytra zealandiae* (White) (Searabacidae: Coleoptera). 10030
- COSTS**
Growing Christmas trees on a power line right-of-way. 10485
- COTTON**
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with empbasis on control of *Verticillium wilt* with Thiabendazole and Benlate. 10181
Growers join forces to battle the boll weevil. 10233
Bees as pests. 10244
A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
Industry's concern with pesticide residues. 10411
Effects of ammonium thiocyanate on carbohydrate metabolism in the cotton plant. 10455
- COVERED SMUT**
A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189
- COWPEAS**
Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- CRABS**
Role of hermit crabs in the biological control of *Achatina fulica* (Bowdich) on the Andamans. 10321
- CROP LOSSES**
The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Sitophilus oryzae* L. and *Rhizopertha dominica* F.. 10270
Metabolism of strychnine nitrate applied for the control of the bear. 10318
Studies on the incidence and extent of damage due to insect pests in stored seeds--1. Cereal seeds. 10388
- CROP VARIETIES**
Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
Ir-2, a germ plasm bank of virus-free fruit tree clones. 10184
Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211
Colechicinc-induced tetraploid azaleas. 10447
- CROP YIELDS**
Biology of the hillbug *Sphenophorus venatus confluens*, a new pest of orchardgrass. 10047
Growers join forces to hattle the boll weevil. 10233
The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Gbana. 10243
Influence of weed competition on sorghum growth. 10277
1967 pre-emergence weed control in potatoes on Long Island. 10289
- Effects of high rates of trifluralin and vernolate on soybean yield and growth. 10317
The effect of N-dimethyl amino succinamic acid (Alar) on size, shape and maturity of Delicious apples. 10450
- CROPS**
Herbicide screening tests during 1967 in agricultural crops and potted herbs. 10307
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- CTENICERA AERIPENNIS DESTRUCTOR**
Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999
- CUCUMBER MOSAIC VIRUS**
Studies on the infection of cucumber mosaic virus. V. the observation of epidermal cell in the local lesion. 10180
- CUCUMBERS**
Translocation of tobacco ringspot virus in cucumber and zinnia. 10206
Metabolism of trifluralin in peanuts and sweet potatoes. 10273
- CUE-LURE**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- CULEX PIPIENS QUINQUEFASCIATUS**
Anatomical indicators for assessing age of mosquitoes: changes in ovarian follicles. 10107
- CULICIDAE**
A new species of *Ficalbia* (Ravcnalites) from Cambodia (Diptera: Culicidae). 9910
A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- CULTURE MEDIA**
Course of sporulation of *Bacillus popilliae* in liquid medium containing activated carbon. 10029
- CURCULIONIDAE**
Allomorphus franzi, n. gen., n. spec. (Coleoptera, Curculionidae), a new species and genus from Austria. 8. Contribution to the knowledge of the Palearctic Cossoninae. 9891
Observations on the hiology of *Lathromeroides* sp. (Trichogrammatidae: Hymenoptera) egg parasite of the leaf rolling weevil, *Apoderus sissu* Marshall (Curculionidae: Coleoptera) with notes on the host weevil. 10117
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
Growers join forces to battle the boll weevil. 10233
- CURVULARIA**
A leaf spot disease of *Cyamopsis tetragonoloba* caused by *Curvularia lunata* in India. 10177
- CUSCUTA**
Biological control of *Cuscuta* spp. II. Biology and host-plant range of *Melanagromyza cuscutae* Hering (Dipt. Agromyzidae). 10272
Effects of chlorpropham vapors on dodder seedlings. 10305
- CUTICLE**
The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078

SUBJECT INDEX

CYAMOPSIS TETRAGONOLOBA

Oenocytes: form and function. 10093

CYAMOPSIS TETRAGONOLOBA

A leaf spot disease of *Cyamopsis tetragonoloba* caused by *Curvularia lunata* in India. 10177

CYCLODIENE COMPOUNDS

Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408

CYNIPID LEAF GALLS

Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203

CYNIPIDAE

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203

CYNODON DACTYLON

Influence of light on sporulation by *Helminthosporium stenospilum*. 10183

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

CYPERUS ROTUNDUS

Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304

CYSTICERCUS

Use of inert particles for the diagnosis of sheep cysticercosis. Bentonite test. 10367

CYTOGENETICS

Chromosome behavior under the influence of claret-nondisjunctional in *Drosophila melanogaster*. 10154

Autosomal fragmentations and fusions in Odonata and their evolutionary implications. 10157

Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angelae*. 10158

CYTOKININS

Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204

Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera crown-gall* tissue. 10439

CYTOLOGY

Ultrastructural observations on the branched rods associated with some insect granuloses. 9960

Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. 10012

Ancylostoma caninum: Fine structure of intestinal epithelium. 10377

CYTOPATHOLOGY

Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997

D, 2,4-

Response of tropical vegetation to herbicides. 10275

Response of ironweed and huckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303

Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306

Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310

Response of soybeans to 2,4-D, dicamba, and picloram. 10312

Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429

Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452

DACAGIN

Spray gel agent solves drift problem. 10456

DACTYLIS GLOMERATA

Biology of the billbug *Sphenophorus venatus confluentis*, a new pest of orchardgrass. 10047

DACUS CUCURBITAE

A note on the occurrence of fruit fly maggots of *Dacus cucurbitae* Coq. in cecidomyiid galls of *Coccinia indica* in Andhra Pradesh. 9998

Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032

DACUS OLEAE

The first large-scale experimentation with the biological control of the olive fly (*Dacus oleae* Gmel.) by means of *Opius concolor* Szep. siculus Mon. in Sicily. 10256

DAIRY EQUIPMENT

An evaluation of herbicide incorporation equipment. 10483

An evaluation of herbicide incorporation equipment. 10484

DALAPON

Repeated, foliar applications of herbicides on johnsongrass. 10291

Translocation of assimilates and dalapon in established johnsongrass. 10292

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

Gas chromatographic determination of residues of Dalapon in several substrates. 10410

DANAUS

A new *Danaus* species from Central-Celebes. 9923

DASHEEN

Rhizoctonia leaf rot of colocasia in India. 10188

DDT

Biological interaction between plasticizers and insecticides. 10058

Inheritance of DDT-RESISTANCE in *Musca domestica nebuld* Fabr. 10096

Variability in insecticide tolerance of eighteen honey-bee colonies. 10125

On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149

Biology and control of leopard moth on pear trees in the United Arab Republic. 10242

Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263

Eggs and chlorinated hydrocarbons. 10394

Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395

Water florae as indicators of irrigation water contamination by DDT. 10403

DDT in fats on Antarctic animals. 10405

Problems with DDT in fish culture operations. 10406

Pesticide residues in the ecosystem. 10407

Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425

Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438

Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472

Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479

Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480

DECOMPOSITION

Behavior of pyrazon in soil. 10286

Influence of pesticides on soil microbes and soil properties. 10400

Structure of pesticides and decomposition by soil microorganisms. 10427

Chemistry of insecticides. 10463

DEER

Relationship between amount of thinning, time of care, and damages caused by red deer. 10323

The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363

DEFICIENCY DISEASES

Vitamin A metabolism in protein deficiency. 10324

Official proceedings. Second annual Pacific Northwest Animal Nutrition Conference, at Pacific Science Center, Seattle, Washington, November 9-10, 1967. 10350

Problems in raising ducks. 10357

DEFOLIANTS

Chemical stimulation of ethylene evolution and bud growth. 10300

DEFOLIATION

Needle miner infestations in lodgepole pine east of the Sierra crest. 10267

DEGRADATION

The fate of phenyl N,N'-dimethylphosphor-diamidate in soil. 10401

The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426

Degradation of p32-bromophos by microorganisms and seedlings. 10449

Atrazine degradation in two soil profiles. 10477

SUBJECT INDEX

DIMETHYL-3-(ALPHA,ALPHA,ALPHA-TRIFLUORO-M-TOLYL)UREA, 1,1-

- DEGUELIN**
Thin layer densitometric determination of rotenone and deguelin. 10461
- DEMETHYLCHLORTETRACYCLINE**
Tetracycline antibiotic compositions for oral use. Patent 3,454,697. 10337
- DEMETON**
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- DEMODEX**
The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363
- DENDROLIMUS SPECTABILIS**
Symposium on the principles of the application of microbiological preparations in nature. 10249
- DEOXYRIBONUCLEIC ACID**
Changes in chromosomes induced by different DNA virus in cells of *Rhynchoseia angela*. 10158
Position effect on DNA transcription and replication. 10160
- DERMACENTOR VARIABILIS**
Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119
- DERMESTES MACULATUS**
Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera: Dermestidae). 10114
- DEVELOPMENT**
Biochemical study of *Plodia interpunctella* (Hbn.) (Lepidoptera) I-Variations of body weight, water content, and dry matter content. 9993
Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997
- DIACRISIA OBLIQUA**
Effect of different food plants on the larval and post-larval development on *Diacrisia obliqua* Walker. 10084
- DIAGNOSIS**
Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
Spirurata of animals and humans and the diseases. 10382
- DIASPIDIDAE**
The identification and distribution of *Quadraspidiotus* species (Homoptera: Diaspididae) on pome and stone fruits in Australia. 9876
The colonization and success in Greece of some imported *Aphytis* spp. (Hym. Aphelinidae) parasitic on citrus scale insects (Hom. Diaspididae). 10241
- DIATRAEOPHAGA STRIATALIS**
Notes on the biology of *Diatraeophaga striatalis* Townsend, tachinid parasite of *Proceras sacchariphagus* Boj. 9970
- DIAZINON**
Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
Chemical control of *Drosicha mangiferae* (Green), a serious pest of Citrus spp. in Madhya Pradesh. 10263
- Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- DICAMBA**
Reaction of flax to dicamba applied at several stages. 10301
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304
Response of soybeans to 2,4-D, dicamba, and picloram. 10312
- DICHLORO-2,2-BIS(P-CHLOROPHENYL)ETHYLENE, 1,1-**
The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
Eggs and chlorinated hydrocarbons. 10394
Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
- DICHLORO-6-(O-CHLOROANILINO)-S-TRIAZINE, 2,4-**
Chemistry of fungicides. 10476
- DICHLORPROP**
The response of fumitory to various herbicides. 10293
- DICHLORVOS**
Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
A killing agent for use in light traps. 10090
A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
Notes and considerations on the control of the cypress moth, *Catoria unipennaria* (Guen.) (Lepidoptera, Geometridae). 10261
Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
The control of insects in bagged grain by the injection of dichlorvos. 10387
- DICOFOL**
Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- DIELDRIN**
Biological interaction between plasticizers and insecticides. 10058
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
Trapping of dieldrin lost from aqueous algae cultures. 10420
- Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- DIENESTROL DIACETATE**
Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356
- DIETHYL O-(2-QUINOXALINYL)PHOSPHOROTHIOATE, O,O**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- DIETHYL O-2-PYRAZINYL PHOSPHOROTHIOATE, O,O**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- DIETHYLCARBA MAZINE**
Dirofilaria immitis from the eye of a dog. 10376
- DIETHYLSTILBESTROL**
Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356
- DIGITARIA SANGUINALIS**
Selective grass control with siduron. 10294
- DIHYDRO-5-CARBOXANILIDO-6-METHYL-1,4-OXATHIIN, 2,3-**
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
Chemical control of loose smut in barley in Minnesota. 10174
Chemotherapy of loose smut of barley in Canada. 10179
Effect of chemical treatments on the control of. 10191
Control of loose smut of wheat and barley in Arkansas with fungicides. 10192
Effect of two systemic fungicides on control of loose smut in wheat. 10195
Effectiveness of fungicides in controlling barley loose smut. 10196
Efficacy of oxathiin fungicides for control of loose smut in barley. 10199
Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
Chemical control of loose smut in barley. 10214
Results obtained with a systemic oxathiin fungicide in France. 10220
The systemic fungicide 2,3-dihydro-5-carbox-anilido-6-methyl,4-oxathiin. 10222
Seed treatment trial, 1967. 10229
- DIMETHOATE**
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- DIMETHYL-3-(ALPHA,ALPHA,ALPHA-TRIFLUORO-M-TOLYL)UREA, 1,1-**
Notice of filing of petition for food additives. 10417

SUBJECT INDEX

DIMETHYLAMINO)BENZENEDIAZO SODIUM SULFONATE,

DIMETHYLAMINO)BENZENEDIAZO SODIUM SULFONATE, P-
Chemistry of fungicides. 10476

DIMETHYLAMINO-3,5-XYLYL METHYL-CARBAMATE, 4-
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247

DINOSEB
Effects of several herbicides on yews and Japanese maples. 10280

The effects of two phytobland oils on the postemergence activity of bromoxynil and DNBP applied in two spray volumes in alfalfa. 10316

DIOXANE COMPOUNDS
Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023

DIOXASPIRO COMPOUNDS
Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023

DIPHENAMID
Phytotoxicity of bemethylated analogs of diphenamid. 10290

DIPLOGASTERIDAE
Diplogasterid nematodes (Diplogasteridae: Rhabditida) and their relationship to insect disease. 10094

DIPLOPODA
Seasonal changes in the distribution of the milipede *Cylindroiulus punctatus* (Leach) in decaying logs and soil. 9966

DIPPING
A simple apparatus for dipping treatment of insects for varying periods of time. 10116

DIPTERA
Wasps attacking other insects. 9979

Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120

Research on the synantropic flies in the Sofia area, in regard to their epidemiological importance. 10165

DIQUAT
Response of tropical vegetation to herbicides. 10275

Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306

DIROFILARIA IMMITIS
Dirofilaria immitis from the eye of a dog. 10376

DISEASE TRANSMISSION
Vaccinated cattle.....can harbor foot and mouth disease. 10331

Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383

DISODIUM METHANEARSONATE
Repeated, foliar applications of herbicides on johnsongrass. 10291

DISTILLATION
Analysis of grains for multiple residues of organic fumigants. 10416

Trapping of dieldrin lost from aqueous algae cultures. 10420

Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472

DISTRIBUTION
Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240

DISULFOTON
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248

GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404

Degradation and antcarboxylesterase activity of disulfoton and phorate after ⁶⁰Co gamma irradiation. 10465

DITHIODIUNDECANOIC ACID
Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281

DIURON
Effects of several herbicides on yews and Japanese maples. 10280

Effect of soil water stress and soil temperature on translocation of diuron. 10302

DOGS
Notes on Parasitology: (A). Canine hookworm (*Ancylostoma caninum* (Ercolani 1859, Hall, 1913) and (B) Canina coccidiosis (*Eimeria canis*, Wenyon 1923). 10366

Dirofilaria immitis from the eye of a dog. 10376

DORSAL VESSEL
Cockroach heart response to cardio-accelerators. 10074

DPA
African feather grass--a weed worth watching. 10279

DRAINAGE DITCHES
Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

DROSICHA MANGIFERA
Chemical control of *Drosicha mangiferae* (Green), a serious pest of Citrus spp. in Madhya Pradesh. 10263

DROSOPHILA
A new *Drosophila* species from northern Fennoscandia (Diptera). 9898

The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995

Evolution of fitness. IV. Genetic evolution of inter-specific competitive ability in *Drosophila*. 10146

Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148

The role of sexuality in dosage compensation in *Drosophila*. 10162

DROSOPHILA MELANOGASTER
Spermatocyte granules in *Drosophila melanogaster*. 10003

Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048

Biological interaction between plasticizers and insecticides. 10058

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

Ethyl methanesulfonate (EMS) induced mutations in *Drosophila melanogaster*. 10147

A third locus (*lpo*) affecting pyridoxal oxidase in *Drosophila melanogaster*. 10152

Chromosome behavior under the influence of claret-nondisjunctional in *Drosophila melanogaster*. 10154

Segregation distorter in *D. melanogaster* males: An effect of female genotype on the segregation ratio. 10155

Population genetics in the American tropics. IV. Temporal changes effected in natural populations of *Drosophila melanogaster* from Colombia. 10156

Position effect on DNA transcription and replication. 10160

DROSOPHILA PSEUDOOBSCURA
Chromosomal polymorphism and genetic load in *Drosophila pseudoobscura*. 10153

A molecular approach to the study of genic heterozygosity in natural populations. IV. Patterns of genic variation in central, marginal and isolated populations of *Drosophila pseudoobscura*. 10159

DRUG THERAPY
Chemotherapy of loose smut of barley in Canada. 10179

Foot lameness in pigs. 10332

DRUGS
Medical and veterinary chemicals. Vol. I, parts I and II. 10355

DUCK PLAGUE
The comparative pathology of duck plague in wild Anseriformes. 10342

DUCKS
The comparative pathology of duck plague in wild Anseriformes. 10342

Problems in raising ducks. 10357

On the environment of *Polymorphus minutus* (*Acanthocephala*) in ducks. 10373

DUSTING
Use of metaidehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. 10319

DYTISCIDAE
A record of diurnal flight in *Dytiscus*. 10132

EARS
Ear mites of the genus *Dicrocheles* (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882

ECDYSONE
Isolation and biological properties of the juvenile hormone. 10106

ECHINOCLOA CRUSGALLI
Selective grass control with siduron. 10294

ECHINOCOCCOSIS
Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatidiosis. 10372

ECOLOGY
Structure, stability, and energy flow in plants and arthropods in a sericea *Lespedeza* stand. 10255

SUBJECT INDEX

EPIPHYTIC

- ECONOMIC PLANTS**
In your garden - weeds: Robbers, but not always bad. 10168
- EDUCATION**
Research and education needs in the use of pesticides. 10486
- EGGPLANT**
Colletotrichum nigrum from eggplant. A new record from India. 10201
- EGGS**
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
The effect of gastro-intestinal secretions on taeniid egg membranes. 10374
Eggs and chlorinated hydrocarbons. 10394
- EIMERIA**
Notes on Parasitology: (A). Canine hookworm (Ancylostoma caninum (Ercolani 1859, Hall, 1913) and (B) Canina coccidiosis (Eimeria canis, Wcnyon 1923). 10366
- EIMERIA TENELLA**
Eimeria tenella schizonts and merozoites in macrophages as shown by electron microscopy. 10354
- ELATERIDAE**
The effect of pupal predators on a population of winter moth, Operophtera brumata (L.) (Hydriomenidae). 10010
- ELECTRON CAPTURE**
Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
- ELECTRON MICROSCOPY**
Ultrastructural observations on the branched rods associated with some insect granuloses. 9960
Spermatocyte granules in Drosophila melanogaster. 10003
Fine structures of merozoites of Babesia bigemina in the ovaries of Boophilus microplus and Boophilus decoloratus. 10012
Notes on the male germ cells of a beetle, Lepidotarsa decemlineata. 10115
Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210
Evidence for restriction of a plant virus to phloem cells. 10219
Eimeria tenella schizonts and merozoites in macrophages as shown by electron microscopy. 10354
Ancylostoma caninum: Fine structure of intestinal epithelium. 10377
The fine structure and method of feeding of the tissue parasitizing stages of Histomonas meleagridis. 10378
- ELECTROPHORESIS**
Lactic dehydrogenase isozymes in the grasshopper. 9961
Female specific protein: Biosynthesis controlled by corpus allatum in Leucophaea maderae. 10002
A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
Analytical studies on extracts of Litomosoides carini. 10341
- The fate of phenyl N,N'-dimethylphosphor-diamidate in soil. 10401
- ELECTROPHYSIOLOGY**
Intracellular activity in cricket neurons during the generation of behaviour patterns. 9968
Locust wind receptors. I. Transducer mechanics and sensory response. 9981
Locust wind receptors. ii. Interneurons in the cervical connective. 9983
Cockroach heart response to cardio-accelerators. 10074
Common inhibitory motoneurons in insects. 10089
- ELYMANA VIRESCENS**
Comparative efficiency of transmission of aster yellows by Elymana virescens and Macrosteles fascifrons and the relative concentration of the causal agent in the vectors. 10238
- EMBIOPTERA**
Observations on the life history and bionomics of Oligotoma ceylonica ceylonica Enderlein (Oligotomidae, Embioptera), commensal in the nest of the social spider Stegodyphus sarasinorum Karsch. 9978
- EMBRYOLOGY**
The external morphogenesis of grasshopper embryos. 9987
- ENCYRTIDAE**
First record of Aewasius advena Comper (Encyrtidae: Hymenoptera) from India as a parasite of Ferrisia virgata Ckll.. 9932
- ENDOGENE FASCICULATA**
Deleterious effect of certain fungitoxicants on the formation of Mycorrhizae on corn by Endogone fasciculata and on corn root development. 10209
- ENDRIN**
Studies on the susceptibility of different stages of Bagrada cruciferarum Kirkaldy to some organic insecticides. 10043
Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
Chemical control of Drosicha mangiferae (Green), a serious pest of Citrus spp. in Madhya Pradesh. 10263
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
Industry's concern with pesticide residues. 10411
Endrin induced alterations in bound carbohydrates in rat serum. 10423
- ENERGY**
Structure, stability, and energy flow in plants and arthropods in a sericea Lespedeza stand. 10255
- ENGLAND**
Cnemacantha illota (Loew) (Dipt., Lauxaniidae) recorded in error from Stanmore Common, Middx. 9896
- ENNOMOS SUBSIGNARIUS**
Elm spanworm eye size depends upon sex and diet. 10000
- ENTOMOGENOUS FUNGI**
Antennopsis gallica Heim and Buchli (hyphomycetes: Glocohaustoriales), an entomogenous fungus on subterranean termites in Florida. 10022
- Research on the effect of the entomophagous fungi Beauveria bassiana (bals.) Vuill. and Metarrhizium anisopliae (Metsch.) Sorok. on warm-blooded animals. 10353
- ENVIRONMENT**
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
On the environment of Polymorphus minutus (Acanthocephala) in ducks. 10373
Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432
- ENVIRONMENTAL EFFECTS**
Experimental studies on diapause in stoneflies. III. Eggs of Brachyptera risi (Morton). 10051
- ENZYMES**
Hydrogen-ion concentration and the digestive enzymes in Cletus signatus Walker (Heteroptera: Corcidae). 10063
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077
Studies on phosphohexosomerase (d-glucose-6-phosphate kctol isomerase) from the Indian honeybee, Apis indica Fabricius.. 10098
A third locus (lpo) affecting pyridoxal oxidase in Drosophila melanogaster. 10152
The effect of gastro-intestinal secretions on taeniid egg membranes. 10374
Biodegradation of pesticides. 10422
Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429
- EPERMENIIDAE**
Results of an Austrian Lepidoptera collecting trip to Syria and Lebanon. (Part V.: Epermeniidae). 9894
Ochromolopis icetella Hb. (Lepidoptera, Epermeniidae) in Finland, probably transported by windstorm. 9912
- EPHEMERAL FEVER**
The occurrence of ephemeral fever of cattle in Victoria in 1968. 10347
- EPHEMEROPTERA**
The life histories and drifting of the Plecoptera and Ephemeroptera in a dartmoor stream. 10001
- EPHYDRIDAE**
A new species of Ephydrella Tonnoir and Malloch (Diptera: Ephydriidae). 9887
- EPIDEMIOLOGY**
Incidence of bluetongue reported calendar year 1967. 10325
- EPIDERMOPTIDAE**
A new species of Epidermoptes from a South Dakota pheasant (Acarina: Epidermoptidae). 9917
- EPINOTIA TSUGANA**
Susceptibility of several forest insects of British Columbia to commercially produced Bacillus thuringiensis. II. Laboratory and field pathogenicity tests. 10257
- EPIPHYTIC**
The epiphytotic of yellow orange leaf disease of rice in 1966 in Thailand. 10197

SUBJECT INDEX

- EPITHELIUM**
- EPITHELIUM**
Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431
- EPIZOOTIC DISEASES**
The occurrence of ephemeral fever of cattle in Victoria in 1968. 10347
Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383
- EQUINE ENCEPHALOMYELITIS VACCINES**
Equine vaccines and vaccinations. 10344
- EQUINE INFLUENZA VACCINES**
Equine vaccines and vaccinations. 10344
- EQUINE RHINOPNEUMONITIS VACCINES**
Equine vaccines and vaccinations. 10344
- ESOPHAGUS**
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- ESTERASES**
A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
- ETHYL ALCOHOL**
Nutrition of *Xyleborus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
- ETHYL ETHER**
An integrated technique to study the effects of fumigants on respiration of insects. 9972
- ETHYL METHANESULFONATE**
Ethyl methanesulfonate (EMS) induced mutations in *Drosophila melanogaster*. 10147
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethyl methanesulfonate. 10435
- ETHYL N,N-DIPROPYLTHIOCARBAMATE**
EPTC effects on sicklepod petiolar fatty acids. 10315
- ETHYL O,O-DIMETHYLDITHIOPHOSPHORYL-1-PHENYL ACETATE**
Gas chromatographic determination of ethyl O,O-dimethyldithiophosphoryl-1-phenyl acetate in technical grade cidial and its 50 percent liquid formulation. 10457
- ETHYL S-PHENYL DITHIOPHOSPHONODITHIOATE, O**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- ETHYLENE**
Chemical stimulation of ethylene evolution and bud growth. 10300
Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452
- ETHYLTHIOETHYL O,O-DIMETHYLPHOSPHORODITHIOATE, S-(2-**
Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug, at seedling stage. 10251
- EUBLEMMA**
A comparative biological study of three ceroplastes species (Hem. Coccidae) and their natural enemies. 9990
- EUCELATORIA ARMIGERA**
Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040
- EULOPHIDAE**
New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. 10259
- EUMENIDAE**
A new sub-genus and species of the Eumeninae (Hymenoptera, Diptera) from the Bulgarian fauna. 9868
A new name for the genus *Cyrtolabus* van der Vecht (Hymenoptera, Eumenidae). 9947
- EXPERIMENTAL INSECTS**
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077
- EXTRACTION**
Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- EXTRACTION TECHNIQUES**
Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480
- EYELIDS**
The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363
- EYES**
Elm spanworm eye size depends upon sex and diet. 10000
Eyes of the female two-spotted spider mite, *Tetranychus urticae*. I. Morphology. 10067
Isolation of *Salmonella pullorum* from a caseous nodular in the orbital region of a chick Arbor Acres breed. 10338
Dirofilaria immitis from the eye of a dog. 10376
- FARNESOL**
Biochemical studies on the terpene metabolism in sweet potato root tissue with black rot. Effect of C10- and C15-terpenols on acetate-2-14C incorporation into ipomeamarone. 10446
- FAT BODY**
Vitellogenic blood protein synthesis by insect fat body. 10083
- FATS**
DDT in fats on Antarctic animals. 10405
Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472
- FATTY ACIDS**
EPTC effects on sicklepod petiolar fatty acids. 10315
- FECES**
Pneumostromylus tenuis in moose on a deer-free island. 10375
- FEED**
Official proceedings. Second annual Pacific Northwest Animal Nutrition Conference, at Pacific Science Center, Seattle, Washington, November 9-10, 1967. 10350
Problems with DDT in fish culture operations. 10406
- FEED ADDITIVES**
Gas chromatographic method for determination of diethylstilbestrol in feeds. 10356
- FEEDING**
Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974
The behavior of newly emerged boll weevils. 10016
Nutrition of *Xyleborus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
Odorous house ant feeds on photographic film. 10386
- FEET**
Foot lameness in pigs. 10332
- FENAC**
Control of johnsongrass on drainage ditchbanks in sugarcane. 10297
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
- FENTHION**
A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
- FENURON**
Selective grass control with siduron. 10294
- FERBAM**
Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441
- FERRISIA VIRGATA**
First record of *Aewasius advena* Comperc (Encyrtidae: Hymenoptera) from India as a parasite of *Ferrisia virgata* Ckll.. 9932
- FERTILITY**
Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100
- FERTILIZERS**
Influence of pesticides and fertilizers on the behaviour of phytophagous mites in orchards and under laboratory conditions. 10065
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
- FIBRINOGEN**
Babesia argentina: Serum changes in infected calves. 10345
- FICALBIA**
A new species of *Ficalbia* (Ravenalites) from Cambodia (Diptera: Culicidae). 9910
- FIELD STUDIES**
Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068
Structure, stability, and energy flow in plants and arthropods in a sericea *Lespedeza* stand. 10255
- FIELD TEST**
Accurately predicting a herbicides potential. 10313
- FILARIASIS**
Analytical studies on extracts of *Litomosoides carinii*. 10341

SUBJECT INDEX

FUNGUS DISEASES (PLANTS)

- FILM**
Odorous house ant feeds on photographic film. 10386
- FISH**
Consequences of insecticide use of nontarget organisms. 10402
Problems with DDT in fish culture operations. 10406
Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
Industry's concern with pesticide residues. 10411
Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421
- FISHERIES**
Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. 10399
- FISHERY PRODUCTS**
Problems with DDT in fish culture operations. 10406
- FLAGELLA**
Experimental infections with *Bacillus* larvae. I. A strain with a morphological marker. 10020
- FLAX**
Reaction of flax to dicamba applied at several stages. 10301
Competition between flax and wild buckwheat. 10440
- FLOTATION**
Recovery of mites from peat and mineral soils using a new floatation method. 9975
- FOLIAR APPLICATION**
Repeated, foliar applications of herbicides on johnsongrass. 10291
- FOOD**
Methods of determining pesticides in food products. (JPRS 34,946). 10418
- FOOD ADDITIVES**
Notice of filing of petition for food additives. 10417
- FOOD ANALYSIS**
Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. 10399
- FOOD CONTAMINATION**
Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- FOOD HABITS**
Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorum brevibuca* Freeman (Chironomidae) under experimental conditions. 10066
The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. 10086
- FOOD PLANTS**
Effect of different food plants on the larval and post-larval development on *Diacrisia obliqua* Walker. 10084
- FOOD POISONING**
Problems in raising ducks. 10357
- FOOT ROT (ANIMALS)**
Foot lameness in pigs. 10332
- FOOT-AND-MOUTH DISEASE**
Vaccinated cattle....can harbor foot and mouth disease. 10331
- FORAGE PLANTS**
Twenty-six varieties of forage crops evaluated for resistance to feeding by *Melanoplus sanguinipes*. 10246
- FOREST CUTTING SYSTEMS**
Relationship between amount of thinning, time of care, and damages caused by red deer. 10323
- FOREST INSECTS**
Helicopter sprayers may rescue infested forests. 9959
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
Needle miner infestations in lodgepole pine east of the Sierra crest. 10267
- FORESTRY**
Chemical preparations in the services of agriculture and forestry. 10169
- FORMICIDAE**
A new Malayan species of the ant genus *Epitritus* and a related new genus from Singapore (Hymenoptera: Formicidae). 9944
A new record, *Dorylus labiatus* Shuck. (Hymenoptera: Formicidae) as a predator of *Microtermes mycophagus* Desn. (Isoptera: Termitidae). 10112
Odorous house ant feeds on photographic film. 10386
- FORMULATIONS**
Beetle. 10137
Gas chromatographic determination of ethyl O,O-dimethyldithiophosphoryl-1-phenyl acetate in technical grade cidal and its 50 percent liquid formulation. 10457
Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459
- FOWL CHOLERA**
Problems in raising ducks. 10357
- FRAXINUS**
Inonotus hispidus. 10218
- FRUIT**
The identification and distribution of *Quadraspidiotus* species (Homoptera: Diaspididae) on pome and stone fruits in Australia. 9876
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
Ir-2, a germ plasm bank of virus-free fruit tree clones. 10184
Biological control of olive scale, *Parlatoria oleae* (Colvce), in a deciduous fruit orchard in California. 10252
Easy-to-kill pests of fruit trees...codling moth. 10253
Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- FUMARIA OFFICINALIS**
The response of fumitory to various herbicides. 10293
- FUMIGANTS**
An integrated technique to study the effects of fumigants on respiration of insects. 9972
Pesticides and clay minerals. 10397
Analysis of grains for multiple residues of organic fumigants. 10416
- FUMIGATION**
Problems in raising ducks. 10357
- FUNGI**
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- FUNGICIDE RESISTANT FUNGI**
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- FUNGICIDES**
Fungicidal control of rice diseases. 10170
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
Designation used, chemical name, source, and trademark name of each fungicide mentioned in this compilation. 10172
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
Chemotherapy of loose smut of barley in Canada. 10179
Fungicidal composition containing zinc dithiocarbamate. Patent 3,458,638. 10190
Effect of chemical treatments on the control of. 10191
Seed-mycoflora of musk-melon. 10193
Effectiveness of fungicides in controlling barley loose smut. 10196
The fungitoxic mechanisms in quinoline compounds and their chelates. 10202
Fungicidal control of smut diseases of cereals. 10207
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
Metabolism of organic pesticide chemicals in higher plants. 10278
Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441
N-(substituted-benzoyl) aminoacetate and aminopropionitriles. Patent 3,457,294. 10460
Chemistry of fungicides. 10476
- FUNGUS CULTURES**
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethylmethanesulfonate. 10435
- FUNGUS DISEASES (PLANTS)**
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
Chemical control of loose smut in barley in Minnesota. 10174
Nutrition of the silver-leaf pathogen *Stereum purpurcum* (Pers.) Fri. 10175

SUBJECT INDEX

FUSARIUM

Interaction between chilli mosaic and powdery mildew in tobacco. 10176

A leaf spot disease of *Cyamopsis tetragonoloba* caused by *Curvularia lunata* in India. 10177

Post-infection changes in the sugar content of leaf-spot infected barley. 10178

Chemotherapy of loose smut of barley in Canada. 10179

Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181

List of publications on fungus and insect defects in forest products. 10182

Verticillium wilt of tobacco. VI. The influence of roots and stems on *Verticillium* wilt symptoms in tobacco. 10186

Rhizoctonia leaf rot of colocasia in India. 10188

A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189

Effect of chemical treatments on the control of. 10191

Control of loose smut of wheat and barley in Arkansas with fungicides. 10192

Chemical control of wheat and barley loose smut. 10194

Effect of two systemic fungicides on control of loose smut in wheat. 10195

Effectiveness of fungicides in controlling barley loose smut. 10196

Standardization of the international race numbers of *Pycularia oryzae*. 10198

Efficacy of oxathiin fungicides for control of loose smut in barley. 10199

Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200

Colletotrichum nigrum from eggplant. A new record from India. 10201

The fungitoxic mechanisms in quinoline compounds and their chelates. 10202

Fungicidal control of smut diseases of cereals. 10207

Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208

Deleterious effect of certain fungitoxicants on the formation of Mycorrhizae on corn by *Endogone fasciculata* and on corn root development. 10209

Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211

Survival of root-infecting fungi in soil. XII. Germination and survival of endoconidia and chlamydospores of *Thielaviopsis basicola* in fallow soil and in soil adjacent to germinating bean seed. 10213

Chemical control of loose smut in barley. 10214

Heterobasidion annosum. 10215

Phellinus igniarius. 10216

Phellinus pomaceus. 10217

Inonotus hispidus. 10218

Results obtained with a systemic oxathiin fungicide in France. 10220

The systemic fungicide 2,3-dihydro-5-carbox-anilido-6-methyl,4-oxathiin. 10222

Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223

Comparison of mycelial and Sclerotial inoculum of *Macrophomina phaseoli* in the mortality of pine seedlings under varying soil conditions. 10225

Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226

Preliminary note on the occurrence of black point disease of wheat in India. 10228

Seed treatment trial, 1967. 10229

Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230

Verticillium wilt of tobacco. VII. Pathogenicity of isolates of *Verticillium dahliae* Kleb. on New Zealand tobacco. 10231

Response to parasites. 10232

FUSARIUM
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173

FUSARIUM MONILIFORME
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethyl methanesulfonate. 10435

GALL-MAKING INSECTS
Gall-inhabiting *Liothrips Uzel* from India. 9867

Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203

GALLERIA MELLONELLA
Study of denonucleosis of Lepidoptera by the immunological gel diffusion method. 10019

Diplogasterid nematodes (Diplogasteridae: Rhaditida) and their relationship to insect disease. 10094

Isolation and biological properties of the juvenile hormone. 10106

GAMMA RAYS
Radiation sensitivity of twelve species of arthropods. 10069

Sensitivity to gamma radiation of *Tribolium confusum* eggs at various developmental stages. 10136

Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148

GARDENS
In your garden - weeds: Robbers, but not always bad. 10168

GASTROINTESTINAL SYSTEM
Hydrogen-ion concentration and the digestive enzymes in *Cletus signatus* Walker (Heteroptera: Coreidae). 10063

Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339

The effect of gastro-intestinal secretions on taeniid egg membranes. 10374

GEESE
The comparative pathology of duck plague in wild Anseriformes. 10342

GELATIN
Odorous house ant feeds on photographic film. 10386

GELECHIIDAE
Synonymy of *Keiferia glochinella* (Zeller) and related names (Lepidoptera: Gelechiidae). 9905

GENES
Chromosomal polymorphism and genetic load in *Drosophila pseudoobscura*. 10153

Biochemical genetics of insecticide resistance in the housefly. 10163

Operator constitutive mutations in the leucine operon of *Salmonella typhimurium*. 10329

GENETICS
Homologous lines of chromosome polymorphism in the natural populations of Adirondack black fly (Diptera, Simuliidae). 10150

A *Salmonella typhimurium* involved in the regulation of isoleucine, valine and leucine biosynthesis. 10326

GEOMETRIDAE
Notes and considerations on the control of the cypress moth, *Catoria unipennaria* (Guen.) (Lepidoptera, Geometridae). 10261

GERANIOL
Biochemical studies on the terpene metabolism in sweet potato root tissue with black rot. Effect of C10- and C15-terpenols on acetate-2-14C incorporation into ipomeamarone. 10446

GERM-FREE LIFE
Ontogeny of the immune response. V. Further characterization of 19 S gamma G- and 7 S gamma G-immunoglobulins in the true primary immune response in germfree, colostrum-deprived piglets. 10340

GHANA
Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391

GIBBERELLIC ACID
Effects of growth regulators and herbicides on germination of *Hydrilla turions*. 10306

Effects of gibberellin A3 on fruit shape and subsequent seed dormancy of apple. 10453

GIBBERELLINS
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethyl methanesulfonate. 10435

GLOBULINS
Ontogeny of the immune response. V. Further characterization of 19 S gamma G- and 7 S gamma G-immunoglobulins in the true primary immune response in germfree, colostrum-deprived piglets. 10340

GLOSSINA
The influence of temperature on reproduction and development in four species of *Glossina* (Diptera: Muscidae). 10028

GLOSSINA MORSITANS
Pupal duration in *Glossina morsitans orientalis* under conditions of constant temperature. 10091

Lethal temperatures for puparia of *Glossina morsitans orientalis*. 10092

- GLUGEA GASTI**
Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068
- GLYCERIDES**
Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Hubner). 10143
- GLYCOPROTEINS**
Endrin induced alterations in bound carbohydrates in rat serum. 10423
- GLYCOSIDES**
Discovery of sinigrin as a phagostimulant by *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 10433
- GOATS**
The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363
Use of inert particles for the diagnosis of sheep cisticercosis. Bentonite test. 10367
- GRACILLARIIDAE**
Two new Palearctic *Lithocolletis* species. (Preliminary description). 9884
- GRAIN**
Fungicidal control of smut diseases of cereals. 10207
The control of insects in bagged grain by the injection of dichlorvos. 10387
Studies on the incidence and extent of damage due to insect pests in stored seeds--I. Cereal seeds. 10388
Analysis of grain storage problems in India. 10390
Analysis of grains for multiple residues of organic fumigants. 10416
- GRAMINELLA NIGRIFRONS**
Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
- GRANULOSES**
Ultrastructural observations on the branched rods associated with some insect granuloses. 9960
- GRAPHOGNATHUS LEUCOLOMA**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- GRASSES**
Biology of the billbug *Sphenophorus venatus* confluens, a new pest of orchardgrass. 10047
Selective grass control with siduron. 10294
- GRASSY SHOOT**
Local lesion host for grassy shoot virus of sugarcane. 10224
- GRAZING**
Bloat on *Dolichos lablab*. 10335
- GROWTH FACTORS**
Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
- GRYLLUS CAMPESTRIS**
Intracellular activity in cricket neurons during the generation of behaviour patterns. 9968
- GUINEA PIGS**
Case of rabies in guinea pig with long incubation period. 10348
- GYRINIDAE**
Correction to the key of the European *Gyrinus* species. 9925
- GYRINUS**
Correction to the key of the European *Gyrinus* species. 9925
- HABITATS**
Gall-inhabiting *Liothrips Uzel* from India. 9867
Description of the male, pupa, and larval habitat of *Nilobezzia brevicornis* (Diptera: Ceratopogonidae). 9963
Seasonal changes in the distribution of the millipede *Cylindroiulus punctatus* (Leach) in decaying logs and soil. 9966
A study of a pocket of scattered desert locust population in Rajasthan, India during 1966 with special reference to eye-stripes and biometrics. 10027
- HAEMATOBIA**
Colonization of an island by the buffalo fly, *Haematobia exigua*. 10004
- HAMSTERS**
Immune lysis of rabies virus-infected cells. 10361
- HAPLOTHRIPS**
The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235
- HEAT TREATMENT**
Freeing alfalfa clones from alfalfa mosaic virus by heat treatment. 10185
- HELICOPTERS**
Helicopter sprayers may rescue infested forests. 9959
- HELIOTHIS**
Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliopsis* spp. 10040
- HELIOTHIS ZEA**
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
- HELMINTHOSPORIUM**
Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226
Preliminary note on the occurrence of black point disease of wheat in India. 10228
- HELMINTHOSPORIUM HAWAIIENSE**
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
- HELMINTHOSPORIUM SATIVUM**
Post-infection changes in the sugar content of leaf-spot infected harley. 10178
- HELMINTHOSPORIUM STENOSPILUM**
Influence of light on sporulation by *Helminthosporium stenospilum*. 10183
- HEMAGGLUTINATION**
Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatidiosis. 10372
- HEMEROCAMPA PSEUDOTSUGATA**
Helicopter sprayers may rescue infested forests. 9959
- HEMOGLOBIN (PLANTS)**
Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438
- HEMOLYMPH**
Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). 10057
The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
- HEPTACHLOR**
Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
Conversion of heptachlor to its epoxide. 10478
Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- HEPTACHLOR EPOXIDE**
Industry's concern with pesticide residues. 10411
Conversion of heptachlor to its epoxide. 10478
Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- HERBICIDE APPLICATION**
Reaction of flax to dicamba applied at several stages. 10301
Herbicide screening tests during 1967 in agricultural crops and potted herbs. 10307
Response of soybeans to 2,4-D, dicamba, and picloram. 10312
An evaluation of herbicide incorporation equipment. 10483
- HERBICIDE RESIDUES**
Gas chromatographic determination of residues of Dalapon in several substrates. 10410
Extraction and gas-liquid chromatographic determination of vernolate in soil. 10412
Notice of filing of petition for food additives. 10417
- HERBICIDES**
Metabolism of trifluralin in peanuts and sweet potatoes. 10273
Response of tropical vegetation to herbicides. 10275
Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276
Metabolism of organic pesticide chemicals in higher plants. 10278
African feather grass--a weed worth watching. 10279
Effects of several herbicides on yews and Japanese maples. 10280
A method for spraying individual trees. 10282
Downy brome control by soil-active herbicides for revegetation of rangelands. 10283
Behavior of pyrazon in soil. 10286
Absorption and translocation of pyrazon by plants. 10287

SUBJECT INDEX

HERBS

Effects of pyrazon on growth, photosynthesis, and respiration. 10288

1967 pre-emergence weed control in potatoes on Long Island. 10289

Phytotoxicity of bemethylated analogs of diphenamid. 10290

Repeated, foliar applications of herbicides on johnsongrass. 10291

Translocation of assimilates and dalapon in established johnsongrass. 10292

The response of fumitory to various herbicides. 10293

Basis for selectivity of linuron on carrot and common ragweed. 10295

Weed control in sugarbeets. 10296

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

Effect of nitrogenous materials on the uptake of triazine herbicides. 10298

Mechanisms of action of herbicides. 10299

Chemical stimulation of ethylene evolution and bud growth. 10300

Reaction of flax to dicamba applied at several stages. 10301

Effect of soil water stress and soil temperature on translocation of diuron. 10302

Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303

Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304

Effects of growth regulators and herbicides on germination of *Hydrilla turionis*. 10306

Herbicide screening tests during 1967 in agricultural crops and potted herbs. 10307

Absorption and penetration of picloram in potato tuber discs. 10308

Effects of 2,4,5-T during the approach of woody plant dormancy. 10311

Response of soybeans to 2,4-D, dicamba, and picloram. 10312

Accurately predicting a herbicides potential. 10313

A sprayer for application of small amounts of herbicides to flats. 10314

EPTC effects on sicklepod petiolar fatty acids. 10315

Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429

Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431

Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434

Spray gel agent solves drift problem. 10456

Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459

Chemistry of herbicides. 10464

Atrazine degradation in two soil profiles. 10477

An evaluation of herbicide incorporation equipment. 10483

An evaluation of herbicide incorporation equipment. 10484

HERBS

Herbicide screening tests during 1967 in agricultural crops and potted herbs. 10307

HETERAKIS GALLINARUM

Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383

HETEROPTERA

Presentation of aquatic heteropteran fauna II, aquatic Heteroptera from Evora, Portugal. 9922

HETEROTYLENCHUS ABERRANS

Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120

HETEROTYLENCHUS AUTUMNALIS

Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120

HEXANE

Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479

HEXOSES

Analytical studies on extracts of *Litomosoides carinii*. 10341

HIBERNATION

Growers join forces to battle the boll weevil. 10233

HILL REACTION

Mechanisms of action of herbicides. 10299

Effects of ammonium thiocyanate on carbohydrate metabolism in the cotton plant. 10455

HIPPOBOSCIDAE

Records of pupiparous Diptera (Hippoboscidae) on birds in India--III. 10365

HISTERIDAE

A key to the species of *Carcinops* Marseul (Coleoptera, Histeridae) associated with stored products, including *C. troglodytes* (Paykull) new to this habitat. 9901

HISTOCHEMISTRY

Retention of intra-cellular potassium by the housefly. 10113

HISTOLOGY

Ancylostoma caninum: Fine structure of intestinal epithelium. 10377

Spirurata of animals and humans and the diseases. 10382

HISTOMONAS MELEAGRIS

The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378

HOG CHOLERA

Hog cholera and other communicable swine diseases. Miscellaneous amendments. 10328

HOG CHOLERA VACCINES

Inactivated hog cholera virus vaccine. Patent 3,456,053. 10330

HOG CHOLERA VIRUS

Inactivated hog cholera virus vaccine. Patent 3,456,053. 10330

HOMOPTERA

Bulgarian grasshoppers (Homoptera: Auchenorrhyncha). 9928

HOPLOPSYLLUS

Abundance of cottontails and their fleas at Red Bluff Ranch, New Mexico. 10007

HORMONES

Sindbis virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. 9969

Female specific protein: Biosynthesis controlled by corpus allatum in *Leucophaea maderae*. 10002

Isolation and biological properties of the juvenile hormone. 10106

HORSES

Equine vaccines and vaccinations. 10344

The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363

The course of naturally acquired helminth infections of horses given regular anthelmintic treatment. 10380

HUMAN DISEASES

Research on the synantropic flies in the Sofia area, in regard to their epidemiological importance. 10165

Allergic responses to insects. 10166

Spirurata of animals and humans and the diseases. 10382

HUMANS

Consequences of insecticide use of nontarget organisms. 10402

HUMIDITY

Development of *Chrotogonus trachypterus* (Blanch.) (Orthoptera: Pyrgomorphidae) in relation to different levels of temperature and humidity. 10026

Water vapor sorption and humidity relationships in *Liposcelis* (Insecta: Psocoptera). 10053

Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119

The response of fumitory to various herbicides. 10293

Analysis of grain storage problems in India. 10390

Survival of lyophilized *Bacillus popilliae* in soil. 10415

HYACINTH DOLICHOS

Bloat on *Dolichos lablab*. 10335

HYALOPHORA CECROPIA

Vitellogenic blood protein synthesis by insect fat body. 10083

Isolation and biological properties of the juvenile hormone. 10106

HYDROCARBONS

Identification of hydrocarbons from *Novomessor cockerelli*. 10138

HYDROGEN-ION CONCENTRATION

Hydrogen-ion concentration and the digestive enzymes in *Cletus signatus* Walker (Heteroptera: Coreidae). 10063

- HYDROLOGY**
Surface hydrology and pesticides. 10392
- HYDROLYSIS**
The effect of gastro-intestinal secretions on taeniid egg membranes. 10374
- HYLEMIA ANTIQUA**
Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120
- HYLOBIUS RHIZOPHAGUS**
Life history and damage of the pine root tip weevil, *Hylobius rhizophagus*, in Wisconsin. 10049
- HYMENOPTERA**
New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916
- HYMENIA RECURVALIS**
New parasite records on *Hymenia recurvalis* (Fabricius) (Lepidoptera: Pyralidae). 10087
- HYMENOLEPIS DIMINUTA**
Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris suum*, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
- HYMENOPTERA**
Wasps attacking other insects. 9979
- HYPERTROPHY**
A strain of nuclear-polyhedrosis virus causing extensive cellular hypertrophy. 10126
- HYPHANTRIA CUNEA**
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
- ICHNEUMONIDAE**
Oriental species of *Coesula* Cameron (Hymenoptera: Ichneumonidae). 9897
Biology of *Agrothereutes tunethnus* Haber. (Hym., Ichneumonidae) an ectoparasite of *Orygia duhia* Tausch. (Lep., Lymantriidae). 10054
Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254
- ILEX OPACA**
Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276
- IMMUNITY**
Vaccinated cattle.....can harbor foot and mouth disease. 10331
Ontogeny of the immune response. V. Further characterization of 19 S gamma G- and 7 S gamma G-immunoglobulins in the true primary immune response in germfree, colostrum-deprived piglets. 10340
Immune lysis of rabies virus-infected cells. 10361
- IMMUNIZATION**
Equine vaccines and vaccinations. 10344
Tablet dosage-form for the immunization of the intestinal tract with live virus preparations. Patent 3,458,621. 10359
- IMMUNOCHEMISTRY**
Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077
- IMMUNOLOGY**
Immunogenicity of concentrated and purified rabies vaccine of tissue culture origin. 10360
- INAZUMA DORSALIS**
Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
- INCLUSION BODIES**
Case of rabies in guinea pig with long incubation period. 10348
- INDICATOR PLANTS**
Water flora as indicators of irrigation water contamination by DDT. 10403
- INDICATORS (DISEASE)**
Experimental infections with *Bacillus* larvae. I. A strain with a morphological marker. 10020
- INDOLEACETIC ACID**
Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452
- INFECTIOUS DISEASES**
Foot lameness in pigs. 10332
- INHERITANCE**
Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096
- INHIBITORS**
A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429
- INSECT ADAPTATION**
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
A model accounting for sympatry in water mites. 10076
- INSECT BEHAVIOR**
Ear mites of the genus *Dicrocheles* (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882
Studies on an Israel strain of *Anagyrus pseudococci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. 9964
Intracellular activity in cricket neurons during the generation of behaviour patterns. 9968
Oviposition behaviour of the desert locust (*Schistocerca gregaria* Forsk.). 9971
Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (Oligotomidae, Emhioptera), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. 9978
Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006
The behavior of newly emerged holl weevils. 10016
Histological, behavioral, and symptomatic effects of Pentac on *Tetranychus urticae*. 10018
Hexalure, an insect sex attractant discovered by empirical screening. 10025
Laboratory demonstration of a chemical sex attractant in *Costelytra zealandica* (White) (Scarabaeidae: Coleoptera). 10030
- Studies and suggestions on the behaviour of moths at light. 10033
Biology of the billbug *Sphenophorus venatus* confluent, a new pest of orchardgrass. 10047
Spaced-out gregariousness in sycamore aphids *Drepanosiphum platanoides* (Schrank) (Homiptera, Callaphididae). 10050
Biology of *Agrothereutes tunethnus* Haber. (Hym., Ichneumonidae) an ectoparasite of *Orygia duhia* Tausch. (Lep., Lymantriidae). 10054
The ecology of the Simuliidae in a Scottish river. 10062
Influence of pesticides and fertilizers on the behaviour of phytophagous mites in orchards and under laboratory conditions. 10065
Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorum breviuucca* Freeman (Chironomidae) under experimental conditions. 10066
Field observations on periodicity and site preference in oviposition by *Aedes aegypti* (L.) and related mosquitoes (Diptera: Culicidae) in Kenya. 10072
Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075
Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. 10080
Nutrition of *Xylehorus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
The predatory and reproductive behaviour of *Rhincocoris bicolor* and *R. tropicus* (Hemiptera: Reduviidae). 10085
The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. 10086
Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100
The defensive behaviour of the stick insect *Onotophasma martini* (Griffini) (Orthoptera: Phasmatidae). 10103
New approaches to the control of pest organisms. 10118
Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122
On the oviposition behaviour and development of *Sitophilus oryzae* Linn. in various natural foods. 10127
A record of diurnal flight in *Dytiscus*. 10132
The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235
Wharf horer. 10385
Odorous house ant feeds on photographic film. 10386
- INSECT BIOCHEMISTRY**
Lactic dehydrogenase isozymes in the grasshopper. 9961
The utilization of C14-labelled adenosine diphosphate during the in vitro respiration of housefly sarcosomes. 9984

SUBJECT INDEX

INSECT BIOLOGY

- On the odour components of the stink of two heteropteran bugs of India. **9989**
- The neutral lipids from various organs of the termite *Macrotermes goliath*. **9991**
- Variations in free amino acids in the larvae and pupae of *Chilo zonellus*. **9994**
- Physico-organic chemical approach to the mode of action of organophosphorus insecticides. **10014**
- A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. **10044**
- Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). **10057**
- Hydrogen-ion concentration and the digestive enzymes in *Cletus signatus* Walker (Heteroptera: Coreidae). **10063**
- Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. **10077**
- Studies on phosphohexoseisomerase (d-glucose-6-phosphate ketol isomerase) from the Indian honeybee, *Apis indica* Fabricius. **10098**
- Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. **10105**
- Isolation and biological properties of the juvenile hormone. **10106**
- On the explosion chemistry of the hombardier beetle. Vi. On the chemistry of the smallest bombardier beetle *Paussus favieri*. XLIII. Communication on arthropod protective substances. **10111**
- Retention of intra-cellular potassium by the housefly. **10113**
- Identification of hydrocarbons from *Novomessor cockerelli*. **10138**
- Refined defensive mechanisms in *Chrysomela scripta*. **10139**
- Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Hühner). **10143**
- Biochemical genetics of insecticide resistance in the housefly. **10163**
- INSECT BIOLOGY**
- Ixodes pacificus* Cooley and Kohls, 1943: Its life-history and occurrence. **9962**
- Studies on an Israel strain of *Anagyrus pseudococci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. **9964**
- Life history and habits of *Sialis rotunda* and *S. californica* in western Oregon. **9965**
- Note on *Prospaltella aurantii* How. (Hym., Aphelinidae), parasite of *Quadraspidiotus pyri* Licht. in the Matitime Alps (Hom., Diaspididae). **9967**
- Notes on the biology of *Diatracophaga striatalis* Townsend, tachinid parasite of *Proceras sacchariphagus* Boj. **9970**
- Oviposition behaviour of the desert locust (*Schistocerca gregaria* Forsk.). **9971**
- Effect of temperature on the development of mustard sawfly, *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). **9976**
- Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (Oligotomidae, Embioptera), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. **9978**
- Meteorus versicolor* Wesm. var. *decoloratus* Ruthe (Hym., Braconidae), a new parasite of *Thaumetopoea pityocampa* Schiff. (Lep., Thaumetopoeidae). **9980**
- A note on the occurrence of fruit fly maggots of *Dacus cucurbitae* Coq. in cecidomyiid galls of *Coccinia indica* in Andhra Pradesh. **9998**
- The life histories and drifting of the Plecoptera and Ephemeroptera in a dartmoor stream. **10001**
- Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. **10006**
- Morphology and biology of a nest-producing mite, *Bakericheyla chanayi* (Acarina: Cheyletidae). **10015**
- In vitro colonization of the goat biting louse, *Bovicola crassipes* and *B. limbata*. **10034**
- Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliothis* spp. **10040**
- Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. **10045**
- Biology of the billbug *Sphenophorus venatus confluens*, a new pest of orchardgrass. **10047**
- Life history and damage of the pine root tip weevil, *Hyllobius rhizophagus*, in Wisconsin. **10049**
- Biology of *Agrothereutes tunethnus* Haber. (Hym., Ichneumonidae) an ectoparasite of *Orygia dubia* Tausch. (Lep., Lymantriidae). **10054**
- Insect parasites of the green peach aphid, *Myzus persicae* Sulz. and their control potential. **10059**
- Age-distribution and abundance in populations of flour beetles. I. Experimental studies. **10071**
- Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. **10080**
- Effect of different food plants on the larval and post-larval development on *Diacrisia obliqua* Walker. **10084**
- Isolation and biological properties of the juvenile hormone. **10106**
- Biological notes on the bee *Tetralonia minuta* and its cleptoparasite, *Morgania histrio transvaalensis* (Hymenoptera: Anthophoridae). **10109**
- Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). **10114**
- Observations on the biology of *Lathromeroides* sp. (Trichogrammatidae: Hymenoptera) egg parasite of the leaf rolling weevil, *Apoderus sissu* Marshall (Curculionidae: Coleoptera) with notes on the host weevil. **10117**
- Notes on the natural history of *Tenebrionidae* (Coleoptera) in Canterbury. **10140**
- Continuous laboratory culture of the locust borer, *Megacyllene robiniae*. **10141**
- Etology as the determining factor of the numerical distribution of the species in the fauna. **10144**
- A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). **10164**
- The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. **10235**
- Biology and control of leopard moth on pear trees in the United Arab Republic. **10242**
- Biological control of olive scale, *Parlatoria oleae* (Colvee), in a deciduous fruit orchard in California. **10252**
- Integrated control of insects. A challenge for scientists. **10265**
- Biological control of *Cuscuta* spp. II. Biology and host-plant range of *Melanagromyza cuscutae* Hering (Dipt. Agromyzidae). **10272**
- A study of the mites of the Gamasoidea superfamily (Parasitiformes) infesting small mammals on the Vitosha Mountain. **10364**
- Wharf borer. **10385**
- INSECT COLLECTING EQUIPMENT**
- A killing agent for use in light traps. **10090**
- A simple collector for removing soil insects from an oil/water interface. **10095**
- INSECT COLLECTION**
- List of insect and other invertebrate types in the Miguel Lillo Institute. (3rd list). **9902**
- INSECT CONTROL**
- New approaches to the control of pest organisms. **10118**
- A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. **10245**
- INSECT DISEASES**
- Helicopter sprayers may rescue infested forests. **9959**
- Ultrastructural observations on the branched rods associated with some insect granuloses. **9960**
- Sindh virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. **9969**
- Spermatocyte granules in *Drosophila melanogaster*. **10003**
- Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. **10012**
- Microscopical studies on the development of *Babesia ovis* in *Rhipicephalus bursa* (Ixodoidea). I. Development in female ticks after repletion. **10013**
- Study of denonucleosis of Lepidoptera by the immunological gel diffusion method. **10019**
- Experimental infections with *Bacillus* larvae. I. A strain with a morphological marker. **10020**
- Antennopsis gallica* Heim and Buchli (hyphomycetes: Glocochaustoriales), an entomogenous fungus on subterranean termites in Florida. **10022**
- Course of sporulation of *Bacillus popilliae* in liquid medium containing activated carbon. **10029**
- Lethargy, a new virus of *Melolontha melolontha* L. larvae (Coleoptera, Searabacidae). **10036**
- Leaching of the nuclear-polyhedrosis virus of *Trichoplusia ni* from soil. **10041**

- Laboratory and field experiments on the effectiveness of purified and non-purified nuclear polyhedral virus of *Lymantria dispar* L.. 10061
- Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068
- Diplogasterid nematodes (Diplogasteridae: Rhabditida) and their relationship to insect disease. 10094
- Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120
- A strain of nuclear-polyhedrosis virus causing extensive cellular hypertrophy. 10126
- Fuseaux virus of a South American Scarabaeidae. 10133
- The histopathology of a nuclear polyhedrosis in larvae of the cabbage looper, *Trichoplusia ni*, related to symptoms and mortality. 10134
- Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angelae*. 10158
- INSECT DISSEMINATION**
- Oehromolopis icetella* Hh. (Lepidoptera, Epermeniidae) in Finland, probably transported by windstorm. 9912
- Colonization of an island by the buffalo fly, *Hacmatahia exigua*. 10004
- INSECT ECOLOGY**
- The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872
- Lathridius bifasciatus* Reitt. (Col., Lathridiidae) habitats. 9878
- Description of *Dendrocercus* (tmacrostigma) noumeae sp. nov. from New Caledonia (Ceraphronoidea, Megaspilidae). 9885
- A new species of *Chrysomela* (Coleoptera, Chrysomelidae)-an important component of the Taimyr Peninsula biocoenoses. 9918
- Life history and habits of *Sialis rotunda* and *S. californica* in western Oregon. 9965
- The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005
- Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006
- Studies on the ecology of larval Tipulinae (Diptera, Tipulidae). 10011
- Ecological research in the Lamto Savannah (Ivory Coast): Annual cycle of the population size and biomasses of arthropods in the herbaceous stratum. 10017
- Aquatic insect communities of a small stream on Mont St. Hilaire, Quebec. 10060
- The ecology of the Simuliidae in a Scottish river. 10062
- Age-distribution and abundance in populations of flour beetles. I. Experimental studies. 10071
- A model accounting for sympatry in water mites. 10076
- Etology as the determining factor of the numerical distribution of the species in the fauna. 10144
- The parasitism of gamasid mites (Gamasoidea) on birds. 10145
- Symposium on the principles of the application of microbiological preparations in nature. 10249
- Structure, stability, and energy flow in plants and arthropods in a sericea Lespedeza stand. 10255
- Integrated control of insects. A challenge for scientists. 10265
- INSECT EGGS**
- Description of immature stages of Coreidae. 3. *Archimerus alternus*. 9956
- Description of immature stages of Coreidae. 1. *Euthochtha galeator*. 9957
- The external morphogenesis of grasshopper embryos. 9987
- Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999
- Temperature effects on embryonic development in insects. 10035
- Biology of the billbug *Sphenophorus venatus confluens*, a new pest of orchardgrass. 10047
- Experimental studies on diapause in stoneflies. III. Eggs of *Brachyptera risi* (Morton). 10051
- Field observations on periodicity and site preference in oviposition by *Aedes aegypti* (L.) and related mosquitoes (Diptera: Culicidae) in Kenya. 10072
- Water uptake and embryonic development in eggs of *Chorthippus brunneus* Thunberg (Saltatoria: Acrididae). 10079
- Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119
- Sensitivity to gamma radiation of *Tribolium confusum* eggs at various developmental stages. 10136
- INSECT EVOLUTION**
- Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
- Spermatophores of the Blattaria. 10024
- Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123
- Evolution of fitness. IV. Genetic evolution of inter-specific competitive ability in *Drosophila*. 10146
- Autosomal fragmentations and fusions in Odonata and their evolutionary implications. 10157
- INSECT FLIGHT**
- Locust wind receptors. I. Transducer mechanics and sensory response. 9981
- Locust wind receptors. III. Contribution to flight initiation and lift control. 9982
- Locust wind receptors. ii. Interneurons in the cervical connective. 9983
- A record of diurnal flight in *Dytiscus*. 10132
- INSECT GENETICS**
- A new *Polymixis* HB. of Spain. *Polymixis lajonquierei* Brsn. (Supplemental description (1)) contribution to the study of Noctuidae trifinae 159(2). 9875
- Spermatocyte granules in *Drosophila melanogaster*. 10003
- The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005
- Evolution of fitness. IV. Genetic evolution of inter-specific competitive ability in *Drosophila*. 10146
- Ethyl methanesulfonate (EMS) induced mutations in *Drosophila melanogaster*. 10147
- Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151
- A third locus (lpo) affecting pyridoxal oxidase in *Drosophila melanogaster*. 10152
- Chromosomal polymorphism and genetic load in *Drosophila pseudoobscura*. 10153
- Chromosome behavior under the influence of claret-nondisjunctional in *Drosophila melanogaster*. 10154
- Segregation distorter in *D. melanogaster* males: An effect of female genotype on the segregation ratio. 10155
- Population genetics in the American tropics. IV. Temporal changes effected in natural populations of *Drosophila melanogaster* from Colombia. 10156
- A molecular approach to the study of genic heterozygosity in natural populations. IV. Patterns of genic variation in central, marginal and isolated populations of *Drosophila pseudoobscura*. 10159
- Position effect on DNA transcription and replication. 10160
- Experimental evidence for factors affecting the relative efficiency of indirect to direct selection in *Tribolium castaneum*. 10161
- The role of sexuality in dosage compensation in *Drosophila*. 10162
- Biochemical genetics of insecticide resistance in the housefly. 10163
- INSECT HISTOLOGY**
- Spermatocyte granules in *Drosophila melanogaster*. 10003
- Microscopical studies on the development of *Babesia ovis* in *Rhipicephalus bursa* (Ixodoidea). I. Development in female ticks after repletion. 10013
- Histological, behavioral, and symptomatic effects of Pentac on *Tetranychus urticae*. 10018
- Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100
- INSECT HORMONES**
- Effects of exogenous moulting hormones on puparium formation in *Calliphora*. 10130

SUBJECT INDEX

INSECT IDENTIFICATION

INSECT IDENTIFICATION

- Gall-inhabiting *Liothrips Uzel* from India. 9867
- A new *Polymixis* HB. of Spain. *Polymixis lajonquierei* Brsn. (Supplemental description (1)) contribution to the study of Noctuidae trifinae 159(2). 9875
- Oriental species of *Coesula* Cameron (Hymenoptera: Ichneumonidae). 9897
- A revision of the pseudomorphaeridini (Orthoptera: Acridoidea: Pyrgomorphidae). 9909
- New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916
- Hypocypus nitidus* Palm. (Col., Staphylinidae) in the Joy collection. 9954
- Quedius (Microsaurus) seitus* (Grav.) (Col., Staphylinidae) a teratological specimen. 9955
- On two new species of Terebrantian Thysanoptera with remarks on a new genus *Pellothrips*. 9958
- A new *Caradrina* O. of Spain- Contributions to the study Noctuidae Trifinae, 158(1). 9977
- Recent records of migrant Lepidoptera in Taranaki. 10008
- Beetle. 10137
- Wharfborer. 10385

INSECT METABOLISM

- Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Hubner). 10143
- The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426

INSECT MIGRATION

- Recent records of migrant Lepidoptera in Taranaki. 10008
- Studies and suggestions on the behaviour of moths at light. 10033
- Meteorological aspects of insect migrations. 10037
- Migrating butterflies in 1967 (Twentieth Annual Report). 10056

INSECT MORPHOLOGY

- New species of *Chrysobothris* from the Pacific Northwest (Coleoptera: Buprestidae). 9870
- A new species of *Ficalbia* (Ravenalites) from Cambodia (Diptera: Culicidae). 9910
- Ochromolopis icetella* Hb. (Lepidoptera, Epermeniidae) in Finland, probably transported by windstorm. 9912
- Amphipyra pyramidea* L. and *A. berbera* Rungs in Finland (Lepidoptera, Noctuidae). 9913
- Description of the male, pupa, and larval habitat of *Nilobezzia brevicornis* (Diptera: Ceratopogonidae). 9963
- Elm spanworm eye size depends upon sex and diet. 10000
- Morphology and biology of a nest-producing mite, *Bakericheyla chanayi* (Acarina: Cheyletidae). 10015

- A study of a pocket of scattered desert locust population in Rajasthan, India during 1966 with special reference to eye-stripes and biometrics. 10027
- Temperature effects on embryonic development in insects. 10035
- The ultrastructure of the brain of the insect *Notonecta glauca* L. 10042
- A more recent sensillary type on the antenna of female mosquitoes (*Aedes aegypti* L.). 10055
- Morphology of the nervous system of adult *Prodenia litura*. 10064
- Eyes of the female two-spotted spider mite, *Tetranychus urticae*. i. Morphology. 10067
- New record of *Chanliops fallax* Scott. (Hemiptera: Lygaeidae) on moong and urid (*Phaseolus* spp.). 10097
- The defensive behaviour of the stick insect *Oncotophasma martini* (Griffini) (Orthoptera: Phasmatidae). 10103
- Notes on the male germ cells of a beetle, *Lepitotarsa decemlineata*. 10115
- Etology as the determining factor of the numerical distribution of the species in the fauna. 10144
- A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- Easy-to-kill pests of fruit trees...codling moth. 10253
- ### INSECT MUTATION
- Ethyl methanesulfonate (EMS) induced mutations in *Drosophila melanogaster*. 10147
- ### INSECT NAMES
- The family Leptogastridae (Diptera). 9927
- Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
- ### INSECT NESTS
- A new family Turanoniseidae fam. n. (Isopoda, Oniscoidea) from termitaria of Middle Asia. 9874
- Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (Oligotomidae, Embioptera), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. 9978
- Morphology and biology of a nest-producing mite, *Bakericheyla chanayi* (Acarina: Cheyletidae). 10015
- Foraging galleries of the Formosan subterranean termite, *Coptotermes formosanus*, in Louisiana. 10052
- ### INSECT NUTRITION
- Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974
- Rearing of the maize stem borer, *Chilo zonellus* Swinhoe on artificial diet. 9988
- Elm spanworm eye size depends upon sex and diet. 10000
- In vitro colonization of the goat biting lice, *Bovicola crassipes* and *B. limbata*. 10034
- Myxomycetes as food for other organisms. 10038
- Biology of the billbug *Sphenophorus venatus* confluens, a new pest of orchardgrass. 10047

- The ecology of the Simuliidae in a Scottish river. 10062
- Entomocoenological and biological studies in *Rosa damascena* Mill. plantations. II. Coleoptera. 10081
- Nutrition of *Xyleborus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
- Effect of different food plants on the larval and post-larval development on *Diaerisia obliqua* Walker. 10084
- Sterol and water-soluble requirements for larvae of the red-banded leaf roller, *Argyrotaenia velutinana*. 10104
- On the oviposition behaviour and development of *Sitophilus oryzae* Linn. in various natural foods. 10127
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- ### INSECT OUTBREAKS
- Colonization of an island by the buffalo fly, *Haematobia exigua*. 10004
- A new pyralid leaf roller, *Phostria* sp. on sugarcane. 10046
- New record of *Chanliops fallax* Scott. (Hemiptera: Lygaeidae) on moong and urid (*Phaseolus* spp.). 10097
- Flea beetles *Phyllotreta cruciferae* Goeze. (Coleoptera, Chrysomelidae) a new pest of stock flower *Mathiola* sp. in Rajasthan. 10110
- The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
- ### INSECT PESTS
- Helicopter sprayers may rescue infested forests. 9959
- Biology of the billbug *Sphenophorus venatus* confluens, a new pest of orchardgrass. 10047
- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- List of publications on fungus and insect defects in forest products. 10182
- Growers join forces to battle the boll weevil. 10233
- The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
- Easy-to-kill pests of fruit trees...codling moth. 10253
- Needle miner infestations in lodgepole pine east of the Sierra crest. 10267
- Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- Odorous house ant feeds on photographic film. 10386
- Observations on prolonged grain storage with forced aeration in Israel. 10389
- Biological studies in Ghana in the control of *Cadra cautella* (Wik.), the tropical warehouse moth. 10391

INSECT PHYSIOLOGY

Intracellular activity in cricket neurons during the generation of behaviour patterns. 9968

Sindbis virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. 9969

Notes on the biology of *Diatraeaophaga striatalis* Townsend, tachinid parasite of *Proceras sacchariphagus* Boj. 9970

An integrated technique to study the effects of fumigants on respiration of insects. 9972

Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974

Effect of temperature on the development of mustard sawfly, *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 9976

Locust wind receptors. I. Transducer mechanics and sensory response. 9981

Locust wind receptors. III. Contribution to flight initiation and lift control. 9982

Locust wind receptors. ii. Interneurons in the cervical connective. 9983

The external morphogenesis of grasshopper embryos. 9987

Biochemical study of *Plodia interpunctella* (Hhn.) (Lepidoptera) I-Variations of body weight, water content, and dry matter content. 9993

The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995

Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999

Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006

Physico-organic chemical approach to the mode of action of organophosphorus insecticides. 10014

The behavior of newly emerged holl weevils. 10016

Spermatophores of the Blattaria. 10024

Development of *Chrotogonus trachypterus* (Blanch.) (Orthoptera: Pyrgomorphidae) in relation to different levels of temperature and humidity. 10026

The influence of temperature on reproduction and development in four species of Glossina (Diptera: Museidae). 10028

Laboratory demonstration of a chemical sex attractant in *Costelytra zealandica* (White) (Scarabaeidae: Coleoptera). 10030

Temperature effects on embryonic development in insects. 10035

Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043

Experimental studies on diapause in stoneflies. III. Eggs of *Brachyptera risi* (Morton). 10051

Water vapor sorption and humidity relationships in *Liposeclis* (Insecta: Psocoptera). 10053

Radiation sensitivity of twelve species of arthropods. 10069

Starvation-induced activity in cockroach malpighian tubules. 10073

Water uptake and embryonic development in eggs of *Chorthippus brunneus* Thunberg (Saltatoria: Acrididae). 10079

Effect of different food plants on the larval and post-larval development on *Diacrisia obliqua* Walker. 10084

The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. 10086

Common inhibitory motoneurons in insects. 10089

Oenocytes: form and function. 10093

Studies on phosphohexoseisomerase (d-glucose-6-phosphate ketol isomerase) from the Indian honeybee, *Apis indica* Fabricius. 10098

Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. 10102

Anatomical indicators for assessing age of mosquitoes: changes in ovarian follicles. 10107

KCl-induced spreading depression and ventilation in the cockroach. 10108

Retention of intra-cellular potassium by the housefly. 10113

Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119

The effects of the removal of the parasite *Xenos* (insecta Strepsiptera) on the protocerebral neurosecretion of its host *Polistes* (Hym. Vespidae). 10121

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123

On the oviposition behaviour and development of *Sitophilus oryzae* Linn. in various natural foods. 10127

Experiments on larval diapause in the carabid *Pterostichus vulgaris* L. 10129

Effects of exogenous moulting hormones on puparium formation in *Calliphora*. 10130

Spectral efficiency as function of latency in the visual mechanism of insect (*Tenebrio molitor* L.). 10142

Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Huhner). 10143

A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164

Growers join forces to battle the holl weevil. 10233

The stem borer *Sesamia hotanephaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243

Needle miner infestations in lodgepole pine east of the Sierra crest. 10267

INSECT POLLINATORS
Bees as pests. 10244

INSECT POPULATIONS

Homologous lines of chromosome polymorphism in the natural populations of Adirondack black fly (Diptera, Simuliidae). 10150

Needle miner infestations in lodgepole pine east of the Sierra crest. 10267

INSECT PROTECTIVE DEVICES
The defensive behaviour of the stick insect *Oncotophasma martini* (Griffini) (Orthoptera: Phasmatidae). 10103

On the explosion chemistry of the bombardier beetle. Vi. On the chemistry of the smallest bombardier beetle *Pausus favieri*. XLIII. Communication on arthropod protective substances. 10111

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

Refined defensive mechanisms in *Chrysomela scripta*. 10139

INSECT REARING

Studies on brood rearing activity of Indian honey bee *Apis indica* F. under Delhi conditions. 9974

Rearing of the maize stem borer, *Chilo zonellus* Swinhoe on artificial diet. 9988

The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995

In vitro colonization of the goat biting louse, *Bovicola crassipes* and *B. limbata*. 10034

Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040

Biology of *Apanteles chilonis* and *A. flavipes* (Hymenoptera: Braconidae), parasites of *Chilo suppressalis*. 10045

Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorium brevivucca* Freeman (Chironomidae) under experimental conditions. 10066

The predatory and reproductive behaviour of *Rhinocoris bicolor* and *R. tropicus* (Hemiptera: Reduviidae). 10085

Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096

Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). 10114

New approaches to the control of pest organisms. 10118

Continuous laboratory culture of the locust borer, *Megacyllene robiniae*. 10141

Experimental evidence for factors affecting the relative efficiency of indirect to direct selection in *Triholium castaneum*. 10161

INSECT REARING EQUIPMENT
A simple apparatus for dipping treatment of insects for varying periods of time. 10116

INSECT REPELLENTS
Method for repelling bees. patent 3,456,056. 10099

INSECT RESPIRATION
An integrated technique to study the effects of fumigants on respiration of insects. 9972

SUBJECT INDEX

INSECT TAXONOMY

INSECT TAXONOMY

New species of crane flies from tropical America. V. (Diptera: Tipulidae). 9865

New or little-known species of exotic Tipulidae (Diptera). XVI. 9866

Gall-inhabiting Liothrips Uzel from India. 9867

A new sub-genus and species of the Eumeninae (Hymenoptera, Diploptera) from the Bulgarian fauna. 9868

A new genus of Noteridae (Coleoptera: Noteridae, Noterini). 9869

New species of Chrysobothris from the Pacific Northwest (Coleoptera: Buprestidae). 9870

Chloropidae (Diptera), unknown in the fauna of Bulgaria. 9871

The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872

A new family Turanoniscidae fam. n. (Isopoda, Oniscoidea) from termitaria of Middle Asia. 9874

A new Polymixis HB. of Spain. Polymixis lajonquierei Brsn. (Supplemental description (1)) contribution to the study of Noctuidae trifinae 159(2). 9875

The identification and distribution of *Quadraspidiotus* species (Homoptera: Diaspididae) on pome and stone fruits in Australia. 9876

Cercyonis pegala abbotti, new subspecies (Lepid., Satyridae). 9877

Revision of the Nearctic moth genus *Abagrotis* Smith with descriptions of new species (Lepidoptera: Noctuidae). Part VI The duanae and placida groups; checklist of the presently known species within the genus. 9879

Study of the world Gyponinae (Homoptera: Cicadellidae). A synopsis of the genus *Clinonaria*. 9883

Two new Palearctic *Lithocolletis* species. (Preliminary description). 9884

Description of *Dendrocercus* (*tmacrostigma*) *noumeae* sp. nov. from New Caledonia (Ceraphronoidea, Megaspilidae). 9885

A new species of *Ephydrella* Tonnoir and Malloch (Diptera: Ephydriidae). 9887

New Simuliidae (Diptera) from New Caledonia and Norfolk Island. 9888

Characters for identification of some common plusiine caterpillars of the southeastern United States. 9889

Contribution to the knowledge of the Staphylinidae. CI. Diverse remarks on the *Quedius* from the eastern Mediterranean. 9890

Allomorphus franzi, n. gen., n. spec. (Coleoptera, Curculionidae), a new species and genus from Austria. 8. Contribution to the knowledge of the Palearctic Cossoninae. 9891

Contribution to the knowledge of the Coccidae from Brazil (Homoptera-Coccidea). 9892

Scymnus (*Sidis*) *hickeyi* Fursch, as a foe of *Pseudococcus citri* Risso. 9893

Results of an Austrian Lepidoptera collecting trip to Syria and Lebanon. (Part V.: Epermeniidae). 9894

Thomisus onustus Walck. (Arachnida) recorded in error from Thursley Common Surrey. 9895

Cnemocantha illota (Loew) (Dipt., Lauxaniidae) recorded in error from Stanmore Common, Middx. 9896

Oriental species of *Coesula* Cameron (Hymenoptera: Ichneumonidae). 9897

A new *Drosophila* species from northern Fennoscandia (Diptera). 9898

The occurrence of *Danis hymetus taygetus* (Felder) at Bayview, New South Wales. 9899

A key to the species of *Carcinops* Marscul (Coleoptera, Histeridae) associated with stored products, including *C. troglodytes* (Paykull) new to this habitat. 9901

Three new species of genus *Blaptica*, Stal, 1874 (Dictyoptera, Blaberidae) of the Republic of Argentina. 9903

Synonymy of *Kciferia glochinella* (Zeller) and related names (Lepidoptera: Gelechiidae). 9905

A new species of *Trichacoides* from India with a redescription of *T. scutellaris* Dodd (Hymenoptera: Platygasteridae). 9906

Palearctic species from the genus *Phymata* Latreille, 1802 (Hem. Het. Reduviidae). 9907

The subgenus *Persicargas* (Ixodoidea, Argasidae, Argas). 7. A. (P.) *walkerae*, new species, a parasite of domestic fowl in southern Africa. 9908

A revision of the pseudomorphaeridini (Orthoptera: Acridoidea: Pyrgomorphidae). 9909

A new species of *Ficalbia* (Ravenalites) from Cambodia (Diptera: Culicidae). 9910

A new species of *Mesidia* (Hymenoptera: Aphelinidae) from California. 9914

On *Sergentomyia ruttledgei* (Lewis Kirk) and *S. schwetzi* (Adler, Theodor Parrot) (Diptera: Psychodidae). 9915

New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916

A new species of *Epidermoptes* from a South Dakota pheasant (Acarina: Epidermoptidae). 9917

A new species of *Chrysomela* (Coleoptera, Chrysomelidae)-an important component of the Taimyr Peninsula biocoenoses. 9918

The genus *Heteroconis* Enderlein, 1905 (Neuroptera, Coniopterygidae). 9919

A new *Danaus* species from Central-Celebes. 9923

The structure of polymorphic species of the subgenus *Autolethrus* (Coleoptera, Scarabaeidae) from South Kazakhstan. 9924

Correction to the key of the European *Gyrinus* species. 9925

New mimarids of Argentina (Hymenoptera; mymaridae). 9926

The family *Leptogastridae* (Diptera). 9927

Bulgarian grasshoppers (Homoptera: Auchenorrhyncha). 9928

Three new species of *Heteromenopon* (Mallophaga: Menoponidae) from Brazilian and Australian parrots. 9930

A new north Palearctic *Stenus*: *St. (Nestus) coriaceus* n. sp. (Coleoptera, Staphylinidae) (58. Contribution to the knowledge of the stenids). 9931

A new genus and key to the species of Australian *Stilboterygidae* (Neuroptera). 9933

Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934

Neotropical cockroaches of the *Epilampra abdominalis* complex; a clarification of their systematics (Dictyoptera, Blattaria). 9935

New species and records of *Nasutitermitinae* (Isoptera: Termitidae) from Africa. 9936

Lymantriidae--east versus west Africa. 9938

Limacodidae- east versus west Africa. 9939

New species of beetle mites of the family *Chamdbatidae* (Oribatei) from the USSR. 9940

Siphonaptera from Inari, Finland. 9942

Aphid fauna of Macedonia. 9943

A new Malayan species of the ant genus *Epitritus* and a related new genus from Singapore (Hymenoptera: Formicidae). 9944

Philonthus parcus Sharp (Col., Staphylinidae) in Britain. 9945

New Bulgarian fauna of phytophagous wasps (Symphyta, Hymenoptera). 9946

A new name for the genus *Cyrtolabus* van der Vecht (Hymenoptera, Eumenidae). 9947

Adelphocoris minor nov. spec. (Heteroptera, Miridae). 9949

Additions to the genus *Alloconotus* Fieber, 1878 (Heteroptera, Miridae). 9950

New *Orthotylus* and *Pachylops* species (Heteroptera, Miridae). 9951

Several *Globiceps*-species (Heteroptera, Miridae). 9952

Keys to genera and some species of New Zealand *Lathridiidae* (Coleoptera). 9953

Description of immature stages of *Coreidae*. 3. *Archimerus alternus*. 9956

Description of immature stages of *Coreidae*. 1. *Euthochtha galeator*. 9957

On two new species of Terebrantian *Thysanoptera* with remarks on a new genus *Pellothrips*. 9958

A new *Caradrina* O. of Spain- Contributions to the study *Noctuidae* Trifinae, 158(1). 9977

Entomocoenological and biological studies in *Rosa damascena* Mill. plantations. II. Coleoptera. 10081

A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164

SUBJECT INDEX

INSECTS

INSECT TRAPS

- The life histories and drifting of the Plecoptera and Ephemeroptera in a dartmoor stream. 10001
- Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- Marking and recapture of California red scale for field studies. 10101
- Easy-to-kill pests of fruit trees...codling moth. 10253

INSECT VECTORS

- Microscopical studies on the development of *Bahesia ovis* in *Rhipicephalus bursa* (Ixodoidea). I. Development in female ticks after repletion. 10013
- A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- Research on the synantropic flies in the Sofia area, in regard to their epidemiological importance. 10165
- Local lesion host for grassy shoot virus of sugarcane. 10224
- Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
- Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostelus fascifrons* and the relative concentration of the causal agent in the vectors. 10238
- Efficiency of three colonies of melon aphids as transmitters of Tristeza virus. 10258

INSECTICIDE APPLICATION

- Growers join forces to battle the boll weevil. 10233

INSECTICIDE DECOMPOSITION

- Degradation and antcarboxylesterase activity of disulfoton and phorate after 60Co gamma irradiation. 10465

INSECTICIDE RESIDUES

- Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
- Consequences of insecticide use of nontarget organisms. 10402
- GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404
- DDT in fats on Antarctic animals. 10405
- Problems with DDT in fish culture operations. 10406
- Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
- Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- Industry's concern with pesticide residues. 10411
- Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carbamates. 10419
- Trapping of dieldrin lost from aqueous algac cultures. 10420
- Chemistry of insecticides. 10463
- Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470

- Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
- Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472
- Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480

INSECTICIDE RESISTANT INSECTS

- Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096
- Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). 10114
- Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- Biochemical genetics of insecticide resistance in the housefly. 10163

INSECTICIDE TRIALS

- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131

INSECTICIDES

- Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
- Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
- Biological interaction between plasticizers and insecticides. 10058
- The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
- Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). 10114
- Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- Beetle. 10137
- Growers join forces to battle the boll weevil. 10233
- A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
- Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
- A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245
- Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
- Easy-to-kill pests of fruit trees...codling moth. 10253
- Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fabr.. 10262

- Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263
- Studies on the control of the red hairy caterpillar, *Amsacta moorci* Butler. 10266
- Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269
- Metabolism of organic pesticide chemicals in higher plants. 10278
- Wharf borer. 10385
- The control of insects in bagged grain by the injection of dichlorvos. 10387
- Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. 10399
- Consequences of insecticide use of nontarget organisms. 10402
- Water florae as indicators of irrigation water contamination by DDT. 10403
- DDT in fats on Antarctic animals. 10405
- Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
- Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425
- Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438
- Degradation of p32-bromophos by microorganisms and seedlings. 10449
- Gas chromatographic determination of ethyl O,O-dimethylthiophosphoryl-1-phenyl acetate in technical grade cidial and its 50 percent liquid formulation. 10457
- Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptachlor component. 10458
- Thin layer densitometric determination of rotenone and deguelin. 10461
- Chemistry of insecticides. 10463
- Degradation and antcarboxylesterase activity of disulfoton and phorate after 60Co gamma irradiation. 10465
- Insecticides, how to use them safely and effectively. 10466
- Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
- Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
- The insecticides; chemistry, mode of action, and toxicity. 10474
- Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- Evaluation of extraction and cleanup methods for analysis of DDT and DDE in green alfalfa. 10480

INSECTS

- Allergic responses to insects. 10166

SUBJECT INDEX

INTEGRATED CONTROL (INSECTS)

- Specificity and mechanism in the action of saligenin cyclic phosphorus esters. 10424
- INTEGRATED CONTROL (INSECTS)**
Integrated control of insects. A challenge for scientists. 10265
- Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- INTESTINES**
Tablet dosage-form for the immunization of the intestinal tract with live virus preparations. Patent 3,458,621. 10359
- On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373
- Ancylostoma caninum*: Fine structure of intestinal epithelium. 10377
- IOXYNIL**
The response of fumitory to various herbicides. 10293
- IPC**
Selective grass control with siduron. 10294
- IRRIGATION**
Water flora as indicators of irrigation water contamination by DDT. 10403
- ISOMERASES**
Studies on phosphohexoseisomerase (d-glucose-6-phosphate ketol isomerase) from the Indian honeybee, *Apis indica* Fabricius. 10098
- ISOMERS**
Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425
- Reaction of aflatoxin B1 with acetic acid-thionyl chloride. 10481
- ISOPHRICHTIS SIMILIELLA**
Synonymy of *Keiferia glochinella* (Zeller) and related names (Lepidoptera: Gelechiidae). 9905
- ISOPODA**
A new family Turanoniscidae fam. n. (Isopoda, Oniscoidea) from termitaria of Middle Asia. 9874
- ISOPROPYL N-(3-CHLOROPHENYL)CARBAMATE**
Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459
- IXODES**
Ixodes pacificus Cooley and Kohls, 1943: Its life-history and occurrence. 9962
- KEIFERIA GLOCHINELLA**
Synonymy of *Keiferia glochinella* (Zeller) and related names (Lepidoptera: Gelechiidae). 9905
- KEIFERIA INCONSPICUELLA**
Synonymy of *Keiferia glochinella* (Zeller) and related names (Lepidoptera: Gelechiidae). 9905
- KERATINIZATION**
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- KIDNEY BEANS**
Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204
- KIDNEYS**
Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997

- KINASES**
Pyruvate kinase and phosphoenolpyruvate carboxylase activities of *Ascaris* muscle, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
- LACCIFERIDAE**
A supplementary list of the host-plants of lac insects. 10135
- LACTATE DEHYDROGENASE**
Lactic dehydrogenase isozymes in the grasshopper. 9961
- LAMENESS**
Foot lameness in pigs. 10332
- LARVAE**
The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872
- Characters for identification of some common plusiine caterpillars of the southeastern United States. 9889
- Caddis larvae. 9904
- Description of the male, pupa, and larval habitat of *Nilobezzia brevicornis* (Diptera: Ceratopogonidae). 9963
- Biochemical study of *Plodia interpunctella* (Hbn.) (Lepidoptera) I--Variations of body weight, water content, and dry matter content. 9993
- Variations in free amino acids in the larvae and pupae of *Chilo zonellus*. 9994
- The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995
- Studies on the ecology of larval Tipulinae (Diptera, Tipulidae). 10011
- Lethargy, a new virus of *Melolontha melolontha* L. larvae (Coleoptera, Scarabaeidae). 10036
- Biology of the billbug *Sphenophorus venatus* confluent, a new pest of orchardgrass. 10047
- Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorum brevivucea* Freeman (Chironomidae) under experimental conditions. 10066
- The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
- Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. 10080
- Effect of different food plants on the larval and post-larval development on *Diacrisia obliqua* Walker. 10084
- Sterol and water-soluble requirements for larvae of the red-banded leaf roller, *Argyrotaenia velutinana*. 10104
- Experiments on larval diapause in the carabid *Pterostichus vulgaris* L. 10129
- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- The histopathology of a nuclear polyhedrosis in larvae of the cabbage looper, *Trichoplusia ni*, related to symptoms and mortality. 10134
- Refined defensive mechanisms in *Chrysomela scripta*. 10139

- A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240
- Pneumostromylus tenuis* in moose on a deer-free island. 10375
- The course of naturally acquired helminth infections of horses given regular anthelmintic treatment. 10380
- LASPEYRESIA POMONELLA**
Easy-to-kill pests of fruit trees...codling moth. 10253
- LATEX**
Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatidosis. 10372
- LATHRIDIIDAE**
Lathridius bifasciatus Reitt. (Col., Lathridiidae) habitats. 9878
- Keys to genera and some species of New Zealand Lathridiidae (Coleoptera). 9953
- LAUXANIIDAE**
Cnemacantha illota (Loew) (Dipt., Lauxaniidae) recorded in error from Stanmore Common, Middx. 9896
- LEAF MINERS**
Alternative host plants of tobacco leaf-miner (*Phthorimaea operculella* (Zell.)). 10239
- LEAF RUST**
The epiphytic of yellow orange leaf disease of rice in 1966 in Thailand. 10197
- LEAF SPOT**
A leaf spot disease of *Cyamopsis tetragonoloba* caused by *Curvularia lunata* in India. 10177
- Post-infection changes in the sugar content of leaf-spot infected barley. 10178
- Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- LEAVES**
Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204
- Spray droplet size in the control of spruce budworm, holl weevil, bollworm and cabbage looper. 10247
- Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431
- LEGISLATION**
Hog cholera and other communicable swine diseases. Miscellaneous amendments. 10328
- LEGUMES**
Bloat on *Dolichos lablab*. 10335
- LEPIDOPTERA**
Butterflies of Collobrières, var. Alpes Maures, Provence in July and August 1967. 9880
- A change in the Lepidoptera of Hampstead after four decades. 9881
- The butterflies of Lord Howe Island. 9929
- Some new records of butterflies from Nepal. 9948
- Recent records of migrant Lepidoptera in Taranaki. 10008

- Migrating butterflies in 1967 (Twentieth Annual Report). 10056
- Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- LEPTINOTARSA DECEMLINEATA**
Notes on the male germ cells of a beetle, *Leptinotarsa decemlineata*. 10115
- The effect of *Perillus bioculatus* (Fabr.) (Het., Pentatomidae) on the population dynamics of the potato beetle. 10124
- LEPTOCORISA VARICORNIS**
On the odour components of the stink of two heteropteran bugs of India. 9989
- LEPTOGASTER**
The family Leptogastridae (Diptera). 9927
- LEPTOSPIRA HARDJO**
The isolation of a strain of *Leptospira*, serotype hardjo, from cattle in Queensland. 10358
- LESPEDEZA CUNEATA**
Structure, stability, and energy flow in plants and arthropods in a sericea Lespedeza stand. 10255
- LETHAL FACTOR**
Position effect on DNA transcription and replication. 10160
- LEUCINE**
Operator constitutive mutations in the leucine operon of *Salmonella typhimurium*. 10329
- LEUCOPHAEA MADERAE**
Female specific protein: Biosynthesis controlled by corpus allatum in *Leucophaea maderae*. 10002
- LIFE CYCLE**
Ixodes pacificus Cooley and Kohls, 1943: Its life-history and occurrence. 9962
- Life history and damage of the pine root tip weevil, *Hylolohius rhizophagus*, in Wisconsin. 10049
- LIGHT**
Studies and suggestions on the behaviour of moths at light. 10033
- Experiments on larval diapause in the carahid *Pterostichus vulgaris* L. 10129
- Spectral efficiency as function of latency in the visual mechanism of insect (*Tenebrio molitor* L.). 10142
- Influence of light on sporulation by *Helminthosporium stenospilum*. 10183
- Biochemical basis for plant competition. 10274
- Seed dormancy and germination in ecotypes of johnsongrass. 10309
- Competition between flax and wild buckwheat. 10440
- Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451
- LIGHT TRAPS**
A killing agent for use in light traps. 10090
- LIMACODIDAE**
Limacodidae-east versus west Africa. 9939
- LINDANE**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- Selection for lindane resistance in *Dermestes maculatus* de Geer (Coleoptera, Dermestidae). 10114
- Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. 10131
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
- Preliminary studies on the integrated control of the pest complex on cowpea, *Vigna unguiculata* Walp., in Nigeria. 10268
- Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479
- LINURON**
Basis for selectivity of linuron on carrot and common ragweed. 10295
- Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459
- LIPIDS**
The neutral lipids from various organs of the termite *Macrotermes goliath*. 9991
- Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Hubner). 10143
- Studies on lipid metabolism of *Ascaris* during starvation. 10368
- LIPOSCELIDAE**
Water vapor sorption and humidity relationships in *Liposcelis* (Insecta: Psocoptera). 10053
- LITERATURE**
Biochemical basis for plant competition. 10274
- Plant growth regulators. 10436
- LIVER**
Schistosomal cirrhosis in pigs in Jabalpur, M. P.. 10381
- LIVESTOCK**
Metabolism of strychnine nitrate applied for the control of the bear. 10318
- Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
- LIVESTOCK DISEASES**
Incidence of bluetongue reported calendar year 1967. 10325
- Hog cholera and other communicable swine diseases. Miscellaneous amendments. 10328
- Vaccinated cattle.....can harbor foot and mouth disease. 10331
- Foot lameness in pigs. 10332
- Survey of yeastlike fungi and tissue changes in esophagogastrie region of stomachs of swine. 10339
- Rubber-vine (*Cryptostegia grandiflora*) toxicity for ruminants. 10346
- LOCUSTA MIGRATORIA**
Common inhibitory motorneurons in insects. 10089
- LOGS**
Seasonal changes in the distribution of the millipede *Cylindroiulus punctatus* (Leach) in decaying logs and soil. 9966
- LONCHOCARPUS**
Thin layer densitometric determination of rotenone and deguelin. 10461
- LONGEVITY**
Studies on an Israel strain of *Anagyrus pseudocoeeci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. 9964
- The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005
- Lethal temperatures for puparia of *Glossina morsitans orientalis*. 10092
- Survival of lyophilized *Bacillus popilliae* in soil. 10415
- LOOSE SMUT**
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
- Chemical control of loose smut in barley in Minnesota. 10174
- Chemotherapy of loose smut of barley in Canada. 10179
- A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling hlights of wheat, barley, oats, and sorghum. 10189
- Effect of chemical treatments on the control of. 10191
- Control of loose smut of wheat and barley in Arkansas with fungicides. 10192
- Chemical control of wheat and barley loose smut. 10194
- Effect of two systemic fungicides on control of loose smut in wheat. 10195
- Effectiveness of fungicides in controlling barley loose smut. 10196
- Chemical control of loose smut in barley. 10214
- The systemic fungicide 2,3-dihydro-5-carboxanilido-6-methyl,4-oxathiin. 10222
- LUCANIDAE**
Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
- LYCAENIDAE**
The occurrence of *Danis hymetus taygetus* (Felder) at Bayview, New South Wales. 9899
- LYGAEIDAE**
New record of *Chanliops fallax* Scott. (Hemiptera: Lygaeidae) on moong and urid (*Phaseolus* spp.). 10097
- LYMAENON**
New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916
- LYMANTRIIDAE**
Lymantriidae-east versus west Africa. 9938
- Biology of *Agrotheresutes tunethnus* Haber. (Hym., lehnecumonidae) an ectoparasite of *Orgyia dubia* Fausch. (Lep., Lymantriidae). 10054

SUBJECT INDEX

LYOPHILIZATION

LYOPHILIZATION

Survival of lyophilized *Bacillus popilliae* in soil. 10415

LYSIS

Immune lysis of rabies virus-infected cells. 10361

MACROCHELES

The influence of ecological and genetic factors on the birth and death of *Macrocheles rohustulus* (Berlese, 1904). 10005

MACROPHOMINA PHASEOLI

Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostele fascifrons* and the relative concentration of the causal agent in the vectors. 10225

MACROSTELAS FASCIFRONS

Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostele fascifrons* and the relative concentration of the causal agent in the vectors. 10238

MALACOSOMA PLUVIALE

Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257

MALARIA

Medical and veterinary chemicals. Vol. I, parts I and II. 10355

MALATHION

A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237

Biology and control of leopard moth on pear trees in the United Arab Republic. 10242

Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263

Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409

MALEIC HYDRAZIDE

The mode of action of maleic hydrazide: Inhibition of growth. 10444

Chemistry of fungicides. 10476

MALLOPHAGA

In vitro colonization of the goat biting louse, *Bovicola crassipes* and *B. limbata*. 10034

MALPIGHIAN TUBES

Starvation-induced activity in cockroach malpighian tubules. 10073

MAMMALS

Mites of the super-family Gamasoidea on micromammalia in the western Balkan Range. 9911

The effect of pupal predators on a population of winter moth, *Operophtera hrumata* (L.) (Hydriomenidae). 10010

Research on the effect of the entomopathogenic fungi *Beauveria hassiana* (bals.) Vuill. and *Metarrhizium anisopliae* (Metsch.) Sorok. on warm-blooded animals. 10353

A study of the mites of the Gamasoidea super-family (Parasitiformes) infesting small mammals on the Vitosha Mountain. 10364

MANGANESE CHLORIDE

Effect of manganese and cobalt on ascorbic acid metabolism in rats. 10352

MATHEMATICAL ANALYSIS

The toxicity to *Tribolium castaneum* (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031

The correlation between physiological activity and physicochemical property of the substituted phenols. 10437

MATHIOLA

Flea beetles *Phyllotreta cruciferae* Goeze. (Coleoptera, Chrysomelidae) a new pest of stock flower *Mathiola* sp. in Rajasthan. 10110

MATTESSIA GRANDIS

Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans *Glugea gasti* and *Mattesia grandis*. 10068

MEGACYLLENE ROBINIAE

Continuous laboratory culture of the locust borer, *Megacyllene robiniae*. 10141

MEIOSIS

Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151

MELANAGROMYZA

Biological control of *Cuscutea* spp. II. Biology and host-plant range of *Melanagromyza cuscutae* Hering (Dipt. Agromyzidae). 10272

MELANOLOPHIA IMITATA

Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257

MELANOPLUS

Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151

MELANOPLUS DIFFERENTIALIS

Lactic dehydrogenase isozymes in the grasshopper. 9961

MELANOPLUS SANGUINIPES

Twenty-six varieties of forage crops evaluated for resistance to feeding by *Melanoplus sanguinipes*. 10246

MELOLONTHA MELOLONTHA

Lethargy, a new virus of *Melolontha melolontha* L. larvae (Coleoptera, Scarabaeidae). 10036

MENOPONIDAE

Three new species of *Heteromenopon* (Mallophaga: Menoponidae) from Brazilian and Australian parrots. 9930

MERCURY

Review of methods for mercury in pesticide formulations. 10469

MERCURY CHLORIDE

Rhizoetonia leaf rot of colocasia in India. 10188

MERCURY COMPOUNDS

Fungicidal control of rice diseases. 10170
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223

MESOSTIGMATA

Ear mites of the genus *Dirocheles* (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882

METABOLISM

Vitamin A metabolism in protein deficiency. 10324

Effect of manganese and cobalt on ascorbic acid metabolism in rats. 10352

Studies on lipid metabolism of *Ascaris* during starvation. 10368

Arginine metabolism in *Ascaris lumbricoide*. Activity of arginine carboxylase and arginase. 10379

Biodegradation of pesticides. 10422

Biochemical studies on the terpene metabolism in sweet potato root tissue with black rot. Effect of C10- and C15-terpenols on acetate-2-14C incorporation into ipomeamarone. 10446

METALDEHYDE

Use of metaldehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. 10319

Observations on the control of *Achatina fulica* Bowdich, the giant African snail with methaldhyde. 10320

METALS

Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. 10399

METAMORPHOSIS

Sindbis virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. 9969

Pupal duration in *Glossina morsitans orientalis* under conditions of constant temperature. 10091

Experiments on larval diapause in the carabid *Pterostichus vulgaris* L. 10129

Easy-to-kill pests of fruit trees...codling moth. 10253

METARRHIZIUM ANISOPLIAE

Research on the effect of the entomopathogenic fungi *Beauveria hassiana* (bals.) Vuill. and *Metarrhizium anisopliae* (Metsch.) Sorok. on warm-blooded animals. 10353

METEPA

Mutagenic effects of TEPA and METEPA in mice. 10333

METHODOLOGY

An integrated technique to study the effects of fumigants on respiration of insects. 9972

Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. 9973

Recovery of mites from peat and mineral soils using a new floatation method. 9975

Hexalure, an insect sex attractant discovered by empirical screening. 10025

Marking and recapture of California red scale for field studies. 10101

A simple apparatus for dipping treatment of insects for varying periods of time. 10116

Identification of hydrocarbons from *Novomessor cockerelli*. 10138

Continuous laboratory culture of the locust borer, *Megacyllene robiniae*. 10141

Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium wilt* with Thiazendazole and Benlate. 10181

A method for spraying individual trees. 10282

- A sprayer for application of small amounts of herbicides to flats. 10314
- Control method of inactivated vaccines against the Newcastle disease by means of the titration of neutralizing antibodies. 10334
- Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- Modifications of the micromethod of sample cleanup for thin-layer and gas chromatographic separation and determination of common organic pesticide residues. 10413
- Activation and standardization of purified silica gel for column chromatographic cleanup of pesticide residue extracts. 10414
- Analysis of grains for multiple residues of organic fumigants. 10416
- Methods of determining pesticides in food products. (JPRS 34,946). 10418
- Peacock plasma, a useful cholinesterase source for inhibition residue analysis of insecticidal carhamates. 10419
- Review of methods for mercury in pesticide formulations. 10469
- Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
- Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
- Collaborative, study of the sweep co-distillation cleanup for chlorinated pesticide residues in edible fats and oils. 10472
- Analysis of multiple pesticide residues--chemical identity and confirmation of results. 10473
- Note on versatility of silicone Dow Corning 11 substrate for gas chromatography of pesticides. 10482
- METHYL BROMIDE**
Analysis of grains for multiple residues of organic fumigants. 10416
- METHYL PARATHION**
Spray droplet size in the control of spruce budworm, holl weevil, bollworm and cabbage looper. 10247
- Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- MICE**
Mutagenic effects of TEPA and METEPA in mice. 10333
- Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
- Immunogenicity of concentrated and purified rabies vaccine of tissue culture origin. 10360
- Researches on Galega species regarding their content of toxins by means of biological methods. I. Toxicity of goats-rue (Galega officinalis L.) for warmhlooded animals. 10428
- MICROBIOLOGICAL DEGRADATION**
Degradation of p32-bromophos by microorganisms and seedlings. 10449
- MICROBIOLOGY**
Antennopsis gallica Heim and Buchli (hyphomycetes: Glocohaustoriales), an entomogenous fungus on subterranean termites in Florida. 10022
- MICROCOCCACEAE**
Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429
- MICROORGANISMS**
Verticillium wilt of tobacco. VII Pathogenicity of isolates of Verticillium dahliae Kleb. on New Zealand tobacco. 10231
- Method for combating micro-organisms. Patent 3,458,636. 10362
- Observations on the decline of water milfoil and other aquatic plants, Maryland, 1962-1967. 10393
- Biodegradation of pesticides. 10422
- MICROSCOPY**
Microscopical studies on the development of Babesia ovis in Rhipicephalus bursa (Ixodoidea). I. Development in female ticks after repletion. 10013
- MICROSPORIDIA**
Development of the bait principle for boll weevil control. IV. Field tests with a bait containing a feeding stimulant and the sporozoans Glugea gastri and Mattesia grandis. 10068
- MILK**
Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470
- MIRIDAE**
Adelphocoris minor nov. spec. (Heteroptera, Miridae). 9949
- Additions to the genus Alloconotus Fieber, 1878 (Heteroptera, Miridae). 9950
- New Orthotylus and Pachylops species (Heteroptera, Miridae). 9951
- Several Globiceps-species (Heteroptera, Miridae). 9952
- MITES**
Ear mites of the genus Dicrocheles (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882
- New species of beetle mites of the family Chamobatidae (Oribatei) from the USSR. 9940
- Recovery of mites from peat and mineral soils using a new floatation method. 9975
- A model accounting for sympatry in water mites. 10076
- The parasitism of gamasid mites (Gamasoidea) on birds. 10145
- European red mite and two-spotted spider mite control on apples in California. 10236
- Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363
- MITOCHONDRIA**
Ancylostoma caninum: Fine structure of intestinal epithelium. 10377
- MITOSIS**
The mode of action of maleic hydrazide: Inhibition of growth. 10444
- MODELS**
The toxicity to Tribolium castaneum (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031
- MOLLUSCACIDES**
Use of metaldehyde as dusts and sprays to control the giant African snail Achatina fulica Bowdich. 10319
- Observations on the control of Achatina fulica Bowdich, the giant African snail with methldehyde. 10320
- MOLTING (INSECTS)**
Oenocytes: form and function. 10093
- Effects of exogenous moulting hormones on puparium formation in Calliphora. 10130
- MONKEYS**
Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997
- MONOSODIUM ACID METHANEARSONATE**
Repeated, foliar applications of herbicides on johnsongrass. 10291
- Control of johnsongrass on drainage ditchbanks in sugarcane. 10297
- MONURON**
African feather grass--a weed worth watching. 10279
- MOOSE**
Pneumostromylus tenuis in moose on a deer-free island. 10375
- MORDELLIDAE**
Mordellistena pumila group in Finland (Coleoptera, Mordellidae). 9941
- MORGANIA HISTRIO TRANSVAALENSIS**
Biological notes on the bee Tetralonia minuta and its eleptoparasite, Morgania histrio transvaalensis (Hymenoptera: Anthophoridae). 10109
- MORPHOLOGY**
Experimental infections with Bacillus larvae. I. A strain with a morphological marker. 10020
- Eimeria tenella schizonts and merozoites in macrophages as shown by electron microscopy. 10354
- The development of the body wall of Polymorphus minutus (Acanthocephala) in its intermediate host Gammarus pulex. 10370
- The fine structure and method of feeding of the tissue parasitizing stages of Histomonas meleagridis. 10378
- Spirurata of animals and humans and the diseases. 10382
- MORTALITY**
The influence of the rearing temperature on larval and pupal mortality and the duration of development of Drosophila. 9995
- The influence of ecological and genetic factors on the birth and death of Macrocheles robustulus (Berlese, 1904). 10005
- The effect of pupal predators on a population of winter moth, Operophtera brumata (L.) (Hydriomenidae). 10010
- Diplogasterid nematodes (Diplogasteridae: Rhabditida) and their relationship to insect disease. 10094

SUBJECT INDEX

MOSAIC

Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119

The histopathology of a nuclear polyhedrosis in larvae of the cabbage looper, *Trichoplusia ni*, related to symptoms and mortality. 10134

Comparison of mycelial and Sclerotial inoculum of *Macrophomina phaseoli* in the mortality of pine seedlings under varying soil conditions. 10225

Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257

MOSAIC

Interaction between chilli mosaic and powdery mildew in tobacco. 10176

Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204

Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210

A necrotic type virus occurring on a weed in Germany. 10227

MOSAIC (ALFALFA)

Freezing alfalfa clones from alfalfa mosaic virus by heat treatment. 10185

MOTHS

Studies and suggestions on the behaviour of moths at light. 10033

MOWING

Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303

MULCHES

In your garden - weeds: Robbers, but not always bad. 10168

MUNG BEANS

Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438

MURAMIDASE

Immune reaction in insects. I. Lysozyme as the fundamental antibacterial factor in the humoral preventive mechanism of the insects. 10077

MUSCA AUTUMNALIS

Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120

MUSCA DOMESTICA

The utilization of C14-labelled adenosine diphosphate during the in vitro respiration of housefly sarcosomes. 9984

Biological interaction between plasticizers and insecticides. 10058

Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096

Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. 10102

Retention of intra-cellular potassium by the housefly. 10113

Biochemical genetics of insecticide resistance in the housefly. 10163

MUSCLES

Lactic dehydrogenase isozymes in the grasshopper. 9961

Common inhibitory motoneurons in insects. 10089

Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris muscel*, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369

MYCOSIS

Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339

On the effect of molds on various animal species. Part 2. 10343

Problems in raising ducks. 10357

MYMARIDAE

New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916

New mimarids of Argentina (Hymenoptera; mymaridae). 9926

MYRIOPHYLLUM

A survey of the chemical composition of Potamogeton and Myriophyllum in New Jersey. 10448

MYRIOPHYLLUM SPICATUM

Observations on the decline of water milfoil and other aquatic plants, Maryland, 1962-1967. 10393

MYXOMYCETES

Myxomycetes as food for other organisms. 10038

MYZUS PERSICAE

Meteorological aspects of insect migrations. 10037

Insect parasites of the green peach aphid, *Myzus persicae* Sulz. and their control potential. 10059

The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. 10086

NACERDES MELANURA

Wharf borer. 10385

NALED

Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032

NATURAL CONTROL (INSECTS)

Meteorus versicolor Wesm. var. *decoloratus* Ruthe (Hym., Braconidae), a new parasite of *Thaumetopoea pityocampa* Schiff. (Lep., Thaumetopoeidae). 9980

An interesting case of adaptation to various hosts on the part of an egg parasite. 9985

The Ephippigerinae (Orthoptera, Tettigoniidae) occasional but important predators of *Thaumetopoea pityocampa* Schiff. 9996

New parasite records on *Hymenia recurvalis* (Fabricius) (Lepidoptera: Pyralidae). 10087

A new record, *Dorylus labiatus* Shuck. (Hymenoptera: Formicidae) as a predator of *Microtermes mycophagus* Desn. (Isoptera: Termitidae). 10112

Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254

New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. 10259

NECROSIS

Studies on the infection of cucumber mosaic virus. V. the observation of epidermal cell in the local lesion. 10180

A necrotic type virus occurring on a weed in Germany. 10227

NEMATOCIDES

Nematocides. Patent 3,457,353. 10271

The fate of phenyl N,N'-dimethylphosphor-diamidate in soil. 10401

NEMATODE VECTORS

Translocation of tobacco ringspot virus in cucumber and zinnia. 10206

NEMATODES

Description, biology, and importance of a new species of Allantonematidae (Nematoda), parasite of the aphidiphagous Coccinellidae: *Parasitylenchus coccinellinae*, n. sp. 10039

Nematode parasites of the face fly and the onion maggot in France and Denmark. 10120

Pneumostromylus tenuis in moose on a deer-free island. 10375

Spirurata of animals and humans and the diseases. 10382

NEOTROPICAL REGION

Neotropical cockroaches of the *Epilampra abdomennigrum* complex; a clarification of their systematics (Dictyoptera, Blattaria). 9935

NEPHOTETIX

Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075

Common leafhopper-plant hopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234

NERVES

KCl-induced spreading depression and ventilation in the cockroach. 10108

NERVOUS SYSTEM

Intra-cellular activity in cricket neurons during the generation of behaviour patterns. 9968

Locust wind receptors. ii. Interneurons in the cervical connective. 9983

Morphology of the nervous system of adult *Prodenia litura*. 10064

Cockroach heart response to cardio-accelerators. 10074

Common inhibitory motoneurons in insects. 10089

NEUROPTERA

A new genus and key to the species of Australian Stilbopterygidae (Neuroptera). 9933

NEWCASTLE DISEASE VACCINES

Control method of inactivated vaccines against the Newcastle disease by means of the titulation of neutralizing antibodies. 10334

NICOTIANA GLUTINOSA

On the inhibitory effect of yeast ribonucleic acid on the infection of *Nicotiana glutinosa* by tobacco mosaic virus. 10443

NILAPARVATA LUGENS

Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075

SUBJECT INDEX

ORGANOPHOSPHORUS COMPOUNDS

- Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
- NITRILES**
N-(substituted-benzoyl) aminoaceto- and aminopropionitriles. Patent 3,457,294 10460
- NITROGEN**
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
Analytical studies on extracts of *Litomosoides carinii*. 10341
- NOCTUIDAE**
A new *Polymixis* HB. of Spain. *Polymixis lajonquieri* Brsn. (Supplemental description (1)) contribution to the study of Noctuidae trifinae 159(2). 9875
Revision of the Nearctic moth genus *Abagrotis* Smith with descriptions of new species (Lepidoptera: Noctuidae). Part VI The *duanae* and *placida* groups; checklist of the presently known species within the genus. 9879
Ear mites of the genus *Dicrocheles* (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882
A note: Some records of Australian Noctuidae in New Zealand. 9886
A new *Caradrina* O. of Spain- Contributions to the study Noctuidae Trifinae, 158(1). 9977
A killing agent for use in light traps. 10090
Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240
The stem borer *Sesamia botanophaga* Tams and Bowden (Lep., Noctuidae) and the maize crop in central Ashanti, Ghana. 10243
- NOMENCLATURE**
A new name for the genus *Cyrtolabus* van der Vecht (Hymenoptera, Eumenidae). 9947
- NOTERIDAE**
A new genus of Noteridae (Coleoptera: Noteridae, Noterini). 9869
- NOTODONTIDAE**
Meteorus versicolor Wesm. var. *decoloratus* Ruthe (Hym., Braconidae), a new parasite of *Thaumetopoea pityocampa* Schiff. (Lep., Thaumetopoeidae). 9980
- NOTONECTA**
The ultrastructure of the brain of the insect *Notonecta glauca* L. 10042
- NOVOMESSOR**
Identification of hydrocarbons from *Novomessor cockerelli*. 10138
- NUCLEAR POLYHEDROSIS VIRUS**
Leaching of the nuclear-polyhedrosis virus of *Trichoplusia ni* from soil. 10041
Laboratory and field experiments on the effectiveness of purified and non-purified nuclear polyhedral virus of *Lymantria dispar* L.. 10061
The histopathology of a nuclear polyhedrosis in larvae of the cabbage looper, *Trichoplusia ni*, related to symptoms and mortality. 10134
- NUCLEIC ACIDS**
Mechanisms of action of herbicides. 10299
- NUTRITION**
The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378
- NYMPHALIDAE**
The absorption of p,p'-DDE by larvae of *Aglais urticae* (Lepidoptera: Nymphalidae). 10078
- NYMPHS**
Description of immature stages of Coreidae. 3. *Archimerus alternus*. 9956
Description of immature stages of Coreidae. 1. *Euthochtha galeator*. 9957
- OATS**
A systemic oxathion fungicide to control loose smuts, covering smuts, seed rots, and seedling hlights of wheat, barley, oats, and sorghum. 10189
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
Seed treatment trial, 1967. 10229
- ODONATA**
The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872
Autosomal fragmentations and fusions in Odonata and their evolutionary implications. 10157
- OLETHREUTIDAE**
Easy-to-kill pests of fruit trees...codling moth. 10253
- OLIGOTOMIDAE**
Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (Oligotomidae, Embioptera), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. 9978
- ONIONS**
Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208
- OOGENESIS**
Female specific protein: Biosynthesis controlled by corpus allatum in *Leucophaea maderae*. 10002
Vitellogenic blood protein synthesis by insect fat body. 10083
- OPEROPHTERA BRUMATA**
The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). 10009
The effect of pupal predators on a population of winter moth, *Operophtera brumata* (L.) (Hydrimenidae). 10010
- OPIUS**
New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. 10259
- OPIUS CONCOLOR**
The first large-scale experimentation with the biological control of the olive fly (*Dacus oleae* Gmel.) by means of *Opius concolor* Szepi. siculus Mon. in Sicily. 10256
- ORANGES**
Efficiency of three colonies of melon aphids as transmitters of *Tristeza* virus. 10258
- ORCHARDS**
Influence of pesticides and fertilizers on the behaviour of phytophagous mites in orchards and under laboratory conditions. 10065
- Biological control of olive scale, *Parlatoria oleae* (Colvee), in a deciduous fruit orchard in California. 10252
Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. 10399
- ORGANIC COMPOUNDS**
Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023
Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
Method for repelling bees. patent 3,456,056. 10099
Metabolism of organic pesticide chemicals in higher plants. 10278
Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
Modifications of the micromethod of sample cleanup for thin-layer and gas chromatographic separation and determination of common organic pesticide residues. 10413
Methods of determining pesticides in food products. (JPRS 34,946). 10418
- ORGANOPHOSPHORUS COMPOUNDS**
Physico-organic chemical approach to the mode of action of organophosphorus insecticides. 10014
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
Inheritance of DDT-RESISTANCE in *Musca domestica* nebuld Fabr. 10096
Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
Beetle. 10137
On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
Growers join forces to battle the boll weevil. 10233
Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235
European red mite and two-spotted spider mite control on apples in California. 10236
A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of

SUBJECT INDEX

ORIBATEI

- Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
- Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug, at seedling stage. 10251
- Easy-to-kill pests of fruit trees...codling moth. 10253
- Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fabr.. 10262
- Chemical control of *Drosicha mangiferae* (Green), a serious pest of Citrus spp. in Madhya Pradesh. 10263
- Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
- Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269
- Chemical stimulation of ethylene evolution and bud growth. 10300
- The control of insects in hagged grain by the injection of dichlorvos. 10387
- Pesticides and clay minerals. 10397
- Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- Methods of determining pesticides in food products. (JPRS 34,946). 10418
- Specificity and mechanism in the action of saligenin cyclic phosphorus esters. 10424
- The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426
- Chemistry of insecticides. 10463
- Degradation and antcarboxylesterase activity of disulfoton and phorate after ⁶⁰Co gamma irradiation. 10465
- Insecticides, how to use them safely and effectively. 10466
- Note on versatility of silicone Dow Corning 11 substrate for gas chromatography of pesticides. 10482

ORIBATEI

- New species of beetle mites of the family Chamobatidae (Oribatei) from the USSR. 9940

ORNAMENTAL PLANTS

- Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269

ORTHOPTERA

- A revision of the pseudomorphaeridini (Orthoptera: Acridoidea: Pyrgomorphidae). 9909

ORYZAEPHILUS SURINAMENSIS

- The control of insects in bagged grain by the injection of dichlorvos. 10387

OSMOTIC PRESSURE

- Water uptake and embryonic development in eggs of *Chorthippus brunneus* Thunberg (Saltatoria: Acrididae). 10079

OVARIES

- Fine structures of merozoites of *Babesia bigemina* in the ovaries of *Boophilus microplus* and *Boophilus decoloratus*. 10012

- Anatomical indicators for assessing age of mosquitoes: changes in ovarian follicles. 10107

OVIPOSITION

- Oviposition behaviour of the desert locust (*Schistocerca gregaria* Forsk.). 9971

- Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992

- Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006

- Development of *Chrotogonus trachypterus* (Blanch.) (Orthoptera: Pyrgomorphidae) in relation to different levels of temperature and humidity. 10026

- Field observations on periodicity and site preference in oviposition by *Aedes aegypti* (L.) and related mosquitoes (Diptera: Culicidae) in Kenya. 10072

- Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075

- Oviposition and hatching in two species of ticks in relation to moisture deficit. 10119

- On the oviposition behaviour and development of *Sitophilus oryzae* Linn. in various natural foods. 10127

OVULATION

- The influence of temperature on reproduction and development in four species of *Glossina* (Diptera: Muscidae). 10028

- Biology of the billbug *Sphenophorus venatus* confluent, a new pest of orchardgrass. 10047

OXATHIINS

- A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189

- Chemical control of wheat and barley loose smut. 10194

OXIDATION

- Conversion of heptachlor to its epoxide. 10478

OXYDEMETONMETHYL

- Control of *Brachyrhinus cribricollis* injuring ornamentals. 10269

- GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404

OXYGEN

- Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123

- Analysis of grain storage problems in India. 10390

PACIFIC NORTHWEST

- New species of *Chrysobothris* from the Pacific Northwest (Coleoptera: Buprestidae). 9870

PAINTS

- Marking and recapture of California red scale for field studies. 10101

PALYNOLOGY

- Pollens collected by species of *Andrena* (Hymenoptera: Apidae). 9986

PANONYCHUS ULMI

- European red mite and two-spotted spider mite control on apples in California. 10236

PAPAYAS

- Volatile metabolites from dimethylthiocarbamate fungicide residues. 10441

PARAQUAT

- Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306

PARASITIC INSECTS

- Ear mites of the genus *Dicrocheles* (Acarina: Mesostigmata) found on noctuids in Hawkes Bay. 9882

- The subgenus *Persicargas* (Ixodoidea, Argasidae, Argas). 7. A. (P.) *walkerae*, new species, a parasite of domestic fowl in southern Africa. 9908

- First record of *Aewasius advena* Compere (Encyrtidae: Hymenoptera) from India as a parasite of *Ferrisia virgata* Ckll.. 9932

- The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005

- Morphology and biology of a nest-producing mite, *Bakericheyla chanayi* (Acarina: Cheyletidae). 10015

- Laboratory studies of *Eueclatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040

- A model accounting for sympatry in water mites. 10076

- New parasite records on *Hymenia recurvalis* (Fabricius) (Lepidoptera: Pyralidae). 10087

- New records of parasites of *Plutella maculipennis* Curt. in Gujarat, India. 10088

- Biological notes on the bee *Tetralonia minuta* and its cleptoparasite, *Morgania histrio* *transvaalensis* (Hymenoptera: Anthophoridae). 10109

- Observations on the biology of *Lathromeroides* sp. (Trichogrammatidae: Hymenoptera) egg parasite of the leaf rolling weevil, *Apoderus sissu* Marshall (Curculionidae: Coleoptera) with notes on the host weevil. 10117

- Etology as the determining factor of the numerical distribution of the species in the fauna. 10144

- The parasitism of gamasid mites (Gamasoidea) on birds. 10145

- New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. 10259

- Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264

- Problems in raising ducks. 10357

- Records of pupiparous Diptera (Hippoboscidae) on birds in India-III. 10365

PARASITISM

- A comparative biological study of three cecropia species (Hem. Coccidae) and their natural enemies. 9990

- On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373

SUBJECT INDEX

PESTICIDE RESIDUES

- PARATHION**
 Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
 Estimation and dissipation of parathion residue from the crop of Indian rape seed. 10048
 On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
 Chemical control of *Drosicha mangiferae* (Green), a serious pest of *Citrus* spp. in Madhya Pradesh. 10263
 Studies on the control of the red hairy caterpillar, *Amsacta moorei* Butler. 10266
 Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
 The difference in sensitivity to the sterilizing action of O,O-diethyl-O-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in *in vitro* culture. 10430
- PARLATORIA OLEAE**
 Biological control of olive scale, *Parlatoria oleae* (Colvce), in a deciduous fruit orchard in California. 10252
- PARROTS**
 Three new species of *Heteromenopon* (Mallophaga: Menoponidae) from Brazilian and Australian parrots. 9930
- PARTICLE SIZE DETERMINATION**
 Spray droplet size in the control of spruce budworm, holl weevil, hollworm and cabbage looper. 10247
- PASSALIDAE**
 Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
- PATENTS**
 Compositions and methods for regulating the growth of plants. Patent 3,455,673. 10021
 Method for repelling bees. patent 3,456,056. 10099
 Fungicidal composition containing zinc dithiocarbazate. Patent 3,458,638. 10190
 Nematocides. Patent 3,457,353. 10271
 Control of aquatic plants with dithiodiundecanoic acid. Patent 3,432,286. 10281
 Inactivated hog cholera virus vaccine. Patent 3,456,053. 10330
 Tetracycline antibiotic compositions for oral use. Patent 3,454,697. 10337
 Tablet dosage-form for the immunization of the intestinal tract with live virus preparations. Patent 3,458,621. 10359
 Method for combating micro-organisms. Patent 3,458,636. 10362
 N-(substituted-benzoyl) aminoaceto- and aminopropionitriles. Patent 3,457,294. 10460
- PEANUTS**
 Metabolism of trifluralin in peanuts and sweet potatoes. 10273
- PEARLMILLET**
 Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226
- PEARS**
 Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
- PEAS**
 New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. 10259
- PEAT**
 Recovery of mites from peat and mineral soils using a new floatation method. 9975
- PECTINOPIHORA GOSSYPIELLA**
 Hexalure, an insect sex attractant discovered by empirical screening. 10025
- PELLICULARIA**
 Fungicidal control of rice diseases. 10170
- PENETRATION**
 Absorption and penetration of picloram in potato tuber discs. 10308
 Physico-chemical and biophysical factors affecting the activity of pesticides. 10462
- PENNISETUM MACROURUM**
 African feather grass--a weed worth watching. 10279
- PENTAC**
 Histological, behavioral, and symptomatic effects of Pentac on *Tetranychus urticae*. 10018
- PENTACHLORONITROBENZENE**
 Chemistry of fungicides. 10476
- PENTATOMIDAE**
 On the odour components of the stink of two heteropteran bugs of India. 9989
 Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043
- PERILLUS BIOCULATUS**
 The effect of *Perillus bioculatus* (Fabr.) (Het., Pentatomidae) on the population dynamics of the potato beetle. 10124
- PERIPLANETA AMERICANA**
 An integrated technique to study the effects of fungigants on respiration of insects. 9972
 Radiation sensitivity of twelve species of arthropods. 10069
 Starvation-induced activity in cockroach malpighian tubules. 10073
 Cockroach heart response to cardio-accelerators. 10074
 Vitellogenic blood protein synthesis by insect fat body. 10083
 Common inhibitory motoneurons in insects. 10089
 Isolation and biological properties of the juvenile hormone. 10106
 KCl-induced spreading depression and ventilation in the cockroach. 10108
- PEST CONTROL**
 Metabolism of strychnine nitrate applied for the control of the hear. 10318
 Research and education needs in the use of pesticides. 10486
- PESTICIDE ANALYSIS**
 Surface hydrology and pesticides. 10392
 Potentials for removing pesticides from water. 10396
 Extraction and gas-liquid chromatographic determination of vernolate in soil. 10467
 Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- PESTICIDE APPLICATION**
 A method for spraying individual trees. 10282
 Response of ironweed and huckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
 A sprayer for application of small amounts of herbicides to flats. 10314
 Pesticide residues in the ecosystem. 10407
 Spray gel agent solves drift problem. 10456
 An evaluation of herbicide incorporation equipment. 10484
- PESTICIDE RESIDUES**
 Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
 Surface hydrology and pesticides. 10392
 Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
 Potentials for removing pesticides from water. 10396
 Pesticides and clay minerals. 10397
 Movement of pesticides in the soil. 10398
 Influence of pesticides on soil microbes and soil properties. 10400
 Pesticide residues in the ecosystem. 10407
 Industry's concern with pesticide residues. 10411
 Modifications of the micromethod of sample cleanup for thin-layer and gas chromatographic separation and determination of common organic pesticide residues. 10413
 Activation and standardization of purified silica gel for column chromatographic cleanup of pesticide residue extracts. 10414
 Analysis of grains for multiple residues of organic fumigants. 10416
 Methods of determining pesticides in food products. (JPRS 34,946). 10418
 Structure of pesticides and decomposition by soil microorganisms. 10427
 Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441
 Extraction and gas-liquid chromatographic determination of vernolate in soil. 10467
 Reactions of pesticides in soils. 10468
 Analysis of multiple pesticide residues--chemical identity and confirmation of results. 10473
 Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475

SUBJECT INDEX

PESTICIDES

PESTICIDES

Influence of pesticides and fertilizers on the behaviour of phytophagous mites in orchards and under laboratory conditions. **10065**

Pesticides and plows. **10167**

Chemical preparations in the services of agriculture and forestry. **10169**

Surface hydrology and pesticides. **10392**

Potentials for removing pesticides from water. **10396**

Pesticides and clay minerals. **10397**

Biodegradation of pesticides. **10422**

Endrin induced alterations in bound carbohydrates in rat serum. **10423**

Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. **10445**

Physico-chemical and biophysical factors affecting the activity of pesticides. **10462**

Reactions of pesticides in soils. **10468**

Review of methods for mercury in pesticide formulations. **10469**

Note on versatility of silicone Dow Corning 11 substrate for gas chromatography of pesticides. **10482**

Research and education needs in the use of pesticides. **10486**

PETROBIA LATENS

Further records of the distribution of *Petrobia latens* (Muller) (Acarina: Tetranychidae), a pest of wheat in India together with the description of a new species of predatory mites on the same. **9920**

PHARYNX

Vaccinated cattle....can harbor foot and mouth disease. **10331**

PHASMATIDAE

The defensive behaviour of the stick insect *Oncotophasma martini* (Griffini) (Orthoptera: Phasmatidae). **10103**

PHENOLS

The correlation between physiological activity and physicochemical property of the substituted phenols. **10437**

PHENOXY ACID COMPOUNDS

Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. **10303**

PHENTHOATE

Gas chromatographic determination of ethyl O,O-dimethylthiophosphoryl-l-phenyl acetate in technical grade cidal and its 50 percent liquid formulation. **10457**

PHENYL

DIMETHYLPHOSPHORODIAMIDATE

The fate of phenyl N,N'-dimethylphosphorodiamidate in soil. **10401**

PHEROMONES

Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. **10105**

PHLOEM

Evidence for restriction of a plant virus to phloem cells. **10219**

PHORATE

Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. **10248**

Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug, at seedling stage. **10251**

Degradation and anticarboxylesterase activity of disulfoton and phorate after ⁶⁰Co gamma irradiation. **10465**

PHORMIA REGINA

Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. **10102**

PHOSPHAMIDON

The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. **10086**

Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug, at seedling stage. **10251**

PHOSPHORUS

Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. **10445**

PHOTOSYNTHESIS

Response to parasites. **10232**

Biochemical basis for plant competition. **10274**

Effects of pyrazon on growth, photosynthesis, and respiration. **10288**

Mechanisms of action of herbicides. **10299**

Effects of ammonium thiocyanate on carbohydrate metabolism in the cotton plant. **10455**

PHTHORIMAEA OPERCULELLA

Alternative host plants of tobacco leaf-miner (*Phthorimaea operculella* (Zell.)). **10239**

PHYLLOTRETA

Flea beetles *Phyllotreta cruciferae* Goeze. (Coleoptera, Chrysomelidae) a new pest of stock flower *Mathiola* sp. in Rajasthan. **10110**

PHYSICAL CHEMISTRY

Physico-chemical and biophysical factors affecting the activity of pesticides. **10462**

PHYSIOLOGY

Description, biology, and importance of a new species of Allantonematidae (Nematoda), parasite of the aphidiphagous Coccinellidae: *Parasitylenchus coccinellinae*, n. sp. **10039**

The fungitoxic mechanisms in quinoline compounds and their chelates. **10202**

The development of the body wall of *Polymorphus minutus* (Acanthocephala) in its intermediate host *Gammarus pulex*. **10370**

The effect of gastro-intestinal secretions on taeniid egg membranes. **10374**

Specificity and mechanism in the action of saligenin cyclic phosphorus esters. **10424**

PHYTOMETRA BILOBA

Meteorological aspects of insect migrations. **10037**

PHYTOMYZA ATRICORNIS

New record of hymenopterous parasites of *Phytomyza atricornis* (Meigen), a serious pest of pea. **10259**

PHYTOPHAGOUS INSECTS

New Bulgarian fauna of phytophagous wasps (Symphyta, Hymenoptera). **9946**

Ecological research in the Lamto Savannah (Ivory Coast): Annual cycle of the population size and biomasses of arthropods in the herbaceous stratum. **10017**

Biological control of *Cuscuta* spp. II. Biology and host-plant range of *Melanagromyza cuscutae* Hering (Dipt. Agromyzidae). **10272**

PHYTOPHAGOUS MITES

Influence of pesticides and fertilizers on the behaviour of phytophagous mites in orchards and under laboratory conditions. **10065**

PHYTOTOXICITY

Phytotoxicity of bemethylated analogs of diphenamid. **10290**

Basis for selectivity of linuron on carrot and common ragweed. **10295**

Effects of growth regulators and herbicides on germination of *Hydrilla* turions. **10306**

The correlation between physiological activity and physicochemical property of the substituted phenols. **10437**

PICEA ABIES

Physiological and biochemical contribution to fume damage research, 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. **10432**

PICEA OMORIKA

Physiological and biochemical contribution to fume damage research, 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. **10432**

PICLORAM

Response of tropical vegetation to herbicides. **10275**

Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. **10303**

Absorption and penetration of picloram in potato tuber discs. **10308**

Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. **10310**

Response of soybeans to 2,4-D, dicamba, and picloram. **10312**

PINE NEEDLES

Physiological and biochemical contribution to fume damage research, 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. **10432**

PINUS

Life history and damage of the pine root tip weevil, *Hyllobius rhizophagus*, in Wisconsin. **10049**

Comparison of mycelial and Sclerotial inoculum of *Macrophomina phaseoli* in the mortality of pine seedlings under varying soil conditions. **10225**

PINUS CONTORTA

Needle miner infestations in lodgepole pine east of the Sierra crest. **10267**

PINUS PALUSTRIS

Light intensity and the absorption and translocation of 2,4,5-T by woody plants. **10276**

PINUS SYLVESTRIS

Physiological and biochemical contribution to fume damage research, 8. Physiological in-

SUBJECT INDEX

PLANT HARDINESS

- vestigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432
- PIPERONYL BUTOXIDE**
The toxicity to *Triholium castaneum* (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031
- PIRICULARIA ORYZAE**
Standardization of the international race numbers of *Pyricularia oryzae*. 10198
- PLANOCOCCUS CITRI**
Scymnus (*Sidis*) *hickci* Fursch, as a foe of *Pseudococcus citri* Risso. 9893
Studies on an Israel strain of *Anagrus pseudococci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. 9964
- PLANT ABNORMALITIES**
Colchicine-induced tetraploid azaleas. 10447
- PLANT BIOCHEMISTRY**
Post-infection changes in the sugar content of leaf-spot infected harley. 10178
Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226
Biochemical basis for plant competition. 10274
Effects of pyrazon on growth, photosynthesis, and respiration. 10288
EPTC effects on sicklepod petiolar fatty acids. 10315
Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432
Discovery of sinigrin as a phagostimulant by *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 10433
Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434
The correlation between physiological activity and physicochemical property of the substituted phenols. 10437
Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438
Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera* crown-gall tissue. 10439
The mode of action of malic hydrazide: Inhibition of growth. 10444
Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
A survey of the chemical composition of *Potamogeton* and *Myriophyllum* in New Jersey. 10448
- PLANT BREEDING**
Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211
Bees as pests. 10244
- PLANT DISEASE CONTROL**
Elements for the differentiated application of quarantine and control measures of potato canker. 10221
- PLANT DISEASE RESISTANCE**
Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186
Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211
Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230
- PLANT DISEASE TRANSMISSION**
Translocation of tobacco ringspot virus in cucumber and zinnia. 10206
Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230
Common leafhopper-plant hopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostelus fascifrons* and the relative concentration of the causal agent in the vectors. 10238
Efficiency of three colonies of melon aphids as transmitters of *Tristeza* virus. 10258
- PLANT DISEASES**
Fungicidal control of rice diseases. 10170
Nutrition of the silver-leaf pathogen *Stercum purpurcum* (Pers.) Fri. 10175
Interaction between chilli mosaic and powdery mildew in tobacco. 10176
Post-infection changes in the sugar content of leaf-spot infected harley. 10178
Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186
Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203
Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204
Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208
Heterobasidion annosum. 10215
Phellinus igniarius. 10216
Phellinus pomaceus. 10217
Inonotus hispidus. 10218
Evidence for restriction of a plant virus to phloem cells. 10219
Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226
A necrotic type virus occurring on a weed in Germany. 10227
- Preliminary note on the occurrence of black point disease of wheat in India. 10228
Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230
Verticillium wilt of tobacco. VII. Pathogenicity of isolates of *Verticillium dahliae* Kleb. on New Zealand tobacco. 10231
- PLANT DORMANCY**
Effects of 2,4,5-T during the approach of woody plant dormancy. 10311
- PLANT ECOLOGY**
Biochemical basis for plant competition. 10274
Influence of weed competition on sorghum growth. 10277
Seed dormancy and germination in ecotypes of johnsongrass. 10309
Competition between flax and wild buckwheat. 10440
- PLANT EXTRACTS**
Gas chromatographic determination of residues of Dalapon in several substrates. 10410
Researches on *Galega* species regarding their content of toxins by means of biological methods. I. Toxicity of goats-ruc (*Galega officinalis* L.) for warmblooded animals. 10428
- PLANT GALLS**
A note on the occurrence of fruit fly maggots of *Dacus cucurbitae* Coq. in cecidomyiid galls of *Coccinia indica* in Andhra Pradesh. 9998
Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203
- PLANT GENETICS**
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethyl methanesulfonate. 10435
- PLANT GEOGRAPHY**
Heterobasidion annosum. 10215
Phellinus igniarius. 10216
Phellinus pomaceus. 10217
Inonotus hispidus. 10218
- PLANT GRAFTING**
Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186
- PLANT GROWTH INHIBITORS**
Progress report on shade tree inhibition. (abstract). 10442
The mode of action of malic hydrazide: Inhibition of growth. 10444
The effect of N-dimethyl amino succinamic acid (Alar) on size, shape and maturity of Delicious apples. 10450
- PLANT GROWTH REGULATOR**
Effects of growth regulators and herbicides on germination of *Hydrilla* turions. 10306
Plant growth regulators. 10436
- PLANT HARDINESS**
Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432

SUBJECT INDEX

PLANT HISTOLOGY

PLANT HISTOLOGY

Studies on the infection of cucumber mosaic virus. V. the observation of epidermal cell in the local lesion. 10180

PLANT HORMONES

Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434

PLANT INJURIES

Life history and damage of the pine root tip weevil, *Hylobius rhizophagus*, in Wisconsin. 10049

Studies on the infection of cucumber mosaic virus. V. the observation of epidermal cell in the local lesion. 10180

Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204

Local lesion host for grassy shoot virus of sugarcane. 10224

Response to parasites. 10232

The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235

A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245

Atherigona sp. (Anthomyiidae: Diptera) as a pest of wheat in Rajasthan. 10250

The effects of two phytobland oils on the postemergence activity of bromoxynil and DNBP applied in two spray volumes in alfalfa. 10316

Effects of high rates of trifluralin and vernolate on soybean yield and growth. 10317

Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432

PLANT METABOLISM

Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208

Response to parasites. 10232

Metabolism of trifluralin in peanuts and sweet potatoes. 10273

Metabolism of organic pesticide chemicals in higher plants. 10278

Translocation of assimilates and dalapon in established johnsongrass. 10292

Basis for selectivity of linuron on carrot and common ragweed. 10295

Mechanisms of action of herbicides. 10299

Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432

Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434

Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441

Degradation of p32-thromophos by microorganisms and seedlings. 10449

Effects of ammonium thiocyanate on carbohydrate metabolism in the cotton plant. 10455

PLANT NEMATODES

Translocation of tobacco ringspot virus in cucumber and zinnia. 10206

PLANT NUTRITION

In your garden - weeds: Robbers, but not always had. 10168

Nutrition of the silver-leaf pathogen *Stereum purpureum* (Pers.) Fri. 10175

PLANT PEST CONTROL

Pesticides and plows. 10167

Chemical preparations in the services of agriculture and forestry. 10169

Role of hermit crabs in the biological control of *Achatina fulica* (Bowdich) on the Andamans. 10321

PLANT PEST RESISTANCE

Twenty-six varieties of forage crops evaluated for resistance to feeding by *Melanoplus sanguinipes*. 10246

PLANT PHYSIOLOGY

Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075

Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203

Mode of action of agricultural antibiotics developed in Japan. 10205

Evidence for restriction of a plant virus to phloem cells. 10219

Studies on physiology of *Helminthosporium australiense* the causal agent of a leaf spot disease of bajra. 10226

Biochemical basis for plant competition. 10274

Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276

Influence of weed competition on sorghum growth. 10277

Absorption and translocation of pyrazon by plants. 10287

Effects of pyrazon on growth, photosynthesis, and respiration. 10288

Translocation of assimilates and dalapon in established johnsongrass. 10292

Effect of nitrogenous materials on the uptake of triazine herbicides. 10298

Chemical stimulation of ethylene evolution and bud growth. 10300

Effect of soil water stress and soil temperature on translocation of diuron. 10302

Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304

Absorption and penetration of picloram in potato tuber discs. 10308

Response of soybeans to 2,4-D, dicamba, and picloram. 10312

EPTC effects on sicklepod petiolar fatty acids. 10315

Influence of pesticides on soil microbes and soil properties. 10400

Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431

Physiological and biochemical contribution to fume damage research. 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432

Influence of atrazine (2-chloro-4-ethylamino-6-isopropylamino-5-triazine) on auxin metabolism of plants. 10434

Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438

On the inhibitory effect of yeast ribonucleic acid on the infection of *Nicotiana glutinosa* by tobacco mosaic virus. 10443

Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451

Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452

Effects of gibberellin A3 on fruit shape and subsequent seed dormancy of apple. 10453

Distribution of miserotoxin in varieties of *Astragalus miser* Dougl. ex Hook. 10454

PLANT PROTECTION

In your garden - weeds: Robbers, but not always bad. 10168

PLANT QUARANTINE

Elements for the differentiated application of quarantine and control measures of potato canker. 10221

PLANT REGULATORS

Compositions and methods for regulating the growth of plants. Patent 3,455,673. 10021

Effects of gibberellin A3 on fruit shape and subsequent seed dormancy of apple. 10453

PLANT RESPIRATION

Response to parasites. 10232

Effects of pyrazon on growth, photosynthesis, and respiration. 10288

Reversion of senescence: Effects of 2,4-dichlorophenoxyacetic acid and indoleacetic acid on respiration, ethylene production, and ripening of banana fruit slices. 10452

PLANT TRANSLOCATION

Translocation of the herbicide dicamba in purple nutsedge, *Cyperus rotundus*. 10304

PLANT WATER RELATIONS

Water florae as indicators of irrigation water contamination by DDT. 10403

PLANTS

A supplementary list of the host-plants of lac insects. 10135

On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149

- Alternative host plants of tobacco leaf-miner (*Phthorimaea operculella* (Zell.)). 10239
- Consequences of insecticide use of nontarget organisms. 10402
- PLATYGASTERIDAE**
A new species of *Trichacoides* from India with a redescription of *T. scutellaris* Dodd (Hymenoptera: Platygasteridae). 9906
- PLECOPTERA**
The life histories and drifting of the Plecoptera and Ephemeroptera in a dartmoor stream. 10001
Experimental studies on diapause in stoneflies. III. Eggs of *Brachyptera risi* (Morton). 10051
- PLODIA INTERPUNCTELLA**
Biochemical study of *Plodia interpunctella* (Hbn.) (Lepidoptera) I--Variations of body weight, water content, and dry matter content. 9993
Sexual dimorphism in neutral lipid metabolism in the Indian-meal moth, *Plodia interpunctella* (Huhner). 10143
- PLOWS**
Pesticides and plows. 10167
- PLUMS**
Phellinus pomaceus. 10217
- PLUSIINAE**
Characters for identification of some common plusiine caterpillars of the southeastern United States. 9889
Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240
- PLUTELLA MACULIPENNIS**
New records of parasites of *Plutella maculipennis* Curt. in Gujarat, India. 10088
- PNEUMOSTRONGYLUS TENUIS**
Pneumostromgylus tenuis in moose on a deer-free island. 10375
- POISONOUS PLANTS**
Ruhber-vine (*Cryptostegia grandiflora*) toxicity for ruminants. 10346
Researches on *Galega* species regarding their content of toxins by means of biological methods. I. Toxicity of goats-rue (*Galega officinalis* L.) for warmblooded animals. 10428
Distribution of miscrotoxin in varieties of *As-tragalus miser* Dougl. ex Hook. 10454
- POISONS**
Distribution of miscrotoxin in varieties of *As-tragalus miser* Dougl. ex Hook. 10454
- POLAROGRAPHY**
Collaborative study of confirmative procedures by single sweep oscillographic polarography for the determination of organophosphorus pesticide residues in nonfatty foods. 10409
- POLISTES**
The effects of the removal of the parasite *Xenos* (insecta Strepsiptera) on the protocerebral neurosecretion of its host *Polistes* (Hym. Vespidae). 10121
- POLYGONUM CONVOLVULUS**
Competition between flax and wild buckwheat. 10440
- POLYHEDROSES**
Helicopter sprayers may rescue infested forests. 9959
A strain of nuclear-polyhedrosis virus causing extensive cellular hypertrophy. 10126
- POLYMORPHISM**
The structure of polymorphic species of the subgenus *Autolethrus* (Coleoptera, Scarabaeidae) from South Kazakhstan. 9924
Homologous lines of chromosome polymorphism in the natural populations of Adirondack black fly (Diptera, Simuliidae). 10150
Chromosomal polymorphism and genetic load in *Drosophila pseudoobscura*. 10153
- POLYMORPHUS BOSCHADIS**
The development of the body wall of *Polymorphus minutus* (Acanthocephala) in its intermediate host *Gammarus pulex*. 10370
On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373
- POLYPLOIDY**
Colechicine-induced tetraploid azaleas. 10447
- POLYPORUS**
Heterobasidion annosum. 10215
Phellinus igniarius. 10216
Phellinus pomaceus. 10217
- POLYPORUS HISPIDUS**
Inonotus hispidus. 10218
- POPILLIA JAPONICA**
Course of sporulation of *Bacillus popilliae* in liquid medium containing activated carbon. 10029
- POPULATION**
Colonization of an island by the buffalo fly, *Haematobia exigua*. 10004
The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005
The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). 10009
The effect of pupal predators on a population of winter moth, *Operophtera brumata* (L.) (Hydrimenidae). 10010
Ecological research in the Lamto Savannah (Ivory Coast): Annual cycle of the population size and biomasses of arthropods in the herbaceous stratum. 10017
A study of a pocket of scattered desert locust population in Rajasthan, India during 1966 with special reference to eye-stripes and biometrics. 10027
Studies and suggestions on the behaviour of moths at light. 10033
Spaced-out gregariousness in sycamore aphids *Drepanosiphum platanoides* (Schrank) (Hemiptera, Callaphididae). 10050
The ecology of the Simuliidae in a Scottish river. 10062
Age-distribution and abundance in populations of flour beetles. I. Experimental studies. 10071
A model accounting for sympatry in water mites. 10076
Entomocoenological and biological studies in *Rosa damascena* Mill. plantations. II. Coleoptera. 10081
The effect of *Perillus bioculatus* (Fabr.) (Het., Pentatomidae) on the population dynamics of the potato beetle. 10124
- Etology as the determining factor of the numerical distribution of the species in the fauna. 10144
- Evolution of fitness. IV. Genetic evolution of inter-specific competitive ability in *Drosophila*. 10146
- On the determination of insect and mite resistance to pesticides. The influence of these products in sublethal doses on animals and in the trophic effect following biochemical repercussions on plants. 10149
- Population genetics in the American tropics. IV. Temporal changes effected in natural populations of *Drosophila melanogaster* from Colombia. 10156
- A molecular approach to the study of genic heterozygosity in natural populations. IV. Patterns of genic variation in central, marginal and isolated populations of *Drosophila pseudoobscura*. 10159
- Structure, stability, and energy flow in plants and arthropods in a sericea *Lespedeza* stand. 10255
- The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (Hemiptera, Aphididae) on brussels sprouts. 10260
- Control of Florida red scale in Florida with the parasite *Aphytis holoxanthus*. 10264
- Influence of weed competition on sorghum growth. 10277
- Yellow foxtail competition in grain sorghum. 10284
- Role of hermit crabs in the biological control of *Achatina fulica* (Bowdich) on the Andamans. 10321
- A study of the mites of the Gamasoidea superfamily (Parasitiformes) infesting small mammals on the Vitosha Mountain. 10364
- Competition between flax and wild buckwheat. 10440
- POPULUS**
An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
Phellinus igniarius. 10216
- PORTHETRIA DISPAR**
Laboratory and field experiments on the effectiveness of purified and non-purified nuclear polyhedral virus of *Lymantria dispar* L.. 10061
Symposium on the principles of the application of microbiological preparations in nature. 10249
- POTAMOGETON**
A survey of the chemical composition of *Potamogeton* and *Myriophyllum* in New Jersey. 10448
- POTASSIUM**
Retention of intra-cellular potassium by the housefly. 10113
- POTASSIUM CHLORIDE**
KCl-induced spreading depression and ventilation in the cock roach. 10108
- POTASSIUM NITRATE**
Effect of nitrogenous materials on the uptake of triazine herbicides. 10298
Seed dormancy and germination in ecotypes of johnsongrass. 10309
Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451

SUBJECT INDEX

POTASSIUM PERMANGANATE

POTASSIUM PERMANGANATE

Rhizoctonia leaf rot of colocasia in India. 10188

POTATOES

Elements for the differentiated application of quarantine and control measures of potato canker. 10221

1967 pre-emergence weed control in potatoes on Long Island. 10289

Absorption and penetration of picloram in potato tuber discs. 10308

Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431

POTENTILLA

Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451

POULTRY

The subgenus *Persicargas* (Ixodoidea, Argasidae, Argas), 7. A. (*P.*) *walkerae*, new species, a parasite of domestic fowl in southern Africa. 9908

POULTRY DISEASES

Problems in raising ducks. 10357

On the environment of *Polymorphus minutus* (Acanthocephala) in ducks. 10373

Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383

POULTRY FARM MANAGEMENT

Problems in raising ducks. 10357

POWDERY MILDEW

Interaction between chilli mosaic and powdery mildew in tobacco. 10176

PREDACEOUS INSECTS

Scymnus (*Sidis*) *hickeyi* Fursch, as a foe of *Pseudococcus citri* Risso. 9893

Further records of the distribution of *Petrobia latens* (Muller) (Acarina: Tetranychidae), a pest of wheat in India together with the description of a new species of predatory mites on the same. 9920

Notes on the biology of *Diatracophaga striatalis* Townsend, tachinid parasite of *Proceras sacchariphagus* Boj. 9970

Wasps attacking other insects. 9979

An interesting case of adaptation to various hosts on the part of an egg parasite. 9985

The Ephippigerinae (Orthoptera, Tettigoniidae) occasional but important predators of *Thaumetopoea pityocampa* Schiff. 9996

The insect predators of the pupal stage of the winter moth, *Operophtera hrumata* (L.) (Lepidoptera: Hydrimenidae). 10009

The effect of pupal predators on a population of winter moth, *Operophtera hrumata* (L.) (Hydrimenidae). 10010

Insect parasites of the green peach aphid, *Myzus persicae* Sulz. and their control potential. 10059

Eretmocerus corni Hald. (Hym., Aphelinidae), a parasite of *Siphoninus phillyreae* Halid. (Hom., Aleyrodidae). 10070

Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. 10080

The predatory and reproductive behaviour of *Rhinocoris bicolor* and *R. tropicus* (Hemiptera: Reduviidae). 10085

A new record, *Dorylus labiatus* Shuck. (Hymenoptera: Formicidae) as a predator of *Microtermes mycophagus* Desn. (Isoptera: Termitidae). 10112

The effect of *Perillus bioculatus* (Fabr.) (Het., Pentatomidae) on the population dynamics of the potato beetle. 10124

Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254

The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (Hemiptera, Aphididae) on brussels sprouts. 10260

PROCERAS SACCHARIPHAGUS

Notes on the biology of *Diatracophaga striatalis* Townsend, tachinid parasite of *Proceras sacchariphagus* Boj. 9970

PRODENIA LITURA

Morphology of the nervous system of adult *Prodenia litura*. 10064

PROPANETHIOL, 1-

Extraction and gas-liquid chromatographic determination of vernolate in soil. 10467

PROPYL N,N-DIPROPYLTHIOLCARBAMATE

Effects of high rates of trifluralin and vernolate on soybean yield and growth. 10317

PROSOPIS JULIFLORA

Chemical stimulation of ethylene evolution and bud growth. 10300

PROSPALTELLA AURANTII

Note on *Prospaltella aurantii* How. (Hym., Aphelinidae), parasite of *Quadraspidiotus pyri* Licht. in the Maritime Alps (Hom., Diaspidinae). 9967

PROTEINS

Female specific protein: Biosynthesis controlled by corpus allatum in *Leucophaea maderae*. 10002

Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). 10057

A molecular approach to the study of genic heterozygosity in natural populations. IV. Patterns of genic variation in central, marginal and isolated populations of *Drosophila pseudoobscura*. 10159

Mechanisms of action of herbicides. 10299

Vitamin A metabolism in protein deficiency. 10324

Analytical studies on extracts of *Litosomoides carinii*. 10341

PRUNING

Progress report on shade tree inhibition. (abstract). 10442

PSEUDALETIA UNIPUNCTA

A strain of nuclear-polyhedrosis virus causing extensive cellular hypertrophy. 10126

PSEUDEUCOILA BOCHEI

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

PSEUDEUCOILA MELLIPES

Inhibition of the defense reaction of *Drosophila melanogaster* parasitized simultaneously by the wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

wasps *Pseudeucoila bochei* and *Pseudeucoila mellipes*. 10122

PSEUDOMONAS FLUORESCENS

Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429

PSYCHODIDAE

On *Sergentomyia ruttledgei* (Lewis Kirk) and *S. schwetzi* (Adler, Theodor Parrot) (Diptera: Psychodidae). 9915

PUPAE

Description of the male, pupa, and larval habitat of *Nilobezzia brevicornis* (Diptera: Ceratopogonidae). 9963

Variations in free amino acids in the larvae and pupae of *Chilo zonellus*. 9994

The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995

The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). 10009

The effect of pupal predators on a population of winter moth, *Operophtera brumata* (L.) (Hydrimenidae). 10010

The influence of temperature on reproduction and development in four species of *Glossina* (Diptera: Muscidae). 10028

Biology of the billbug *Sphenophorus venatus* confluent, a new pest of orchardgrass. 10047

Biology and description of immature stages of *Orthacheta hirtipes*, a predator of *Cordilura* spp. 10080

Pupal duration in *Glossina morsitans orientalis* under conditions of constant temperature. 10091

Lethal temperatures for puparia of *Glossina morsitans orientalis*. 10092

Effects of exogenous moulting hormones on puparium formation in *Calliphora*. 10130

Refined defensive mechanisms in *Chrysomela scripta*. 10139

Position effect on DNA transcription and replication. 10160

A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164

Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240

Records of pupiparous Diptera (Hippoboscidae) on birds in India--III. 10365

PYRALIDAE

A new pyralid leaf roller, *Phostria* sp. on sugarcane. 10046

Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254

PYRAZON

Behavior of pyrazon in soil. 10286

Absorption and translocation of pyrazon by plants. 10287

Effects of pyrazon on growth, photosynthesis, and respiration. 10288

Weed control in sugarbeets. 10296

SUBJECT INDEX

RIBONUCLEIC ACID

- PYRENOPHORA AVENAE**
Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223
- PYRETHRUM**
The toxicity to *Tribolium castaneum* (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
Chemistry of insecticides. 10463
- PYRGOMORPHIDAE**
A revision of the pseudomorphaeridini (Orthoptera: Acridoidea: Pyrgomorphidae). 9909
- PYRUVATE KINASE**
Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris* muscle, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
- QUAIL**
The difference in sensitivity to the sterilizing action of O,O-diethyl-O-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in *in vitro* culture. 10430
- QUANTITATIVE ANALYSIS**
Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. 9973
Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421
Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471
- QUEDIUS**
Contribution to the knowledge of the Staphylinidae. CI. Diverse remarks on some *Quedius* from the eastern Mediterranean. 9890
Quedius (*Microsaurus*) *scitus* (Grav.) (Col., Staphylinidae) a teratological specimen. 9955
- QUEEN BEES**
Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). 10057
- QUERCUS LAEVIS**
Effects of 2,4,5-T during the approach of woody plant dormancy. 10311
- QUERCUS NIGRA**
Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276
- QUERCUS ROBUR**
Some observations on *Cynips quercus folii* L. galls on *Quercus robur* L. in Bydgoszcz province. 10203
- QUERCUS STELLATA**
Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276
- QUINOLINE**
The fungitoxic mechanisms in quinoline compounds and their chelates. 10202
- RABBITS**
Abundance of cottontails and their fleas at Red Bluff Ranch, New Mexico. 10007
- RABIES**
Case of rabies in guinea pig with long incubation period. 10348
Immune lysis of rabies virus-infected cells. 10361
- RABIES VACCINES**
Immunogenicity of concentrated and purified rabies vaccine of tissue culture origin. 10360
- RABIES VIRUS**
Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
- RADIATION**
Radiation sensitivity of twelve species of arthropods. 10069
Degradation and antcarboxylesterase activity of disulfoton and phorate after 60Co gamma irradiation. 10465
- RADIOACTIVE TRACERS**
The utilization of C14-labelled adenosine diphosphate during the *in vitro* respiration of housefly sarcosomes. 9984
The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). 10009
Vitellogenic blood protein synthesis by insect fat body. 10083
Translocation of assimilates and dalapon in established johnsongrass. 10292
Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441
Degradation of p32-bromophos by microorganisms and seedlings. 10449
- RADIOISOTOPES**
The fate of phenyl N,N'-dimethylphosphordiamidate in soil. 10401
- RADISHES**
Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
- RAINFALL**
Pesticides and clay minerals. 10397
- RANGES**
Downy broom control by soil-active herbicides for revegetation of rangelands. 10283
- RAPE**
Phytotoxicity of bemethylated analogs of diphenamid. 10290
- RATS**
Vitamin A metabolism in protein deficiency. 10324
Effect of manganese and cobalt on ascorbic acid metabolism in rats. 10352
Endrin induced alterations in bound carbohydrates in rat serum. 10423
- REDUVIIDAE**
Palearctic species from the genus *Phymata* Latreille, 1802 (Hem. Het. Reduviidae). 9907
The predatory and reproductive behaviour of *Rhinocoris bicolor* and *R. tropicus* (Hemiptera: Reduviidae). 10085
- REPRODUCTION**
Studies on an Israel strain of *Anagrus pseudococci* (Girault) (Hym., Encyrtidae). II. Some biological aspects. 9964
Deviate-ontogenies in the aphelinid male (Hymenoptera) associated with the ovipositional behavior of the parental female. 10006
- REPRODUCTIVE ORGANS**
Notes on the male germ cells of a beetle, *Lepidotarsa decemlineata*. 10115
- RESEARCH**
Research and education needs in the use of pesticides. 10486
- RESPIRATORY DISEASES**
Problems in raising ducks. 10357
- RETICULITERMES FLAVIPES**
Antennopsis gallica Heim and Buehli (hyphomycetes: Glocohaustoriales), an entomogenous fungus on subterranean termites in Florida. 10022
- REVIEWS**
Caddis larvae. 9904
Temperature effects on embryonic development in insects. 10035
Diplogasterid nematodes (Diplogasteridae: Rhabditida) and their relationship to insect disease. 10094
Allergic responses to insects. 10166
Response to parasites. 10232
A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245
Integrated control of insects. A challenge for scientists. 10265
Metabolism of organic pesticide chemicals in higher plants. 10278
Mechanisms of action of herbicides. 10299
- RHABDITIS**
Diplogasterid nematodes (Diplogasteridae: Rhabditida) and their relationship to insect disease. 10094
- RHIPICEPHALUS BURSA**
Microscopical studies on the development of *Babesia ovis* in *Rhipicephalus bursa* (Ixodoidea). I. Development in female ticks after repletion. 10013
- RHIZOCTONIA**
Rhizoctonia leaf rot of colocasia in India. 10188
- RHIZOPERTHA DOMINICA**
Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Sitophilus oryzae* L. and *Rhizopertha dominica* F.. 10270
- RHIZOPUS**
Seed-mycoflora of musk-melon. 10193
- RHYNCHOSCIARA**
Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angelae*. 10158
- RHYZOPERTHA DOMINICA**
A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237
- RIBONUCLEIC ACID**
Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's

SUBJECT INDEX

- RICE**
 yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera* crown-gall tissue. 10439
 On the inhibitory effect of yeast ribonucleic acid on the infection of *Nicotiana glutinosa* by tobacco mosaic virus. 10443
- RICE**
 Anatomical studies of the ovipositional site of plant hoppers and leaf hoppers on rice. 10075
 Fungicidal control of rice diseases. 10170
 The epiphytotic of yellow orange leaf disease of rice in 1966 in Thailand. 10197
 Standardization of the international race numbers of *Pyricularia oryzae*. 10198
 Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
 Industry's concern with pesticide residues. 10411
- RICKETTSIA**
 Spermatoocyte granules in *Drosophila melanogaster*. 10003
- RING SPOT**
 Translocation of tobacco ringspot virus in cucumber and zinnia. 10206
- RODENTS**
 Analytical studies on extracts of *Litomosoides carinii*. 10341
- ROE**
 Problems with DDT in fish culture operations. 10406
- RONNEL**
 Variability in insecticide tolerance of eighteen honey-bee colonies. 10125
- ROOTS**
 Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186
 Verticillium wilt of tobacco. VIII. Movement of conidia of Verticillium dahliae Kleb. in tobacco plants. 10230
 Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438
- ROSA**
 Entomocoenological and biological studies in *Rosa damascena* Mill. plantations. II. Coleoptera. 10081
- ROT**
 Rhizoctonia leaf rot of colocasia in India. 10188
 A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189
Phellinus igniarius. 10216
Phellinus pomaceus. 10217
- ROTENONE**
 Thin layer densitometric determination of rotenone and deguelin. 10461
 Chemistry of insecticides. 10463
- RUMINANTS**
 Rubber-vine (*Cryptostegia grandiflora*) toxicity for ruminants. 10346
- RUST**
 Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211
- SALICYLALDEHYDE**
 Refined defensive mechanisms in *Chrysomela scripta*. 10139
- SALIX**
Phellinus igniarius. 10216
- SALMONELLA PULLORUM**
 Isolation of *Salmonella pullorum* from a caseous nodular in the orbital region of a chick Arbor Acres breed. 10338
- SALMONELLA TYPHIMURIUM**
 A *Salmonella typhimurium* involved in the regulation of isoleucine, valine and leucine biosynthesis. 10326
 Operator constitutive mutations in the leucine operon of *Salmonella typhimurium*. 10329
- SALMONELLOSIS**
 Problems in raising ducks. 10357
- SANITATION**
 Problems in raising ducks. 10357
- SANITATION CONTROL (PESTS)**
 Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatioosis. 10372
- SAPERDA CARCHARIAS**
 An interesting case of adaptation to various hosts on the part of an egg parasite. 9985
- SARCOSOMES**
 The utilization of C14-labelled adenosine diphosphate during the in vitro respiration of housefly sarcosomes. 9984
- SATYRIDAE**
Ceryonis pegala abbotti, new subspecies (Lepid., Satyridae). 9877
- SCARABAEIDAE**
 The structure of polymorphic species of the subgenus *Autolethrus* (Coleoptera, Scarabaeidae) from South Kazakhstan. 9924
 Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. 9934
 Laboratory demonstration of a chemical sex attractant in *Costelytra zealandica* (White) (Scarabaeidae: Coleoptera). 10030
 Fuseaux virus of a South American Scarabaeidae. 10133
- SCHISTOCERCA GREGARIA**
 Oviposition behaviour of the desert locust (*Schistocerca gregaria* Forsk.). 9971
 Locust wind receptors. I. Transducer mechanics and sensory response. 9981
 Locust wind receptors. III. Contribution to flight initiation and lift control. 9982
 Locust wind receptors. ii. Interneurons in the cervical connective. 9983
 A study of a pocket of scattered desert locust population in Rajasthan, India during 1966 with special reference to eye-stripes and biometrics. 10027
 Meteorological aspects of insect migrations. 10037
- Common inhibitory motoneurons in insects. 10089
- SCHISTOSOMA MANSONI**
 Pyruvate kinase and phosphoenolpyruvate carboxykinase activities of *Ascaris muscle*, *Hymenolepis diminuta* and *Schistosoma mansoni*. 10369
- SCHISTOSOMIASIS**
 Schistosomal cirrhosis in pigs in Jabalpur, M. P.. 10381
- SCORZONERA**
 Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera* crown-gall tissue. 10439
- SCYMNUS**
Scymnus (*Sidis*) *hickei* Fursch, as a foe of *Pseudococcus citri* Risso. 9893
- SEASONAL VARIATION**
 Butterflies of Collobrières, var. Alpes Maures, Provence in July and August 1967. 9880
 Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123
 Population genetics in the American tropics. IV. Temporal changes effected in natural populations of *Drosophila melanogaster* from Colombia. 10156
- SECRETION**
 On the odour components of the stink of two heteropteran bugs of India. 9989
 Oenocytes: form and function. 10093
 On the explosion chemistry of the bombardier beetle. VI. On the chemistry of the smallest bombardier beetle *Pausus favieri*. XLIII. Communication on arthropod protective substances. 10111
- SEED DORMANCY**
 Seed dormancy and germination in ecotypes of johnsongrass. 10309
 Effects of gibberellin A3 on fruit shape and subsequent seed dormancy of apple. 10453
- SEED GERMINATION**
 Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Strophilus oryzae* L. and *Rhizopertha dominica* F.. 10270
 Seed dormancy and germination in ecotypes of johnsongrass. 10309
 Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451
- SEED TREATMENT**
 Chemotherapy of loose smut of barley in Canada. 10179
 Chemical control of loose smut in barley. 10214
 Seed treatment trial, 1967. 10229
 Treatment of mustard and radish seeds for the control of mustard sawfly, *Athalia proxima* Klug. at seedling stage. 10251
 Selective grass control with siduron. 10294

SEED-BORNE PLANT DISEASES

Fungicidal control of rice diseases. 10170

SEEDLING BLIGHT

Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223

SEEDLINGS

Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223

Comparison of mycelial and Sclerotial inoculum of *Macrophomina phaseoli* in the mortality of pine seedlings under varying soil conditions. 10225

Effects of chlorpropham vapors on dodder seedlings. 10305

Degradation of p32-bromophos by microorganisms and seedlings. 10449

SEEDS

Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208

Mercury-resistant *Pyrenophora avenae* in New Zealand seed oats: a comparison of six different compounds as seed disinfectants. 10223

SENSE ORGANS

Locust wind receptors. I. Transducer mechanics and sensory response. 9981

Locust wind receptors. III. Contribution to flight initiation and lift control. 9982

Locust wind receptors. ii. Interneurons in the cervical connective. 9983

A more recent sensillary type on the antenna of female mosquitoes (*Aedes aegypti* L.). 10055

SERODIAGNOSIS

Study of densonucleosis of Lepidoptera by the immunological gel diffusion method. 10019

Use of inert particles for the diagnosis of sheep cisticercosis. Bentonite test. 10367

Recent techniques for serodiagnosis of hydatidosis. V. The importance of tests of bentonite, latex and indirect hemagglutination in the field sanitation of hidatidosis. 10372

SEROLOGICAL TESTS

Control method of inactivated vaccines against the Newcastle disease by means of the titulation of neutralizing antibodies. 10334

The isolation of a strain of *Leptospira*, serotype hardjo, from cattle in Queensland. 10358

SERUM

Babesia argentina: Serum changes in infected calves. 10345

SESONE

Effects of several herbicides on yews and Japanese maples. 10280

SETARIA GLAUCA

Yellow foxtail competition in grain sorghum. 10284

SEX

Segregation distorter in *D. melanogaster* males: An effect of female genotype on the segregation ratio. 10155

The role of sexuality in dosage compensation in *Drosophila*. 10162

SEX ATTRACTANTS

Laboratory demonstration of a chemical sex attractant in *Costelytra zealandica* (White) (Scarabaeidae: Coleoptera). 10030

SEX BEHAVIOR

Biology of the billbug *Sphenophorus venatus confluentis*, a new pest of orchardgrass. 10047

The predatory and reproductive behaviour of *Rhinocoris bicolor* and *R. tropicus* (Hemiptera: Reduviidae). 10085

Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100

SHADE TREES

Progress report on shade tree inhibition. (abstract). 10442

SHEEP

Incidence of bluetongue reported calendar year 1967. 10325

An outbreak of vibriosis in sheep in New South Wales. 10351

The incidence of demodectic mites in the eyelids of various mammalian hosts. 10363

Use of inert particles for the diagnosis of sheep cisticercosis. Bentonite test. 10367

SIALIDAE

Life history and habits of *Sialis rotunda* and *S. californica* in western Oregon. 9965

SIDURON

Selective grass control with siduron. 10294

SILICA GELS

Activation and standardization of purified silica gel for column chromatographic cleanup of pesticide residue extracts. 10414

SILVEX

Extraction, separation, and GLC detection of silvex and its propylene glycol ether ester in fish tissue. 10421

SIMAZINE

Effects of several herbicides on yews and Japanese maples. 10280

Chemistry of fungicides. 10476

SIMULIIDAE

New Simuliidae (Diptera) from New Caledonia and Norfolk Island. 9888

The ecology of the Simuliidae in a Scottish river. 10062

Homologous lines of chromosome polymorphism in the natural populations of Adirondack black fly (Diptera, Simuliidae). 10150

SINDBIS VIRUS

Sindbis virus multiplication and *Calliphora erythrocephala* (Meig.) metamorphosis. 9969

SINIGRIN

Discovery of sinigrin as a phagostimulant by *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 10433

SIPHONAPTERA

Siphonaptera from Inari, Finland. 9942

Abundance of cottontails and their fleas at Red Bluff Ranch, New Mexico. 10007

SITOPHILUS GRANARIUS

The control of insects in bagged grain by the injection of dichlorvos. 10387

SITOPHILUS ORYZAE

On the oviposition behaviour and development of *Sitophilus oryzae* Linn. in various natural foods. 10127

A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhyzopertha dominica* (F.) in wheat. 10237

Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Sitophilus oryzae* L. and *Rhyzopertha dominica* F.. 10270

SMUT

Fungicidal control of smut diseases of cereals. 10207

Seed treatment trial, 1967. 10229

SNAILS

Use of metaldehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. 10319

Observations on the control of *Achatina fulica* Bowdich, the giant African snail with methaldehyde. 10320

Gulella (*Indocneca*) *bicolor* (Hutton), a predator of giant African snail *Achatina fulica* Bowdich. 10322

SODIUM CHLORATE

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

SODIUM HYPOCHLORITE

Treated water curbs tomato decay. 10384

SODIUM MONOCHLOROACETALDEHYDE BISULFITE

Nematocides. Patent 3,457,353. 10271

SODIUM N-METHYLDITHIOCARBAMATE

Chemistry of fungicides. 10476

SOGATELLA FURCIFERA

Common leafhopper-planthopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234

SOIL CONTAMINATION

Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395

SOIL INSECTS

A simple collector for removing soil insects from an oil/water interface. 10095

SOIL LEACHING

Leaching of the nuclear-polyhedrosis virus of *Trichoplusia ni* from soil. 10041

Pesticides and clay minerals. 10397

SOIL MICROORGANISMS

Behavior of pyrazon in soil. 10286

Influence of pesticides on soil microbes and soil properties. 10400

Survival of lyophilized *Bacillus popilliae* in soil. 10415

Structure of pesticides and decomposition by soil microorganisms. 10427

SOIL MOISTURE

Effect of soil water stress and soil temperature on translocation of diuron. 10302

SOIL PROFILES

Atrazine degradation in two soil profiles. 10477

SUBJECT INDEX

SOIL PROPERTIES

SOIL PROPERTIES

Influence of pesticides on soil microbes and soil properties. **10400**

Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. **10445**

SOIL SAMPLING

Seasonal changes in the distribution of the milled *Cylindroiulus punctatus* (Leach) in decaying logs and soil. **9966**

Recovery of mites from peat and mineral soils using a new floatation method. **9975**

SOIL SANITATION

Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. **10248**

SOIL TEMPERATURE

Effect of soil water stress and soil temperature on translocation of diuron. **10302**

SOIL TEXTURE

Pesticides and clay minerals. **10397**

SOILS

Laboratory evaluation of insecticides against white-fringed weevil (*Graphognathus leucoloma* (Boheman) (Coleoptera: Curculionidae)) larvae. **10131**

Survival of root-infecting fungi in soil. XII. Germination and survival of endoconidia and chlamydozoospores of *Thielaviopsis basicola* in fallow soil and in soil adjacent to germinating bean seed. **10213**

Movement of pesticides in the soil. **10398**

Influence of pesticides on soil microbes and soil properties. **10400**

The fate of phenyl N,N'-dimethylphosphorodiamidate in soil. **10401**

Consequences of insecticide use of nontarget organisms. **10402**

Industry's concern with pesticide residues. **10411**

Extraction and gas-liquid chromatographic determination of vernolate in soil. **10412**

Structure of pesticides and decomposition by soil microorganisms. **10427**

Chemistry of herbicides. **10464**

Extraction and gas-liquid chromatographic determination of vernolate in soil. **10467**

Reactions of pesticides in soils. **10468**

SOLUBILITY

Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. **10479**

SORGHUM

A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. **10189**

Influence of weed competition on sorghum growth. **10277**

Yellow foxtail competition in grain sorghum. **10284**

Tall waterhemp competition in grain sorghum. **10285**

SORGHUM HALEPENSE

Repeated, foliar applications of herbicides on johnsongrass. **10291**

Translocation of assimilates and dalapon in established johnsongrass. **10292**

Control of johnsongrass on drainage ditchbanks in sugarcane. **10297**

Seed dormancy and germination in ecotypes of johnsongrass. **10309**

SORPTION

Water vapor sorption and humidity relationships in *Liposcelis* (Insecta: Psocoptera). **10053**

SOYBEANS

Response of soybeans to 2,4-D, dicamba, and picloram. **10312**

Effects of high rates of trifluralin and vernolate on soybean yield and growth. **10317**

SPECTROMETRY

Analysis of multiple pesticide residues--chemical identity and confirmation of results. **10473**

SPECTROPHOTOMETRY

Behavior of pyrazon in soil. **10286**

Determination and measurement of insecticide dust particles in atmospheres adjacent to orchards. **10399**

Acetonitrile extraction and determination of carbaryl in fruits and vegetables. **10475**

SPERMATHECA

Proteins in the spermathecae and haemolymph of the queen bee (*Apis mellifica* L. var. *ligustica* Spin.). **10057**

SPERMATOCYTES

Spermatocyte granules in *Drosophila melanogaster*. **10003**

Notes on the male germ cells of a beetle, *Lepidotarsa decemlineata*. **10115**

SPERMATOGENESIS

Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. **10102**

Notes on the male germ cells of a beetle, *Lepidotarsa decemlineata*. **10115**

SPERMATOPHYTES

Spermatophores of the Blattaria. **10024**

SPHENOPHORUS VENATUS CONFLUENS

Biology of the billbug *Sphenophorus venatus confluens*, a new pest of orchardgrass. **10047**

SPIRACLES

Spiracles of adult Scarabaeoidea (Coleoptera) and their phylogenetic significance. I. The abdominal spiracles. **9934**

SPIROCHETOSIS

Problems in raising ducks. **10357**

SPIRURIDAE

Spirurata of animals and humans and the diseases. **10382**

SPODOPTERA EXIGUA

Meteorological aspects of insect migrations. **10037**

SPORULATION

Influence of light on sporulation by *Helminthosporium stenospilum*. **10183**

SPRAYING

Growers join forces to battle the holl weevil. **10233**

Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. **10247**

Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. **10248**

Easy-to-kill pests of fruit trees...codling moth. **10253**

Control of *Brachyrhinus eribricollis* injuring ornamentals. **10269**

A method for spraying individual trees. **10282**

A sprayer for application of small amounts of herbicides to flats. **10314**

Use of metaldehyde as dusts and sprays to control the giant African snail *Achatina fulica* Bowdich. **10319**

The effect of N-dimethyl amino succinamic acid (Ajar) on size, shape and maturity of Delicious apples. **10450**

Spray gel agent solves drift problem. **10456**

Insecticides, how to use them safely and effectively. **10466**

SPRAYING EQUIPMENT

Helicopter sprayers may rescue infested forests. **9959**

STAPHYLINIDAE

A new north Palearctic *Stenus*: *St. (Nestus) coriaceus* n. sp. (Coleoptera, Staphylinidae) (58. Contribution to the knowledge of the stenids). **9931**

Philonthus pareus Sharp (Col., Staphylinidae) in Britain. **9945**

Hypocyrtus nitidus Palm. (Col., Staphylinidae) in the Joy collection. **9954**

Quedius (Microsaurus) scitus (Grav.) (Col., Staphylinidae) a teratological specimen. **9955**

The insect predators of the pupal stage of the winter moth, *Operophtera brumata* (L.) (Lepidoptera: Hydrimenidae). **10009**

The effect of pupal predators on a population of winter moth, *Operophtera brumata* (L.) (Hydrimenidae). **10010**

STAPHYLOCOCCUS AUREUS

Method for combating micro-organisms. Patent 3,458,636. **10362**

Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. **10429**

STARVATION

Starvation-induced activity in cockroach malpighian tubules. **10073**

Studies on lipid metabolism of *Ascaris* during starvation. **10368**

STATISTICAL ANALYSIS

Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. **9973**

Experimental evidence for factors affecting the relative efficiency of indirect to direct selection in *Tribolium castaneum*. **10161**

STEMS

Verticillium wilt of tobacco. VI. The influence of roots and stems on *Verticillium* wilt symptoms in tobacco. **10186**

SUBJECT INDEX

SURVEYS

- STEREUM PURPUREUM**
Nutrition of the silver-leaf pathogen *Stereum purpureum* (Pers.) Fri. 10175
- STERILIZATION**
New approaches to the control of pest organisms. 10118
- STEROLS**
Sterol and water-soluble requirements for larvae of the red-banded leaf roller, *Argyrotaenia velutinana*. 10104
- STIMULANTS**
Nutrition of *Xyleborus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
- STINKING SMUT**
Seed treatment trial, 1967. 10229
- STOMACH**
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- STORAGE**
Analysis of grain storage problems in India. 10390
- STORAGE DISEASES**
Treated water curbs tomato decay. 10384
- STORED PRODUCT INSECTS**
Analysis of grain storage problems in India. 10390
- STORED PRODUCTS**
A key to the species of *Carcinops Marscul* (Coleoptera, Histeridae) associated with stored products, including *C. troglodytes* (Paykull) new to this habitat. 9901
The control of insects in bagged grain by the injection of dichlorvos. 10387
Observations on prolonged grain storage with forced aeration in Israel. 10389
Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391
- STORED-PRODUCT INSECTS**
Studies on the incidence and extent of damage due to insect pests in stored seeds--I. Cereal seeds. 10388
- STRANGLES (HORSES)**
Equine vaccines and vaccinations. 10344
- STRAWBERRIES**
In your garden - weeds: Robbers, but not always bad. 10168
Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- STREAMS**
Aquatic insect communities of a small stream on Mont St. Hilaire, Quebec. 10060
- STRONGYLUS**
The course of naturally acquired helminth infections of horses given regular anthelmintic treatment. 10380
- STRYCHNINE**
Metabolism of strychnine nitrate applied for the control of the bear. 10318
- STUNT**
Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
- STYLOPIDAE**
The effects of the removal of the parasite *Xenos* (Insecta Strepsiptera) on the protocerebral neurosecretion of its host *Polistes* (Hym. Vespidae). 10121
- SUBSTRATES**
Substrate preferences and invasion behaviour exhibited by larvae of *Nilodorum brevibuca* Freeman (Chironomidae) under experimental conditions. 10066
- SUCCINIC ACID, 2,2-DIMETHYLHYDRAZIDE**
The effect of N-dimethyl amino succinamic acid (Alar) on size, shape and maturity of Delicious apples. 10450
- SUGAR BEETS**
Absorption and translocation of pyrazon by plants. 10287
Weed control in sugarbeets. 10296
- SUGARCANE**
A new pyralid leaf roller, *Phostria* sp. on sugarcane. 10046
Local lesion host for grassy shoot virus of sugarcane. 10224
Contribution to the knowledge of the natural enemies of *Bissetia steniellus* (Hampson) (Lep.: Pyralidae). 10254
Control of johnsongrass on drainage ditchbanks in sugarcane. 10297
- SUGARS**
Post-infection changes in the sugar content of leaf-spot infected barley. 10178
- SULFITES**
Nematocides. Patent 3,457,353. 10271
- SULFUR**
Surface hydrology and pesticides. 10392
- SULFUR DIOXIDE**
Physiological and biochemical contribution to fume damage research, 8. Physiological investigations of the action of SO₂ on the metabolism of conifer needles in winter. 10432
- SURFACE-ACTIVE AGENTS**
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
Bloat on *Dolichos lablab*. 10335
Treated water curbs tomato decay. 10384
- SURGERY**
Dirofilaria immitis from the eye of a dog. 10376
- SURVEYS**
Chloropidae (Diptera), unknown in the fauna of Bulgaria. 9871
The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872
Yespidae from Bulgaria (Hymenoptera, Diptera). 9873
Revision of the Nearctic moth genus *Abagrotis* Smith with descriptions of new species (Lepidoptera: Noctuidae). Part VI The *duanea* and *placida* groups; checklist of the presently known species within the genus. 9879
Butterflies ht *Collobrieries*, var. *Alpes Maures*, Provence in July and August 1967. 9880
- A change in the Lepidoptera of Hampstead after four decades. 9881
Study of the world *Gyponinae* (Homoptera: Cicadellidae). A synopsis of the genus *Clinonaria*. 9883
A note: Some records of Australian Noctuidae in New Zealand. 9886
Results of an Austrian Lepidoptera collecting trip to Syria and Lebanon. (Part V.: Epermeniidae). 9894
The tiger moths of the county of Cumberland, New South Wales. 9900
A key to the species of *Carcinops Marscul* (Coleoptera, Histeridae) associated with stored products, including *C. troglodytes* (Paykull) new to this habitat. 9901
Mites of the super-family Gamasoidea on micromammalia in the western Balkan Range. 9911
Three new records of *Bryobiinae* from India (Acarina: Tetranychidae). 9921
Presentation of aquatic heteropteran fauna II, aquatic Heteroptera from Evora, Portugal. 9922
Bulgarian grasshoppers (Homoptera: Auchenorrhyncha). 9928
The butterflies of Lord Howe Island. 9929
First record of *Aewasius advena* Compere (Encyrtidae: Hymenoptera) from India as a parasite of *Ferrisia virgata* Ckll.. 9932
New species and records of *Nasutitermitinae* (Isoptera: Termitidae) from Africa. 9936
Distribution and establishment of *Tetrastichus incertus* in the eastern United States. 9937
Mordellistena pumila group in Finland (Coleoptera, Mordellidae). 9941
Aphid fauna of Macedonia. 9943
Some new records of butterflies from Nepal. 9948
Several *Globiceps*-species (Heteroptera, Miridae). 9952
Ixodes pacificus Cooley and Kohls, 1943: Its life-history and occurrence. 9962
Pollens collected by species of *Andrena* (Hymenoptera: Apidae). 9986
Abundance of cottontails and their fleas at Red Bluff Ranch, New Mexico. 10007
Recent records of migrant Lepidoptera in Taranaki. 10008
Studies on the ecology of larval *Tipulinae* (Diptera, Tipulidae). 10011
Migrating butterflies in 1967 (Twentieth Annual Report). 10056
Aquatic insect communities of a small stream on Mont St. Hilaire, Quebec. 10060
New records of parasites of *Plutella maculipennis* Curt. in Gujarat, India. 10088
The epiphytotic of yellow orange leaf disease of rice in 1966 in Thailand. 10197

SUBJECT INDEX

SWEETPOTATOES

- The presence of tristeza virus in certain species of citrus in Cyprus. 10212
- Alternative host plants of tobacco leaf-miner (*Phthorimaea operculella* (Zell.)). 10239
- Biochemical basis for plant competition. 10274
- The relative incidence of *Vibrio fetus* infection in dairy and beef cattle in New South Wales. 10336
- The occurrence of ephemeral fever of cattle in Victoria in 1968. 10347
- An outbreak of vibriosis in sheep in New South Wales. 10351
- Contribution to the research on the helminth fauna of wild birds in Thrace (southern Bulgaria) *Aeatbocephala*. 10371
- Studies on the incidence and extent of damage due to insect pests in stored seeds--I. Cereal seeds. 10388
- A survey of the chemical composition of *Potamogeton* and *Myriophyllum* in New Jersey. 10448

SWEETPOTATOES

- Metabolism of trifluralin in peanuts and sweet potatoes. 10273
- Biochemical studies on the terpene metabolism in sweet potato root tissue with black rot. Effect of C10- and C15-terpenols on acetate-2-14C incorporation into ipomeamarone. 10446

SWINE

- Toxoplasma gondii*: Isolation of samples starting from the diaphragms of clinically healthy pigs slaughtered in Sao Paulo, Brazil. 10327
- Hog cholera and other communicable swine diseases. Miscellaneous amendments. 10328
- Inactivated hog cholera virus vaccine. Patent 3,456,053. 10330
- Foot lameness in pigs. 10332
- Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- Schistosomal cirrhosis in pigs in Jabalpur, M. P.. 10381

SYMBIOSIS

- Observations on the life history and bionomics of *Oligotoma ceylonica ceylonica* Enderlein (*Oligotomidae*, *Embioptera*), commensal in the nest of the social spider *Stegodyphus sarasinorum* Karsch. 9978

SYMPHORICARPOS

- Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303

SYMPHYTA

- New Bulgarian fauna of phytophagous wasps (*Symphyla*, *Hymenoptera*). 9946

SYMPOSIA

- Symposium on the principles of the application of microbiological preparations in nature. 10249

SYNCHYTRIUM ENDOBIOTICUM

- Elements for the differentiated application of quarantine and control measures of potato canker. 10221

SYNERGISM

- Biological interaction between plasticizers and insecticides. 10058

SYNTHESIS

- Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210
- Conversion of heptachlor to its epoxide. 10478

SYRPHIDAE

- The effect of removal of arthropod predators on an infestation of *Brevicoryne brassicae* (*Hemiptera*, *Aphididae*) on brussels sprouts. 10260

SYSTEMIC FUNGICIDES

- Chemical control of loose smut in barley in Minnesota. 10174
- Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181
- A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189

- Control of loose smut of wheat and barley in Arkansas with fungicides. 10192

- Chemical control of wheat and barley loose smut. 10194

- Effect of two systemic fungicides on control of loose smut in wheat. 10195

- Efficacy of oxathiin fungicides for control of loose smut in barley. 10199

- Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200

- Chemical control of loose smut in barley. 10214

- Results obtained with a systemic oxathiin fungicide in France. 10220

- The systemic fungicide 2,3-dihydro-5-carbox-anilido-6-methyl-4-oxathiin. 10222

- Seed treatment trial, 1967. 10229

T, 2,4,5-

- Response of tropical vegetation to herbicides. 10275

- Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276

- Effects of 2,4,5-T during the approach of woody plant dormancy. 10311

- Growing Christmas trees on a power line right-of-way. 10485

TABLES (DATA)

- Designation used, chemical name, source, and trademark name of each fungicide mentioned in this compilation. 10172

- Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395

TACHINIDAE

- Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040

TAENIA HYDATIGENA

- The effect of gastro-intestinal secretions on taeniid egg membranes. 10374

TAENIA PISIFORMIS

- The effect of gastro-intestinal secretions on taeniid egg membranes. 10374

TAENIA SAGINATA

- The effect of gastro-intestinal secretions on taeniid egg membranes. 10374

TAPINOMA SESSILE

- Odorous house ant feeds on photographic film. 10386

TAXONOMY

- Description, biology, and importance of a new species of *Allantonematidae* (*Nematoda*), parasite of the aphidiphagous *Coccinellidae*: *Parasitylenchus coccinellinae*, n. sp. 10039

- Heterobasidion annosum*. 10215

- Phellinus pomaceus*. 10217

- Inonotus hispidus*. 10218

- Notes on Parasitology: (A) Canine hookworm (*Ancylostoma caninum* (Ercolani 1859, Hall, 1913) and (B) Canina coccidiosis (*Eimeria canis*, Wenyon 1923). 10366

- Spirurata of animals and humans and the diseases. 10382

TAXUS

- Effects of several herbicides on yews and Japanese maples. 10280

TDE

- Comparison of ten methods for the analysis of milk for residues of chlorinated pesticides. 10470

TEMIK

- Rapid method for the extraction, cleanup, and GLC determination of toxic residues of temik. 10471

TEMPERATURE

- Effect of temperature on the development of mustard sawfly, *Athalia proxima* Klug. (*Hymenoptera*: *Tenthredinidae*). 9976

- The external morphogenesis of grasshopper embryos. 9987

- The influence of the rearing temperature on larval and pupal mortality and the duration of development of *Drosophila*. 9995

- Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999

- The influence of ecological and genetic factors on the birth and death of *Macrocheles robustulus* (Berlese, 1904). 10005

- Development of *Chrotogonus trachypterus* (Blanch.) (*Orthoptera*: *Pyrsgomorphidae*) in relation to different levels of temperature and humidity. 10026

- The influence of temperature on reproduction and development in four species of *Glossina* (*Diptera*: *Muscidae*). 10028

- Temperature effects on embryonic development in insects. 10035

- Laboratory studies of *Eucelatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040

- Experimental studies on diapause in stoneflies. III. Eggs of *Brachyptera risi* (Morton). 10051

- Pupal duration in *Glossina morsitans orientalis* under conditions of constant temperature. 10091

- Letal temperatures for puparia of *Glossina morsitans orientalis*. 10092

- Seasonal evolution of the honey bee thermogenesis. Oxygen consumption of the isolated bee at five different temperatures in summer and in winter. 10123
- Experiments on larval diapause in the carahid *Pterostichus vulgaris* L. 10129
- Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151
- Biochemical basis for plant competition. 10274
- The response of fumitory to various herbicides. 10293
- Absorption and penetration of picloram in potato tuber discs. 10308
- Seed dormancy and germination in ecotypes of johnsongrass. 10309
- Problems in raising ducks. 10357
- Observations on prolonged grain storage with forced aeration in Israel. 10389
- Analysis of grain storage problems in India. 10390
- Photocontrol of rough cinquefoil seed germination and its enhancement by temperature manipulation and KNO₃. 10451
- TENEBRIO MOLITOR**
Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. 9973
- A simple starch-gel electrophoretic method to investigate esterase inhibition by common organic insecticides. 10044
- Radiation sensitivity of twelve species of arthropods. 10069
- Isolation and biological properties of the juvenile hormone. 10106
- Spectral efficiency as function of latency in the visual mechanism of insect (*Tenebrio molitor* L.). 10142
- TENEBRIONIDAE**
Notes on the natural history of Tenebrionidae (Coleoptera) in Canterbury. 10140
- TENEBROIDES MAURITANICUS**
Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. 9973
- TENTHREDINIDAE**
Effect of temperature on the development of mustard sawfly, *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 9976
- Discovery of sinigrin as a phagostimulant by *Athalia proxima* Klug. (Hymenoptera: Tenthredinidae). 10433
- TEPA**
Mutagenic effects of TEPA and METEPA in mice. 10333
- TEPHROSIA VOGELII**
Thin layer densitometric determination of rotenone and degucln. 10461
- TERMITES**
A new family Turanoniscidae fam. n. (Isopoda, Oniscoidea) from termitaria of Middle Asia. 9874
- New species and records of Nasutitermitinae (Isoptera: Termitidae) from Africa. 9936
- The neutral lipids from various organs of the termite *Macrotermes goliath*. 9991
- Antennopsis gallica* Heim and Buchli (hyphomycetes: Glocochaustorales), an entomogenous fungus on subterranean termites in Florida. 10022
- Foraging galleries of the Formosan subterranean termite, *Coptotermes formosanus*, in Louisiana. 10052
- A new record, *Dorylus lhiatus* Shuck. (Hymenoptera: Formicidae) as a predator of *Microtermes mycophagus* Desn. (Isoptera: Termitidae). 10112
- On the effect of molds on various animal species. Part 2. 10343
- TESTES**
Lactic dehydrogenase isozymes in the grasshopper. 9961
- Damage to testes and recovery of fertility in boll weevils fed chemosterilants. 10100
- The difference in sensitivity to the sterilizing action of O,O-diethyl-O-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in vitro culture. 10430
- TETANUS**
Equine vaccines and vaccinations. 10344
- TETRACYCLINE**
Tetracycline antibiotic compositions for oral use. Patent 3,454,697. 10337
- TETRALONIA MINUTA**
Biological notes on the bee *Tetralonia minuta* and its cleptoparasite, *Morgania histrio transvaalensis* (Hymenoptera: Anthophoridae). 10109
- TETRANYCHIDAE**
Three new records of Bryobiinae from India (Acarina: Tetranychidae). 9921
- TETRANYCHUS URTICAE**
Histological, behavioral, and symptomatic effects of Pentac on *Tetranychus urticae*. 10018
- Eyes of the female two-spotted spider mite, *Tetranychus urticae*. i. Morphology. 10067
- Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128
- European red mite and two-spotted spider mite control on apples in California. 10236
- Organophosphorus acaricides for controlling the two-spotted spider mite on strawberries. 10248
- TETRASTICHUS**
A comparative biological study of three ceroplastes species (Hem. Coccidae) and their natural enemies. 9990
- TETRASTICHUS INCERTUS**
Distribution and establishment of *Tetrastichus incertus* in the eastern United States. 9937
- TETTIGONIDAE**
The Ephippigerinae (Orthoptera, Tettigoniidae) occasional hut important predators of *Thaumetopoea pityocampa* Schiff. 9996
- THAUMETOPEINID CATERPILLAR**
The Ephippigerinae (Orthoptera, Tettigoniidae) occasional but important predators of *Thaumetopoea pityocampa* Schiff. 9996
- THIAMINE**
Nutrition of the silver-leaf pathogen *Stereum purpureum* (Pers.) Fri. 10175
- THIAZOLE**
Chemical control of wheat and barley loose smut. 10194
- THIAZOLYL-BENZIMIDIZOLE, 2-(4-**
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium wilt* with Thiabendazole and Benlate. 10181
- The course of naturally acquired helminth infections of horses given regular anthelmintic treatment. 10380
- THIELAVIOPSIS BASICOLA**
Survival of root-infecting fungi in soil. XII. Germination and survival of endoconidia and chlamydospores of *Thielaviopsis basicola* in fallow soil and in soil adjacent to germinating bean seed. 10213
- THIOCARBAMATES**
Effectiveness of fungicides in controlling barley loose smut. 10196
- THIRAM**
Seed-mycoflora of musk-melon. 10193
- Effectiveness of fungicides in controlling barley loose smut. 10196
- Chemical control of loose smut in barley. 10214
- THURICIDE**
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
- THYSANOPTERA**
On two new species of Terebrantian Thysanoptera with remarks on a new genus *Pellothrips*. 9958
- TIME**
Relationship between amount of thinning, time of care, and damages caused by red deer. 10323
- TIPULIDAE**
New species of crane flies from tropical America. V. (Diptera: Tipulidae). 9865
- New or little-known species of exotic Tipulidae (Diptera). XVI. 9866
- Studies on the ecology of larval Tipulinae (Diptera, Tipulidae). 10011
- TISSUE CULTURE**
The utilization of C¹⁴-labelled adenosine diphosphate during the in vitro respiration of housefly sarcosomes. 9984
- Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997
- Vitellogenic blood protein synthesis by insect fat body. 10083
- Immunogenicity of concentrated and purified rabies vaccine of tissue culture origin. 10360
- The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426
- The difference in sensitivity to the sterilizing action of O,O-diethyl-O-paranitrophenyl thiophosphate of the embryonic testicles of quails and chickens in vitro culture. 10430
- Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera crown-gall* tissue. 10439

SUBJECT INDEX

TISSUE EXTRACTS

TISSUE EXTRACTS

Lactic dehydrogenase isozymes in the grasshopper. 9961

The in vitro metabolism of organophosphorus insecticides by tissue homogenates from mammal and insect. 10426

TOBACCO

Interaction between chilli mosaic and powdery mildew in tobacco. 10176

Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186

Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204

Translocation of tobacco ringspot virus in cucumber and zinnia. 10206

Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210

A necrotic type virus occurring on a weed in Germany. 10227

Verticillium wilt of tobacco. VIII. Movement of conidia of Verticillium dahliae Kleb. in tobacco plants. 10230

Verticillium wilt of tobacco. VII. Pathogenicity of isolates of Verticillium dahliae Kleb. on New Zealand tobacco. 10231

Distribution of larval and pupal instars of *Plusia argentifera* Guen. on tobacco plants. 10240

GLC determination of residues of disulfoton, oxydemetonmethyl, and their metabolites in tobacco plants. 10404

Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera* crown-gall tissue. 10439

TOBACCO MOSAIC VIRUS

Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204

Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210

On the inhibitory effect of yeast ribonucleic acid on the infection of *Nicotiana glutinosa* by tobacco mosaic virus. 10443

TOLERANCES

Notice of filing of petition for food additives. 10417

TOMATOES

A new tomato virus found in the Estonian SSR (*Aspermy-virus*). 10187

Phytotoxicity of bemethylated analogs of diphenamid. 10290

Effect of nitrogenous materials on the uptake of triazine herbicides. 10298

Treated water curbs tomato decay. 10384

TOXICITY

Rubber-vine (*Cryptostegia grandiflora*) toxicity for ruminants. 10346

Specificity and mechanism in the action of saligenin cyclic phosphorus esters. 10242

Insecticides, how to use them safely and effectively. 10466

TOXICOLOGY

Action of honey bee venom on development of epithelial cellular cultures of monkey's kidneys. 9997

Physico-organic chemical approach to the mode of action of organophosphorus insecticides. 10014

The toxicity to *Tribolium castaneum* (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031

The artificial feeding of phosphamidon to *Myzus persicae*: ii. The effects of phosphamidon on liquid uptake through a parafilm membrane. 10086

Variability in insecticide tolerance of eighteen honey-bee colonies. 10125

Toxicity of selected acaricides to susceptible and resistant strains of *Tetranychus urticae* Koch. 10128

Toxicity of eight insecticides to the coccinellid predator *Chilomenes sexmaculata* Fabr.. 10262

Metabolism of trifluralin in peanuts and sweet potatoes. 10273

Metabolism of organic pesticide chemicals in higher plants. 10278

Basis for selectivity of linuron on carrot and common ragweed. 10295

Mechanisms of action of herbicides. 10299

Absorption and penetration of picloram in potato tuber discs. 10308

Research on the effect of the entomophagous fungi *Beauveria bassiana* (bals.) Vuill. and *Metarrhizium anisopliae* (Metsch.) Sorok. on warm-blooded animals. 10353

Influence of pesticides on soil microbes and soil properties. 10400

Biodegradation of pesticides. 10422

Endrin induced alterations in bound carbohydrates in rat serum. 10423

Degradation and disappearance of ortho, para isomer of technical DDT in living and dead avian tissues. 10425

Delayed lethal effect of 2,4-dichlorophenoxyacetic acid on bacteria. 10429

Effect of dichloro diphenyl trichloro-ethane (DDT) on leghemoglobin content of root nodules of *Phaseolus aureus* (green gram). 10438

Physico-chemical and biophysical factors affecting the activity of pesticides. 10462

The insecticides; chemistry, mode of action, and toxicity. 10474

TOXINS

Toxic metabolite of *Aspergillus niger* and its role in onion rot disease. 10208

Researches on *Galega* species regarding their content of toxins by means of biological methods. I. Toxicity of goats-rue (*Galega officinalis* L.) for warmblooded animals. 10428

TOXOPLASMA GONDII

Toxoplasma gondii: Isolation of samples starting from the diaphragms of clinically healthy pigs slaughtered in Sao Paulo, Brazil. 10327

TRADEMARKS

Designation used, chemical name, source, and trademark name of each fungicide mentioned in this compilation. 10172

TRANSLOCATION

Light intensity and the absorption and translocation of 2,4,5-T by woody plants. 10276

Absorption and translocation of pyrazon by plants. 10287

Translocation of assimilates and dalapon in established johnsongrass. 10292

Effect of soil water stress and soil temperature on translocation of diuron. 10302

TREE INJURIES

Relationship between amount of thinning, time of care, and damages caused by red deer. 10323

TREES

Foraging galleries of the Formosan subterranean termite, *Coptotermes formosanus*, in Louisiana. 10052

Phellinus igniarius. 10216

Inonotus hispidus. 10218

A method for spraying individual trees. 10282

TRIAZINES

Metabolism of organic pesticide chemicals in higher plants. 10278

Effect of nitrogenous materials on the uptake of triazine herbicides. 10298

Cell physiology investigations of the action of new triazine derivatives on petiole epidermis of *Solanum tuberosum* L. 10431

TRIBOLIUM CASTANEUM

The toxicity to *Tribolium castaneum* (Herbst) (Coleoptera, Tenebrionidae) of mixtures of pyrethrins and piperonyl butoxide: Fitting a mathematical model. 10031

Age-distribution and abundance in populations of flour beetles. I. Experimental studies. 10071

Experimental evidence for factors affecting the relative efficiency of indirect to direct selection in *Tribolium castaneum*. 10161

TRIBOLIUM CONFUSUM

Sensitivity to gamma radiation of *Tribolium confusum* eggs at various developmental stages. 10136

TRICHLORFON

Studies on the susceptibility of different stages of *Bagrada cruciferarum* Kirkaldy to some organic insecticides. 10043

Variability in insecticide tolerance of eighteen honey-bee colonies. 10125

Biology and control of leopard moth on pear trees in the United Arab Republic. 10242

TRICHLOROACETIC ACID

African feather grass--a weed worth watching. 10279

Weed control in sugarbeets. 10296

Control of johnsongrass on drainage ditchbanks in sugarcane. 10297

SUBJECT INDEX

VIRULENCE

- TRICHLOROBENZOIC ACID, 2,3,6-**
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
- TRICHOGRAMMATIDAE**
Observations on the biology of *Lathromeroides* sp. (Trichogrammatidae: Hymenoptera) egg parasite of the leaf rolling weevil, *Apoderus sissu* Marshall (Curculionidae: Coleoptera) with notes on the host weevil. 10117
- TRICHOPLUSIA NI**
Leaching of the nuclear-polyhedrosis virus of *Trichoplusia ni* from soil. 10041
The histopathology of a nuclear polyhedrosis in larvae of the cabbage looper, *Trichoplusia ni*, related to symptoms and mortality. 10134
Spray droplet size in the control of spruce budworm, boll weevil, bollworm and cabbage looper. 10247
- TRICHOPTERA**
Caddis larvae. 9904
- TRIFLURALIN**
Metabolism of trifluralin in peanuts and sweet potatoes. 10273
Effects of several herbicides on yews and Japanese maples. 10280
Effects of high rates of trifluralin and vernolate on soybean yield and growth. 10317
An evaluation of herbicide incorporation equipment. 10483
An evaluation of herbicide incorporation equipment. 10484
- TRIMEDLURE**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
- TRISTEZA**
The presence of tristeza virus in certain species of citrus in Cyprus. 10212
Evidence for restriction of a plant virus to phloem cells. 10219
Efficiency of three colonies of melon aphids as transmitters of Tristeza virus. 10258
- TROGODERMA INCLUSUM**
Sex attractant of female dermestid beetle *Trogoderma inclusum* Le Conte. 10105
- TROPICAL AGRICULTURE**
Pesticide effect on phosphorus absorption from fertilizer-pesticide mixture applied to a tropical soil with low available phosphorus value. 10445
- TROPICAL PLANTS**
Response of tropical vegetation to herbicides. 10275
- TROUT**
Problems with DDT in fish culture operations. 10406
Uptake of dieldrin by isolated perfused gills of rainbow trout. 10408
- TUBERCULOSIS**
Medical and veterinary chemicals. Vol. I, parts I and II. 10355
- TUNGRO**
Common leafhopper-plantopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
- TURKEYS**
The fine structure and method of feeding of the tissue parasitizing stages of *Histomonas meleagridis*. 10378
Transmission of histomoniasis with male *Heterakis gallinarum* (Nematoda). 10383
- ULCERS**
Foot lameness in pigs. 10332
Survey of yeastlike fungi and tissue changes in esophagogastric region of stomachs of swine. 10339
- ULTRA-LOW-VOLUME SPRAYING**
Growers join forces to hattle the boll weevil. 10233
- UREA**
Effect of nitrogenous materials on the uptake of triazine herbicides. 10298
- UREA COMPOUNDS**
Variations of the culture of *Fusarium moniliforme* induced by N-nitrosoethylurea and ethyl methanesulfonate. 10435
Chemistry of herbicides. 10464
- URIC ACID**
Quantitative determination of uric acid in insect feces by lithium carbonate extraction and the enzymatic-spectrophotometric method. 9973
- USTILAGO AVENAE**
Results obtained with a systemic oxathiin fungicide in France. 10220
- USTILAGO NUDA**
Control of barley loose smut in Wisconsin in 1966 and 1967. 10171
Chemical control of loose smut in barley in Minnesota. 10174
Effect of chemical treatments on the control of. 10191
Efficacy of oxathiin fungicides for control of loose smut in barley. 10199
Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
Results obtained with a systemic oxathiin fungicide in France. 10220
The systemic fungicide 2,3-dihydro-5-carboxanilido-6-methyl,4-oxathiin. 10222
- USTILAGO TRITICI**
Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
The systemic fungicide 2,3-dihydro-5-carboxanilido-6-methyl,4-oxathiin. 10222
- VACCINES**
Equine vaccines and vaccinations. 10344
- VANESSA CARDUI**
Susceptibility of several forest insects of British Columbia to commercially produced *Bacillus thuringiensis*. II. Laboratory and field pathogenicity tests. 10257
- VAPORS**
Effects of chlorpropham vapors on dodder seedlings. 10305
- VECTORS**
Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349
- VEGETABLES**
Mediterranean fruit flies and melon flies trapped at various heights with synthetic lures. 10032
Acetonitrile extraction and determination of carbaryl in fruits and vegetables. 10475
- VENTILATION**
KCl-induced spreading depression and ventilation in the cockroach. 10108
- VERNOLATE**
Extraction and gas-liquid chromatographic determination of vernolate in soil. 10412
Release rates and herbicidal activity of slow release granular formulations. (abstract). 10459
Extraction and gas-liquid chromatographic determination of vernolate in soil. 10467
- VERNONIA**
Response of ironweed and buckbrush to herbicides and to herbicides in combinations with mowing, nitrogen fertilizer, and surfactants. 10303
- VERTICILLIUM**
Methods of determination of the systemic and fungitoxic properties of chemicals applied to plants with emphasis on control of *Verticillium* wilt with Thiabendazole and Benlate. 10181
- VERTICILLIUM DAHLIAE**
Verticillium wilt of tobacco. VI. The influence of roots and stems on *Verticillium* wilt symptoms in tobacco. 10186
Verticillium wilt of tobacco. VIII. Movement of conidia of *Verticillium dahliae* Kleb. in tobacco plants. 10230
Verticillium wilt of tobacco. VII. Pathogenicity of isolates of *Verticillium dahliae* Kleb. on New Zealand tobacco. 10231
- VESPIDAE**
Vespidae from Bulgaria (Hymenoptera, Diptera). 9873
- VETERINARY MEDICINE**
Medical and veterinary chemicals. Vol. I, parts I and II. 10355
- VIBRATION**
Interaction between chronic irradiation, vibration, and centrifugation in the production of genetic effects in *Drosophila*. 10148
Position effect on DNA transcription and replication. 10160
- VIBRIO FETUS**
The relative incidence of *Vibrio fetus* infection in dairy and beef cattle in New South Wales. 10336
- VIBRIOSIS**
An outbreak of vibriosis in sheep in New South Wales. 10351
- VIROLOGY**
Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204
Vaccinated cattle.....can harbor foot and mouth disease. 10331
- VIRUCIDES**
Tablet dosage-form for the immunization of the intestinal tract with live virus preparations. Patent 3,458,621. 10359
- VIRULENCE**
Rabies diagnosis. Observations on strains of virus with low pathogenicity. 10349

SUBJECT INDEX

VIRUS DISEASES (ANIMALS)

VIRUS DISEASES (ANIMALS)

- Incidence of bluetongue reported calendar year 1967. 10325
- Vaccinated cattle.....can harbor foot and mouth disease. 10331
- The comparative pathology of duck plague in wild Anseriformes. 10342

VIRUS DISEASES (PLANTS)

- Corn stunt vector leafhopper attractancy to and oviposition preference for hybrid dent corn. II. *Graminella nigrifrons*. 9992
- Interaction between chilli mosaic and powdery mildew in tobacco. 10176
- Studies on the infection of cucumber mosaic virus. V. the observation of epidermal cell in the local lesion. 10180
- Ir-2, a germ plasm bank of virus-free fruit tree clones. 10184
- A new tomato virus found in the Estonian SSR (*Aspermy-virus*). 10187
- The epiphytotic of yellow orange leaf disease of rice in 1966 in Thailand. 10197
- Effect of cytokinins on tobacco mosaic virus production in local-lesion and systemic hosts. 10204
- Translocation of tobacco ringspot virus in cucumber and zinnia. 10206
- Studies on the biosynthesis of TMV. I. A system approaching a synchronized virus synthesis in a tobacco leaf. 10210
- The presence of tristeza virus in certain species of citrus in Cyprus. 10212
- Evidence for restriction of a plant virus to phloem cells. 10219
- Local lesion host for grassy shoot virus of sugarcane. 10224
- A necrotic type virus occurring on a weed in Germany. 10227
- Response to parasites. 10232
- Common leafhopper-plantopper populations and incidence of tungro virus in diazinon-treated and untreated rice plots. 10234
- Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostelus fascifrons* and the relative concentration of the causal agent in the vectors. 10238
- Efficiency of three colonies of melon aphids as transmitters of Tristeza virus. 10258

VIRUSES

- Lethargy, a new virus of *Melolontha melolontha* L. larvae (Coleoptera, Scarabacidae). 10036
- Changes in chromosomes induced by different DNA virus in cells of *Rhynchosciara angelae*. 10158
- Freeing alfalfa clones from alfalfa mosaic virus by heat treatment. 10185
- Medical and veterinary chemicals. Vol. I, parts I and II. 10355
- Tablet dosage-form for the immunization of the intestinal tract with live virus preparations. Patent 3,458,621. 10359

VISION

- Spectral efficiency as function of latency in the visual mechanism of insect (*Tenebrio molitor* L.). 10142

VITAMIN A

- Vitamin A metabolism in protein deficiency. 10324

VITAMINS

- Sterol and water-soluble requirements for larvae of the red-banded leaf roller, *Argyrotaenia velutinana*. 10104

VOLATILE SUBSTANCES

- Dioxane and dioxaspiro derivatives as attractants for male yellow-fever mosquitoes. 10023
- Volatile metabolites from dimethyldithiocarbamate fungicide residues. 10441

WAREHOUSES

- Biological studies in Ghana in the control of *Cadra cautella* (Wlk.), the tropical warehouse moth. 10391

WASTE DISPOSAL

- Movement of pesticides in the soil. 10398

WATER

- Biochemical study of *Plodia interpunctella* (Hbn.) (Lepidoptera) I--Variations of body weight, water content, and dry matter content. 9993
- Effect of temperature on water absorption, development, and hatching in eggs of the prairie grain wireworm, *Ctenicera destructor*. 9999
- Water vapor sorption and humidity relationships in *Liposcelis* (Insecta: Psocoptera). 10053
- Water uptake and embryonic development in eggs of *Chorthippus brunneus* Thunberg (Saltatoria: Acrididae). 10079
- Yellow foxtail competition in grain sorghum. 10284
- Tall waterhemp competition in grain sorghum. 10285
- Potentials for removing pesticides from water. 10396
- Movement of pesticides in the soil. 10398
- Consequences of insecticide use of nontarget organisms. 10402
- Competition between flax and wild huckwheat. 10440
- Gas chromatographic characteristics of chlordane. I. Effect of an aqueous environment on the heptaehlor component. 10458
- Distribution ratio of some chlorinated hydrocarbon insecticides between hexane and water. 10479

WATER ANALYSIS

- Water florae as indicators of irrigation water contamination by DDT. 10403

WATER POLLUTION

- Surface hydrology and pesticides. 10392
- Research on pollution of crops, soil and shallow bodies of water in Liguria, through residues of some organochlorinated pesticides. 10395
- Potentials for removing pesticides from water. 10396
- Water florae as indicators of irrigation water contamination by DDT. 10403

WATER TREATMENT

- Treated water curbs tomato decay. 10384

- Potentials for removing pesticides from water. 10396

WEED CONTROL

- A method for spraying individual trees. 10282
- Downy brome control by soil-active herbicides for revegetation of rangelands. 10283
- Repeated, foliar applications of herbicides on johnsongrass. 10291
- The response of fumitory to various herbicides. 10293
- Selective grass control with siduron. 10294
- Control of johnsongrass on drainage ditchbanks in sugarcane. 10297
- Reaction of flax to dicamba applied at several stages. 10301
- Effects of chlorpropham vapors on dodder seedlings. 10305
- Effects of growth regulators and herbicides on germination of *Hydrilla turions*. 10306
- Control of green rabbitbrush and big sagebrush with 2,4-D and picloram. 10310
- An evaluation of herbicide incorporation equipment. 10484

WEEDS

- In your garden - weeds: Robbers, but not always bad. 10168
- A necrotic type virus occurring on a weed in Germany. 10227
- Biochemical basis for plant competition. 10274
- Influence of weed competition on sorghum growth. 10277
- African feather grass--a weed worth watching. 10279
- Yellow foxtail competition in grain sorghum. 10284
- Tall waterhemp competition in grain sorghum. 10285
- Effects of growth regulators and herbicides on germination of *Hydrilla turions*. 10306
- Seed dormancy and germination in ecotypes of johnsongrass. 10309
- Rubber-vine (*Cryptostegia grandiflora*) toxicity for ruminants. 10346
- Competition between flax and wild buckwheat. 10440
- A survey of the chemical composition of Potamdetton and *Myriophyllum* in New Jersey. 10448

WHEAT

- Further records of the distribution of *Petrobia latens* (Muller) (Acarina: Tetranychidae), a pest of wheat in India together with the description of a new species of predatory mites on the same. 9920
- A systemic oxathiin fungicide to control loose smuts, covering smuts, seed rots, and seedling blights of wheat, barley, oats, and sorghum. 10189
- Control of loose smut of wheat and barley in Arkansas with fungicides. 10192
- Chemical control of wheat and barley loose smut. 10194

- Effect of two systemic fungicides on control of loose smut in wheat. 10195
- Preliminary observations on the treatment of wheat and barley with a fungicide to control loose smut in England. 10200
- Breeding for rust resistance. Advances in genetics give hope for total immunity. 10211
- The systemic fungicide 2,3-dihydro-5-carbox-anilido-6-methyl,4-oxathiin. 10222
- Preliminary note on the occurrence of black point disease of wheat in India. 10228
- Seed treatment trial, 1967. 10229
- The biology, mode of attack and damage caused by the thrips, (*Haplothrips tritici* Kurd) to wheat crops. 10235
- A comparison of malathion, diazinon, fenitrothion and dichlorvos for control of *Sitophilus oryzae* (L.) and *Rhizopertha dominica* (F.) in wheat. 10237
- Atherigona* sp. (Anthomyiidae: Diptera) as a pest of wheat in Rajasthan. 10250
- Studies on insect damage and germination of seeds. III. Germination of wheat jowar and maize seeds damaged by the developing grubs of *Sitophilus oryzae* L. and *Rhizopertha dominica* F.. 10270
- Effect of soil water stress and soil temperature on translocation of diuron. 10302
- Observations on prolonged grain storage with forced aeration in Israel. 10389
- WILDLIFE**
Consequences of insecticide use of nontarget organisms. 10402
- WILDLIFE DISEASES**
The comparative pathology of duck plague in wild Anseriformes. 10342
- WILT**
Verticillium wilt of tobacco. VI. The influence of roots and stems on Verticillium wilt symptoms in tobacco. 10186
- Verticillium wilt of tobacco. VIII. Movement of conidia of Verticillium dahliae Kleb. in tobacco plants. 10230
- Verticillium wilt of tobacco. VII. Pathogenicity of isolates of Verticillium dahliae Kleb. on New Zealand tobacco. 10231
- WIND**
Locust wind receptors. I. Transducer mechanics and sensory response. 9981
- Locust wind receptors. ii. Interneurons in the cervical connective. 9983
- WIND DISPERSAL**
Ochromolopis icetella Hb. (Lepidoptera, Epermeniidae) in Finland, probably transported by windstorm. 9912
- X-RAYS**
Comparison of effects of irradiation on the primary spermatogonia and mature sperm of three species of Diptera. 10102
- Meiosis in the grasshopper: Chiasma frequency after elevated temperature and X-rays. 10151
- XANTHOMONAS ORYZAE**
Fungicidal control of rice diseases. 10170
- XIPHINEMA AMERICANUM**
Translocation of tobacco ringspot virus in cucumber and zinnia. 10206
- XYLEBORUS FERRUGINEUS**
Nutrition of *Xyleborus ferrugineus*. I. Ethanol in diets as a tunneling (feeding) stimulant. 10082
- YEASTS**
Cytokinins and transfer ribonucleic acids. II. Presence of cytokinins in different amino-acid specific transfer ribonucleic acids of brewer's yeast as revealed by the growth response of tobacco-pith callus tissue and *Scorzonera* crown-gall tissue. 10439
- On the inhibitory effect of yeast ribonucleic acid on the infection of *Nicotiana glutinosa* by tobacco mosaic virus. 10443
- YELLOWWS**
Comparative efficiency of transmission of aster yellows by *Elymana virescens* and *Macrostoteles fascifrons* and the relative concentration of the causal agent in the vectors. 10238
- ZEUZERA PYRINA**
Biology and control of leopard moth on pear trees in the United Arab Republic. 10242
- ZINC**
Effect of CL-50, a new synthetic fungicide on certain fungi. 10173
- ZINC DITHIOCARBAZATE**
Fungicidal composition containing zinc dithiocarbazate. Patent 3,458,638. 10190
- ZOOGEOGRAPHY**
New species of crane flies from tropical America. V. (Diptera: Tipulidae). 9865
- A new sub-genus and species of the Eumeninae (Hymenoptera, Diptera) from the Bulgarian fauna. 9868
- New species of *Chrysobothris* from the Pacific Northwest (Coleoptera: Buprestidae). 9870
- The larvae of Odonata in the vascular territory of stagnant waters in Bulgaria. 9872
- The identification and distribution of *Quadraspidiotus* species (Homoptera: Diaspididae) on pome and stone fruits in Australia. 9876
- Revision of the Nearctic moth genus *Abagrotis* Smith with descriptions of new species (Lepidoptera: Noctuidae). Part VI The *duanea* and *placida* groups; checklist of the presently known species within the genus. 9879
- Study of the world Gyponinae (Homoptera: Cicadellidae). A synopsis of the genus *Clinonaria*. 9883
- Two new Palearctic *Lithocolletis* species. (Preliminary description). 9884
- Description of *Dendrocercus* (*tmacrostigma*) *noumcae* sp. nov. from New Caledonia (Ceraphronoidea, Megaspilidae). 9885
- Contribution to the knowledge of the Staphylinidae. CI. Diverse remarks on some *Quedius* from the eastern Mediterranean. 9890
- Oriental species of *Coesula* Cameron (Hymenoptera: Ichneumonidae). 9897
- The subgenus *Persicargas* (Ixodoidea, Argasidae, Argas). 7. A. (P.) *walkerae*, new species, a parasite of domestic fowl in southern Africa. 9908
- A revision of the pseudomorphaeridini (Orthoptera: Acridoidea: Pyrgomorphidae). 9909
- A new species of *Ficalbia* (Ravenalites) from Cambodia (Diptera: Culicidae). 9910
- Amphipyra pyramidea* L. and *A. berbera* Rungs in Finland (Lepidoptera, Noctuidae). 9913
- New Mymaridae from Central Africa. (Hymenoptera: Chalcidoidea). 9916
- The genus *Heteroconis* Enderlein, 1905 (Neuroptera, Coniopterygidae). 9919
- Further records of the distribution of *Petrobia latens* (Muller) (Acarina: Tetranychidae), a pest of wheat in India together with the description of a new species of predatory mites on the same. 9920
- New species and records of *Nasutitermitinae* (Isoptera: Termitidae) from Africa. 9936
- Distribution and establishment of *Tetrastichus incertus* in the eastern United States. 9937
- Mordellistena pumila* group in Finland (Coleoptera, Mordellidae). 9941
- New Bulgarian fauna of phytophagous wasps (Symphyta, Hymenoptera). 9946
- Some new records of butterflies from Nepal. 9948
- Adelphocoris minor* nov. spec. (Heteroptera, Miridae). 9949
- Additions to the genus *Alloconotus* Fisher, 1878 (Heteroptera, Miridae). 9950
- New *Orthotylus* and *Pachylops* species (Heteroptera, Miridae). 9951
- On two new species of Terebrantian Thysanoptera with remarks on a new genus *Pellothrips*. 9958
- Ixodes pacificus* Cooley and Kohls, 1943: Its life-history and occurrence. 9962
- Laboratory studies of *Eucclatoria armigera*, a tachinid parasite of *Heliothis* spp. 10040
- Insect parasites of the green peach aphid, *Myzus persicae* Sulz. and their control potential. 10059
- Eretmocerus corni* Hald. (Hym., Aphelinidae), a parasite of *Siphoninus phillyrae* Halid. (Hom., Aleyrodidae). 10070
- New records of parasites of *Plutella maculipennis* Curt. in Gujarat, India. 10088
- A supplementary list of the host-plants of lac insects. 10135
- Etology as the determining factor of the numerical distribution of the species in the fauna. 10144
- A new species of *Aedes* (*Stegomyia*) from Thailand (Diptera: Culicidae). 10164
- Elements for the differentiated application of quarantine and control measures of potato canker. 10221
- A review of the use of insecticides on the main agricultural crops of the world--3. Section 3: Cotton. 10245

SUBJECT INDEX

ZOOGEOGRAPHY

Atherigona sp. (Anthomyiidae: Diptera) as a pest of wheat in Rajasthan.

10250

Needle miner infestations in lodgepole pine east of the Sierra crest.

10267

Gulella (Indoennea) bicolor (Hutton), a predator of giant African snail Achatina fulica Bowdich.

10322

Contribution to the research on the helminth fauna of wild birds in Thrace (southern Bulgaria) Acathocephala.

10371

Wharf borer.

10385

BIOGRAPHICAL INDEX

- Abeygunawardena, D V W**
Ceylon. central Agricultural Research Institute,
10170
- Ahrens, R W**
Wisconsin Univ., Madison; Dept. of Plant Pathology
10171
- Alexander, C P**
Massachusetts. university
9865
- Alexander, C P**
Massachusetts. university
9866
- Alexander, M**
Cornell University, Ithaca, N. Y.; New York State
College of Agriculture; Dept. of Agronomy
10422
- Amhral, V do**
Sao Paulo. instituto Biologico; Seceao de
Parasitologia Animal
10327
- Ananthakrishnan, T N**
Loyola College, Madras, India; Dept. of Zoology
9867
- Ananthakrishnan, T N**
Loyola College, Madras, India; Dept. of Zoology
9958
- Anderson, R J**
Agricultural Research Service, Washington, D. C.
10328
- Arnott, H J**
Texas. university; Cell Research Institute, Austin
9960
- Aronson, J N**
New York State Univ., Albany; Depts. of Chemistry
and Biological Sciences
9961
- Arthur, D R**
London. university King's College; Dept. of Zoology
and Animal Biology
9962
- Ashrafi, S H**
Pakistan Council of Scientific and Industrial
Research; Karachi; Central Lah.
10173
- Atchley, W R**
Kansas. university; Dept. of Entomology
9963
- Atienza Fernandez, M**
Spain. consejo Superior de Investigaciones Cientificas; Instituto 'Lopez-Neyra' de Parasitologia;
Seccion de Immunologia
10367
- Avidov, Z**
Hebrew University; Faculty of Agriculture,
Rehovot
9964
- Ayala, F J**
Rockefeller University, New York (city)
10146
- Azam, K M**
Hyderahad, 17-8-593, Chanchalguda, India
9965
- Bae, S H**
Office of Rural Development (Suwon); Dept. of
Entomology
10234
- Balfour-Browne, J**
British Muscum (Natural History)
9869
- Ball, B D**
Dept. of Agriculture, Michigan
10167
- Baloch, G M**
Commonwealth Institute of Biological Control;
Pakistan Station
10272
- Banerjee, B**
India. tocklai Experimental Station, Cinnamara
9966
- Banita, E**
Statiunea experimentală agricola Simnic, Craiova,
Romania
10235
- Bantari, E E**
Minnesota Univ., St. Paul; Dept. of Plant Pathology
10174
- Barr, W F**
Idaho. University; Dept. of Entomology
9870
- Barthel, W F**
U. S. Dept. of Agriculture, Gulfport, Miss.;
Agricultural Research Service; Plant Pest Control
Division
10392
- Bazzi, B**
Montecatini Edison S.p.A, Milan, Italy; Istituto
Ricerche Agrarie
10457
- Beames, C G**
North Dakota State Univ., Fargo; Dept. of Zoology
10368
- Beever, D J**
New Zealand. dept. of Scientific and Industrial;
Research; Plant Diseases Division, Auckland
10175
- Benassy, C**
France. station de Recherches de lutte biologique
et; de Zoologie agricole, Antibes
9967
- Bentley, D R**
California Univ., Berkeley; Dept. of Zoology
9968
- Berkaloff, A**
Faculte des Sciences, Orsay. France; Lab. de
Biologie cellulaire III
9969
- Betbeder-Natibet, M**
Madagascar. institut de Recherches Agronomiques
de la; Republique Malagache, Tananarive; Division
d'Entomologie
9970
- Bevenue, A**
Hawaii. university; Dept. of Agricultural
Biochemistry
10458
- Bhatia, K R**
India. field Station for Investigations on Locusts.;
Bikaner
9971
- Bhatia, S S**
Poona. university; Dept. of Zoology
9972
- Bhattacharya, A K**
Illinois. university; Dept. of Entomology
9973
- Bishop, J B**
Louisiana State Univ., Baton Rouge; Dept. of
Zoology
10147
- Bisht, D S**
Indian Agricultural Research Institute; Division of
Entomology, Delhi
9974
- Biswas, P K**
Carver Research Foundation, Ala.
10273
- Black, C C**
Georgia. university; Dept. of Biochemistry
10274
- Block, W**
Cambridge. university; School of Agriculture, En-
gland
9975
- Bode, L E**
Missouri. University, Columbia; Dept. of Agricul-
tural Engineering.; Weed Control Machinery Pro-
ject
10484
- Bogawat, J K**
Udiapur University. agricultural Experiment Sta-
tion; Dept. of Entomology
9976
- Bogawat, J K**
Udaipur University. agricultural Experiment Sta-
tion; Dept. of Entomology
10433
- Borutzky, E V**
Moscow. state University; Zoological Museum
9874
- Boursin, C**
11 Rue des Ecoles, Paris (5e), France
9875
- Boursin, C**
11 Rue des Ecoles, Paris (5e), France
9977
- Bovey, R W**
U. S. dept. of Agriculture. agricultural Research
Service; Crops Research Division, Mayaguez
10275
- Bowman, M C**
U. S. Agricultural Research Service, Tifton; En-
tomology Research Division
10404
- Brady, H A**
U. S. dept. of Agriculture. southern Forest Experi-
ment; Station; Alexandria Timber Management
Research Project, La.
10276
- Brewerton, H V**
New Zealand. dept. of Scientific and Industrial;
Research; Chemistry Division, Wellington
10405
- Brookes, H M**
Australia. waite Agricultural Research Institute,
Glen; Glen Osmond
9876
- Brown, F M**
Fountain Valley School, Colorado Springs
9877
- Brown, L R**
California. university; Dept. of Entomology
10386
- Browning, L S**
St. Thomas Univ. houston, Tex.
10148
- Buck, F D**
Colchester, New Road, England
9878
- Buck, F D**
Colchester, New Road, England
9979
- Buckett, J S**
California. dept. of Agriculture; Bureau of En-
tomology, Sacramento
9879
- Bueding, E**
Johns Hopkins Univ., Baltimore, Md.; Dept. of
Pathobiology
10369
- Burnside, O C**
Nebraska. university; Dept. of Agronomy
10277
- Butterworth, P E**
Massachusetts. University; Dept. of Zoology
10370
- Cadahia, D**
Antibes. institut National de la Recherche
Agronomique; Station de Recherches de Lutte
biologique
9980
- Calderara, P**
Barnet, 26 Manor Road, England
9880
- Calvo, J M**
Cornell University; Dept. of Biochemistry and
Molecular Biology, Ithaca, N. Y.
10329
- Camhi, J M**
Cornell University; Division of Biological Sciences;
Section of Neurobiology and Behavior
9981
- Camhi, J M**
Cornell University; Division of Biological Sciences;
Section of Neurobiology and Behavior
9982
- Camhi, J M**
Cornell University; Division of Biological Sciences;
Section of Neurobiology and Behavior
9983
- Carney, G C**
Bowling Green University; Dept. of Biology, Ohio
9984
- Carter, C I**
Alton, 6 The Ridgeway, England
9881
- Casida, J E**
California. university; Division of Entomology,
Berkeley
10278
- Castro, J G**
Instituto Lopez-Neyra de Parasitologia, Argentina;
Seccion de Immunoparasitologia
10372
- Cavalcaselle, B**
Italy. centro di Sperimentazione Agricola e
Forestale; Rome
9985

BIOGRAPHICAL INDEX

Chadha, K C

Chadha, K C
Indian Agricultural Research Institute; Division of Mycology and Plant Pathology, New Delhi 10176

Chambers, V H
Hertfordshire, 12 Douglas Road, London 9986

Champ, B R
Australia. dept. of Primary Industries; Entomology Laboratory, Indooroopilly 10237

Chand, J N
Punjab. agricultural University; Dept. of Botany and Plant Pathology 10177

Chapman, R F
Birkbeck College; Dept. of Zoology, London 9987

Chatterji, S M
Indian Agricultural Research Institute; Division of Entomology, New Delhi 9988

Choudhuri, D K
Burduan. university; Dept. of Zoology 9989

Chubareva, I A
Academy of Sciences of the USSR, Leningrad; Lab. for Karyosystematics and Population Genetics 10150

Church, K
Oregon. university; Dept. of Biology, Eugene 10151

Cmelik, S H W
Rhodesia. university College; Dept. of Biochemistry 9991

Colby, S R
University of Maryland, College Park; Agronomy Dept. 10459

Coleman, R L
Oklahoma. university. school of Health; Depts. of Environmental Health and Biochemistry 10423

Collins, H I
Mississippi. state University; Dept. of Entomology 9992

Collins, J F
Bethesda. national Institutes of Health; Laboratory of Molecular Biology 10152

Couture, G
Laval. universite; Dept. de Biologie 9993

Crompton, D W T
Cambridge. university; Molteno Institute 10373

Crumpacker, D W
Colorado. university; Dept. of Biology 10153

Cuerrier, J P
Canadian Wildlife Service, Ottawa 10406

Cunningham, J C
Queensland. dept. of Primary Industries; Entomology Section, Mareeba 10239

Cunningham, I C
Queensland. dept. of Primary Industries; Entomology Section, Mareeba 10240

Dang, K
Indian Agricultural Research Institute; Division of Entomology, New Delhi 9994

Danielson, L I
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Beltsville 10280

David, J
Faculte des Sciences; Laboratoire de Zoologie General, Lyon, France 9995

Davies, T H
Clifton, R. D. 2, New Zealand 9882

Davis, D G
Wisconsin. university; Dept. of Medical Genetics, Madison 10154

Dayal, R
Banaras. hindu University; Dept. of Plant Pathology 10178

DeBaca, P
California. university. agricultural Experimentation.; Riverside 10241

Delfel, N E
U. S. Agricultural Research Service, Peoria; Northern Regional Research Laboratory 10461

DeLong, D M
Ohio. state University 9883

Demolin, G
Antihes. institut National de la Recherche Agronomique; Station de Recherches de Lutte biologique 9996

Denell, R E
Texas Univ., Austin 10155

Derevici, A
Institut Docteur Cantacuzino, Bucharest, Rumania 9997

Deschka, G
Steyr, Josef Ressel-Strasse, Austria 9884

Dessart, P
Brussels. institut royal des Sciences naturelles de; Belgique; Section d'Entomologie 9885

Dharmaraju, E
Andhra Pradesh. agricultural University 9998

Doane, J F
Canada. dept. of Agriculture; Research Station, Saskatoon 9999

Dowle, C C
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Mayaguez. 10282

Drooz, A T
U. S. dept. of Agriculture. forest Service; Southeastern Forest Experiment Station; Research Triangle Park, N. C. 10000

Dugdale, J S
New Zealand. Dept. of Scientific and Industrial Research; Entomology Division 9886

Dumbleton, I J
New Zealand. dept. of Scientific and Industrial Research; Entomology Division 9887

Dumbleton, I J
New Zealand. dept. of Scientific and Industrial Research; Entomology Division, Christchurch 9888

Dustman, E H
Patuxent Wildlife Research Center, Laurel, Md.; Bureau of Sport Fisheries and Wildlife; U. S. Fish and Wildlife Service 10407

Ebert, E
Geigy, J. R., S. A., Basel, Switzerland 10434

Edgington, I V
Dept. of Botany 10179

Ehara, Y
Tohoku University; Lab. of Phytopathology 10180

Eichlin, T D
Auburn. university; Dept. of Zoology-entomology, Ala. 9889

Eldcfrawi, M E
Alexandria. university. college of Agriculture; Dept. of Plant Protection 10242

Elliott, J M
Freshwater Biological Association, Ambleside, England 10001

Elser, H J
Dept. of Chesapeake Bay Affairs, Annapolis, Md. 10393

Endrody-Younga,
Crops Research Inst., Kumasi, Ghana; Entomology Section 10243

Engelmann, F
California. university; Dept. of Zoology, Los Angeles 10002

Epstein, S S
Children's Cancer Research Foundation, Inc, Boston, Mass. 10333

Erickson, J
Western Washington. state College; Dept. of Biology, Bellingham 10003

Erokhina, L I
Kurchatov Inst. of Atomic Energy, Moscow, USSR 10435

Erwin, D C
California. university; Dept. of Plant Pathology, Riverside 10181

Erwin, D C
California. university; Dept. of Plant Pathology, Riverside 10244

Erwin, D C
California. university; Dept. of Plant Pathology, Riverside 10394

Erwin, D C
California. university; Dept. of Plant Pathology, Riverside 10436

Erwin, D C
California. university; Dept. of Plant Pathology, Riverside 10462

Eto, M
Kyushu Univ., Fukuoka, Japan; Dept. of Agricultural Chemistry 10424

Evans, R A
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Reno, Nev. 10283

Fagel, G
Institut royal des Sciences naturelles, Brussels.; Belgium 9890

Feltner, K C
Kansas. state University; Dept. of Agronomy 10284

Feltner, K C
Kansas. state University; Dept. of Agronomy 10285

Ferrari, P
Australia. commonwealth Scientific and Industrial Research; Organization; Division of Entomology, Townsville 10004

Filipponi, A
Rome. istituto Superiore di Sanita; Laboratori di Parassitologia, 10005

Flanders, S E
California. university; Citrus Research Center, Riverside 10006

Fleck, E E
U. S. Dept. of Agriculture, Beltsville, Md.; Entomology Research Division; Pesticide Chemicals Research Branch 10463

Fonseca, J P de
Sao Paulo. instito Biologico ; Seceao de Parasitologia Vegetal 9892

Forcom, D L
New Mexico. Health and Social Services Dept.; General Sanitation Section 10007

Fox, K J
Manaia, Box 23, New Zealand 10008

Frank, J H
Alberta. university; Dept. of Entomology, Canada 10009

BIOGRAPHICAL INDEX

Hurpin, B

- Frank, J H**
Alberta. university, Edmonston; Dept. of Entomology
10010
- Frank, R**
Ontario. dept. of Agriculture and Food; Provincial Pesticide Residue Testing Laboratory, Canada
10286
- Frank, R**
Ontario. dept. of Agriculture and Food; Provincial Pesticide Residue Testing Laboratory
10287
- Frank, R**
Ontario. dept. of Agriculture and Food; Provincial Pesticide Residue Testing Laboratory, Canada
10288
- Freed, V H**
Oregon State University, Corvallis; Dept. of Agricultural Chemistry
10464
- Freeman, B E**
London. university; Wye College
10011
- Freeman, T E**
University of Florida, Gainesville; U. S. Dept. of Agriculture; Agricultural Research Center; Dept. of Plant Pathology
10183
- French, M C**
England. monks Wood Experimental Station; Nature Conservancy, Huntingdonshire
10425
- Fridlund, P R**
Washington State University, Prosser, Washington; Department Of Plant Pathology
10184
- Friedhoff, K**
Hannover. institut fur Parasitologie; Tierarztliche Hochschule
10012
- Friedhoff, K**
Hannover. institute fur Parasitologie; Tierarztliche Hochschule
10013
- Fromm, P O**
Michigan. state University; Dept. of Physiology
10408
- Frosheiser, F I**
U. S. Dept. of Agriculture, St. Paul, Minnesota; Agricultural Research Service; Crops Research Division
10185
- Fujita, T**
Kyoto Univ., Japan; Dept. of Agricultural Chemistry
10437
- Fukunaga, K**
Institute of Physical and Chemical Research, Tokyo, Japan; Lab. of Insect Toxicology
10426
- Fukuto, T R**
California Univ., Riverside; Dept. of Entomology
10014
- Furman, D P**
California. university; Division of Parasitology, Berkeley
10015
- Gaedike, R**
Germany (Democratic Republic). deutsches Entomologisches; Institut, Eberswalde
9894
- Gajan, R J**
U. S. food and Drug Administration. division of Food; Chemistry and Technology, Wash., D. C.
10409
- Gaur, A C**
Indian Agricultural Research Institute; Division of Microbiology, New Delhi
10438
- Gentner, W A**
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Beltsville
10290
- Getzendaner, M E**
Dow Chemical Co.; Agricultural Products Dept., Midland, Mich.
10410
- Giannattasio, M**
France. faculte des Sciences; Laboratoire de Biologie cellulaire, Paris
10439
- Gibbins, J. N**
Guelph. University; Dept. of Microbiology
10186
- Gilliland, F R**
Auburn. university, Ala.
10016
- Gillon, Y**
Office de la Recherche Scientifique et Technique; Outre-Mer, Adiopodume, Ivory Coast; Lab. d'Entomologie
10017
- Gingrich, J B**
Rutgers--the State University; Dept. of Entomology and Economic Zoology, N. J.
10018
- Giran, F**
France. Centre National de la Recherche Scientifique; Laboratoire de Microbiologie et Virologie, Montpellier
10019
- Gochnauer, T A**
Canada. dept. of Agriculture; Entomology Research Institute, Ottawa
10020
- Goddard, P A**
Harrow Weald, 69 Weighon Road, England
9895
- Goddard, P A**
Harrow Weald, 69 Weighon Road, England
9896
- Goldin, M**
Academy of Sciences, Estonia, USSR; Inst. of Experimental Biology
10187
- Gonnert, R**
Farbenfabriken Bayer AG; Institut fur Parasitologie und Veterinarmedizin, Wuppertal
10374
- Gouger, R J**
Florida. university; Dept. of Entomology and Nematology
10022
- Grant, D L**
Canada. dept. of National Health and Welfare; Research Laboratories, Ottawa
10465
- Grant, G G**
Virginia Polytechnic Institute; Dept. of Entomology
10023
- Graves, P N**
Wesleyan University, Middletown, Conn.
10024
- Green, A A**
England. agricultural Research Council; Pest Infestation Laboratory
10387
- Green, N**
U. S. dept. of Agriculture; Entomology Research Division, Beltsville
10025
- Grewal, G S**
Punjab. agricultural University; Dept. of Zoology-Entomology
10026
- Grillo Torrado, J M**
Buenos Aires. instituto Nacional de Tecnologia; Agropecuaria; Centro Nacional de Investigaciones Agropecuarias
10334
- Grover, R K**
Punjab. agricultural University; Dept. of Botany and Plant Pathology
10188
- Gruenhagen, R D**
North Carolina. state University; Dept. of Crop Science
10440
- Gupta, V K**
Delhi Univ., India; Dept. of Zoology
9897
- Hackman, W**
Helsinki. zoological Museum.
9898
- Haines, L C**
Australian Museum, Sydney
9899
- Haines, L C**
Australian Museum, Sydney
9900
- Halstead, D G H**
England. agricultural Research Council; Pest Infestation Laboratory
9901
- Hamilton, K C**
Arizona. agricultural Experiment Station, Tucson
10291
- Hamilton, R I**
Commonwealth Scientific and Industrial Research; Organization., St. Lucia, Australia; Div. of Tropical Pastures
10335
- Hansberry, R**
Shell Development Company, Modesto, Calif.
10411
- Hansing, E D**
Kansas State Univ., Manhattan; Dept. of Plant Pathology
10189
- Harjal, S C**
India. field Station for Investigations on Locusts; Bikaner
10027
- Harley, J M B**
Middlesex, 18 Leighton Avenue, England
10028
- Haynes, W C**
U. S. dept. of Agriculture. agricultural Research Service; Northern Regional Research Laboratory, Peoria
10029
- Henzell, R F**
Ruakura Soil Research Station, Hamilton, New Zealand
10030
- Hepper, H C**
Instituto Nacional de Microbiologia, Buenos Aires; Dept. de Entomologia Sanitaria
9903
- Herbert, T T**
North Carolina State Univ., Raleigh; Dept. of Plant Pathology
10191
- Hermanson, H P**
Rutgers--The State University, New Brunswick, N. J.; Dept. of Agricultural Chemistry
10412
- Hermanson, H P**
Rutgers - The State University, New Brunswick, N. J.; Bureau of Conservation and Environmental Science; Dept. of Agricultural Chemistry
10467
- Hewitt, G B**
U. S. dept. of Agriculture. agricultural Research Service; Entomology Research Division, Bozeman
10246
- Hewlett, P S**
England. agricultural Research Council; Pest Infestation Laboratory
10031
- Hodges, R W**
Agricultural Research Service, U. S. National Museum; Washington, D. C.; Systematic Entomology Lab.
9905
- Hoenigsberg, H F**
Andes. universidad; Instituto de Genetica
10156
- Holloway, J D**
Cambridge, Grape House, England
10033
- Hopkins, D E**
U. S. Agricultural Research Service, Kerrville; Entomology Research Division
10034
- Howe, R W**
England. agricultural Research Council; Pest Infestation Laboratory, Slough
10035
- Huang, Y-M**
Smithsonian Institution, Washington, D.C.; Southeast Asia Mosquito Project
10164
- Hull, R J**
Rhode Island. university; Dept. of Horticulture
10292
- Hurpin, B**
France. institut National de la Recherche Agronomique; Station de Recherches de Lutte Biologique et de; Biocoenotique, Versailles
10036

BIOGRAPHICAL INDEX

- Hyllin, J W**
Mellon Institute, Pittsburg, Pa. 10441
- Ing, B**
Imperial College, England; Dept. of Biochemistry 10038
- Inukai, T**
Hokkaido Univ., Japan; Dept. of Agriculture 10318
- Ipert, G**
France. institut National de la Recherche Agronomique; Station de Recherches de Lutte Biologique et de; Zoologie Agricole d'Antibes. 10039
- Jackson, D**
Akron. university, Ohio 9906
- Jakovljevic, D**
New South Wales. veterinary Research Station, Glenfield. 10336
- Jaques, R P**
Canada. dept. of Agriculture; Research Station, Harrow, Ontario 10041
- Jarnicka-Stanos, H**
Medical Academy; Dept. of Electron Microscopy, Lublin 10042
- Jeffery, I S**
North Dakota. state University; Dept. of Agronomy 10293
- Johnson, R R**
Amchem Products, Inc.; Research Dept.; Agricultural Chemicals Division 10442
- Jones, J P**
Arkansas Agricultural Experiment Station, Fayetteville 10192
- Joshi, H C**
India. dept. of Agriculture; State Entomological Research Laboratory, Jaipur 10043
- Joshi, H C**
India. dept. of Agriculture; State Entomological Research Laboratory, Jaipur 10250
- Jotwani, M G**
Indian Agricultural Research Institute; Division of Entomology, New Delhi 10251
- July, J R**
Sao Paulo. instituto Biologico; Seccao de Ornitopatologia 10338
- Kadel, W L**
Kansas State University; College of Veterinary Medicine; Dept. of Pathology, Parasitology, and Public Health 10339
- Kadoun, A M**
Kansas. state University; Dept. of Entomology 10044
- Kadoun, A M**
Kansas. state University; Dept. of Entomology 10413
- Kadoun, A M**
Kansas. state University; Dept. of Entomology 10414
- Kaiser, M N**
U. S. Naval Medical Research Unit No. Three; Dept. of Medical Zoology, Cairo, Egypt 9908
- Kajita, H**
Kyushu. university; Institute of Biological Control 10045
- Kalra, A N**
Indian Institute of Sugarcane Research, Lucknow 10046
- Kamm, J A**
Oregon State University; Dept. of Entomology 10047
- Kanitz, S**
Genova Univ., Italy; Istituto di Igiene 10395
- Karns, P D**
Carlos Avery Research Center, Forest Lake, Minn. 10375
- Kaufman, D D**
U. S. Dept. of Agriculture, Beltsville, Md.; Agricultural Research Service; Crops Research Division 10427
- Kavadia, V. S.**
College of Agriculture; Dept. of Entomology, Jobner 10048
- Kawahara, F K**
U. S. Dept. of Health Education and Welfare, Cincinnati; Public Health Service; Div. of Water Supply and Pollution Control; Basic Data Branch 10396
- Kearby, W H**
Pennsylvania. state University 10049
- Kearney, P C**
Agricultural Research Service, Beltsville, Md.; Crops Research Div. 10468
- Kennedy, J S**
Agricultural Research Council (London); Unit of Insect Physiology 10050
- Kerr, H D**
Missouri. university; Dept. of Agronomy, Portageville 10294
- Kevan, D K M**
McGill Univ., Quebec.; Dept. of Entomology 9909
- Khandelwal, G L**
University of Udaipur, Udaipur; Dept. of Plant Pathology 10193
- Kho, S G**
Malaya. university; School of Biological Sciences 10051
- Kianta, B**
Utrecht, university; Institute of Genetics, Netherlands 10157
- Kiesling, R L**
North Dakota State Univ., Fargo; Plant Pathology Dept. 10194
- Kilpatrick, R A**
Agricultural Research Service, Beltsville, Md.; Crops Research Div. 10195
- King, E G**
Louisiana. state University; Dept. of Entomology, Baton Rouge 10052
- Klein, J M**
Institut Pasteur du Cambodge, Phnom-Penh.; Office de la Recherche scientifique et technique Outre-Mer 9910
- Kline, D M**
North Carolina State Univ., Raleigh; Crops Research Div. 10196
- Knulle, W**
Ohio. agricultural Research and Development Center; Dept. of Zoology and Entomology, Wooster 10053
- Kohler, H.**
Deutsche Akademie der Landwirtschaftswissenschaften; Institut fur Pflanzenzuchtung Quedlinburg, Berlin (East) 10428
- Koyumdjjeva, M**
Sofia. Academie Bulgare des Sciences; Section de Biologie 10364
- Krogerus, H**
Helsinki, Sbjorneborgsvagen, Finland 9912
- Krogerus, H**
Helsinki, S Bjorneborgsvagen, Finland 9913
- Kugler, J**
Tel-Aviv. university; Dept. of Zoology 10054
- Kunze, G W**
Texas A and M University, College Station; Texas Agricultural Experiment Station; Soil and Crop Sciences Dept. 10397
- Kuratle, H**
DuPont (E. I) de Nemours and Co.; Plant Research Laboratory, Wilmington, Del. 10295
- Lacher, V**
Menlo Park. stanford Research Institute; Life Sciences Research 10055
- Lagace, C F**
California. university; Division of Biological Control, Berkeley 9914
- Lamartiniere, C A**
Louisiana. state University. agricultural Experiment; Station; Dept. of Microbiology 10429
- Lamey, H A**
United Nations. fAO; Rice Protection Research and Training Center, Bangkok 10197
- Lammler, G**
Justus Liebig-Universitat; Institut fur Parasitologie und Parasitare Krankheiten; der Tiere, Giessen 10341
- Launer, J E**
Oregon. state Dept. of Agriculture; Laboratory Services, Salem 10469
- Lavers, D W**
Cairns, 307 Mulgrave Road, Australia 10376
- Lawrence, J H**
U. S. food and Drug Administration. division of; Pesticides, Wash., D. C. 10470
- Lee, C C**
King's College; Dept. of Biological Sciences, Wilkes-Barre, Pa. 10377
- Lee, D L**
Houghton Poultry Research Station, England 10378
- LeGrand, H E**
U. S. Geological Survey, Raleigh, N. C.; Water Resources Division 10398
- Leibovitz, I**
Cornell University; Dept. of Avian Diseases, Eastport, N. Y. 10342
- Lempke, B J**
Amsterdam, Oude IJselstraat 12 III, Netherlands 10056
- Lensny, Y**
Hebrew University; Dept. of Entomology, Rehovot 10057
- Lenz, M**
Freien Univ., Berlin, West Germany; Institut fur Angewandte Zoologie 10343
- Lewis, D J**
British Museum (Natural History); Medical Research Council 9915
- Ling, K C**
International Rice Research Institute, Los Banos, Philippine 10198
- Lingg, A J**
Kansas. state University; Division of Biology 10415
- Littrell, R H**
Georgia Univ. Coll. of Agriculture, Tifton, Ga.; Coastal Plain Station 10199
- Lopez-Gorge, J**
Granada. instituto 'Lopez-Neyra' de Purasitologia; Seccion de Fisioparasitologia, Spain 10379
- Lutz-Ostertag, y**
Centre National de la Recherche Scientifiques.; Clermont-Ferrand, France; Lab. de Biologie animale et Lab. no. 4 10430
- Lyall, M**
Colorado State University; College of Veterinary Medicine 10344
- MacCollom, G B**
Vermont. university. agricultural Experiment Station 10399

BIOGRAPHICAL INDEX

Pandey, N D

- MacConnell, W P**
University of Massachusetts, Amherst
10485
- Macer, R C F**
Rothwell Plant Breeders, England
10200
- Mackauer, M**
Simon Fraser University; Dept. of Biological Sciences, Canada
10059
- Mackay, R J**
McGill University; Dept. of Zoology
10060
- Magnoler, A**
Italy. stazione Sperimentale del Sughero, Sassari
10061
- Mahoney, D F**
Australia. commonwealth Scientific and Industrial Research; Organization; Long Pocket Laboratories, Brisbane
10345
- Maitland, P S**
Liverpool. university; Dept. of Zoology, England
10062
- Maitlen, J C**
U. S. dept. of Agriculture. agricultural Research Service; Entomology Research Division, Yakima
10471
- Mall, S B**
Allahabad. university; Dept. of Zoology
10063
- Malone, B**
U. S. food and Drug Administration. division of; Pesticides, Wash., D. C.
10416
- Malone, B**
U. S. Food and Drug Administration. division of; Pesticides, Wash., D. C.
10472
- Martin, J P**
University of California, Riverside; Dept. of Soils and Plant Nutrition
10400
- Mathot, G**
Lovanium University. kinshasa, Congo
9916
- Mathur, K C**
Commonwealth Institute of Biological Control; Indian Station
10254
- Mathur, L M L**
Udaipur. university. agricultural Experiment Station; Dept. of Entomology
10064
- Mathur, S B**
Copenhagen. institute of Seed Pathology for Developing; Countries
10201
- Mathys, G**
France. station federale d'essais agricoles; Lausanne-Changins
10065
- McCart, M**
Food and Drug Administration, Washington, D. C.
10417
- McCully, K A**
Canada. dept. of National Health and Welfare; Research Laboratories, Ontario
10473
- McDaniel, B**
South Dakota. state University; Dept. of Entomology-Zoology
9917
- McEnroe, W D**
Massachusetts. university. agricultural Experiment Station; Waltham Field Station
10067
- McIlachlan, A J**
Malawi. university. chancellor College; Dept. of Biology
10066
- McNew, G L**
Boycce Thompson Inst., Yonkers, N. Y.
10202
- McClelland, G A H**
California. university; Dept. of Entomology, Davis
10072
- Medvedev, L N**
USSR. academy of Sciences; Laboratory of Biogeocoenology, Leningrad
9918
- Meggitt, W F**
Dept. of Crop Science
10296
- Meikle, R W**
Dow Chemical Co.; Agricultural Products Research Laboratory, Walnut Creek
10401
- Meinander, M**
Helsinki. zoological museum
9919
- Meneghini, M**
Sao Paulo. instituto Biologico; Seccao de Bioquimica Vegetal
10443
- Menhinick, E F**
North Carolina. university; Dept. of Biology
10069
- Menhinick, E F**
North Carolina. university; Dept. of Biology. Charlotte
10255
- Menon, M G R**
Indian Agricultural Research Institute; Division of Entomology, New Delhi
9920
- Menon, M G R**
Indian Agricultural Research Institute; Division of Entomology, New Delhi
10365
- Menon, M G R**
Indian Agricultural Research Institute; Division of Entomology, New Delhi
9921
- Mentzelos, I**
Thessaloniki. plant Protection Institute
10070
- Mertz, D B**
California. university; Dept. of Biological Sciences, Santa Barbara
10071
- Meyers, J**
Illinois. university; Dept. of Entomology
10073
- Michno-Zatorska, Z**
Copernicus University. turon; Dept. of General Botany, Poland
10203
- Millhollon, R W**
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Houma
10297
- Milo, G E**
Roswell Park Memorial Institute, Buffalo
10204
- Minshall, W H**
Canada. dept. of Agriculture.; Research Branch, Ontario
10298
- Misato, T**
Institute Of Physical and Chemical Research, Tokyo, Japan
10205
- Misra, B C**
Cuttack. central Rice Research Institute
10075
- Mitchell, R**
Ohio. state University
10076
- Monastero, S**
Palermo. istituto di Entomologia agraria
10256
- Mookherjee, P B**
Indian Agricultural Research Institute; Division of Entomology, Delhi
10388
- Moore, B J**
Arkansas. University; Dept. of Plant Pathology
10206
- Moreland, D E**
North Carolina. state University; Dept. of Crop Science
10299
- Morgan, I**
Australia. dept. of Agriculture. division of Animal; Health, Melbourne
10347
- Morgan, P W**
Texas. a M University; Dept. of Plant Sciences
10300
- Moriarty, F**
England. monks Wood Experimental Station; Nature Conservancy, Huntlyngdon
10078
- Moriarty, F**
England. monks Wood Experimental Station; Nature Conservancy, Huntingdon
10079
- Morris, O N**
Canada. dept. of Forestry; Forest Research Laboratory, Victoria, British Columbia
10257
- Moseman, J G**
Agricultural Research Service, Beltsville, Md.; Crops Research Div.
10207
- Nair, M R G K**
Agricultural College and Research Institute, Vellayani
10319
- Nalewaja, J D**
North Dakota. state University; Dept. of Agronomy
10301
- Narain, A**
Orissa. university of Agriculture and Technology; Dept. of Mycology and Plant Pathology
10208
- Navarro, S**
Israel. ministry of Agriculture. dept. of Plant; Protection; Stored Products Division, Jaffa
10389
- Neff, S E**
Virginia. polytechnic Institute; Dept. of Biology
10080
- Neisham, O**
Morton Chemical Co., Woodstock, Ill.
10209
- Newsom, L D**
Louisiana. state University; Dept. of Entomology
10402
- Nieser, N**
Universite de l'Etat; Laboratoire Zoologique, Utrecht
9922
- Nieuwenhuis, E J**
Rotterdam, Bentincklaan 37a, Netherlands
9923
- Nikolajev, G V**
USSR. academy of Sciences; Zoological Institute, Leningrad
9924
- Nilsson-Tillgren, T**
Copenhagen. university; Institute of Genetics
10210
- Nilsson, M R**
Sao Paulo. instituto Biologico; Seccao de Enzootias
10348
- Nilsson, M R**
Sao Paulo. instituto Biologico; Seccao de Enzootias
10349
- Nooden, L D**
Michigan. University; Dept. of Botany
10444
- Norris, D M**
Wisconsin. university; Dept. of Entomology, Madison
10082
- Odak, S C**
Jawaharlal Nehru Krishi Vishwa Vidyalala; Gwalior Campus, Jabalpur
10259
- Ofori, C S**
Soil Research Inst., Kumasi, Ghana
10445
- Oguni, I**
Nagoya University, Chikusa, Japan; Lab. of Biochemistry and Institute for Biochemical Regulation
10446
- Oldroyd, H**
British Museum (Natural History)
9927
- Pal, B P**
Inbyan Council of Agricultural Research, New Delhi
10211
- Pan, M L**
Pennsylvania. university; Dept. of Biology
10083
- Pandey, N D**
Government Agricultural College, Kanpur
10084

BIOGRAPHICAL INDEX

Papasolomontos, A

Papasolomontos, A

Cyprus. ministry of Agriculture and Natural Resources; Agricultural Research Institute, Nicosia
10212

Papavizas, G C

U. S. Dept. of Agriculture, Beltsville, Md.; Agricultural Research Center; Crops Research Division
10213

Parker, A II

Sir John Cass College; Dept. of Biological Sciences, London
10085

Parry, W H

Aherdeen. university; Dept. of Forestry
10086

Parshad, B

Indian Agricultural Research Institute; Division of Entomology, New Delhi
10087

Pavan, C

Texas Univ., Austin
10158

Pearson, K G

Oxford. university; Laboratory of Physiology
10089

Pederson, V D

North Dakota State Univ., Fargo; Dept. of Plant Pathology
10214

Perrott, D C F

New Zealand. dept. of Scientific and Industrial Research; Entomology Division
10090

Peters, E J

Agricultural Research Service; Crops Research Division
10303

Phelps, R J

Rhodesia. university; Division of Biological Sciences
10091

Phelps, R J

Rhodesia. university College
10092

Philogene, B J R

Quebec. dept. of Forestry and Rural Development; Forest Research Laboratory
10093

Poinar, G O

California. university; Dept. of Entomology and Parasitology, Berkeley
10094

Pollard, E

England. monks Wood Experimental Station; Nature Conservancy, Huntingdon
10260

Porter, M L

Food and Drug Administration, Washington, D. C.; Division of Food Chemistry and Technology
10475

Power, R J B

New Zealand. dept. of Scientific and Industrial Research; Entomology Division
10095

Pradhan, S

Indian Agricultural Research Institute; Division of Entomology, New Delhi
10390

Prakash, S

Chicago. university; Dept. of Biology
10159

Price, R D

Minnesota. university; Dept. of Entomology, Fisheries, and Wildlife, St. Paul
9930

Price, W C

Florida. university; Plant Virus Laboratory
10219

Pryor, R L

U S Dept Of Agriculture, Beltsville, Maryland; Agricultural Research Service
10447

Puthz, V

Germany. (Federal Republic). limnologische flussstation.; Schlitz.
9931

Rahman, S J

India. national Institute of Communicable Diseases; Southern India Branch, Coonoor
10096

Rawat, R R

Jawaharlal Nehru Krishi Vishwa Vidyalaya, Jabalpur.
9932

Rawat, R R

Jawaharlal Nehru Krishi Vishwa Vidyalala; Dept. of Entomology, Jabalpur
10097

Rawnsley, J

Food and Agriculture Organization, Accra, Ghana; Crop Protection Branch
10391

Ray, B

North Carolina. agricultural and Technical University; Dept. of Plant Science
10304

Ray, S

Indian Agricultural Research Institute; Division of Entomology, Delhi
10098

Reinecke, L H

North Dakota. state University; Dept. of Entomology
10100

Rice, R E

California. university; Dept. of Entomology, Davis
10101

Rich, S

Connecticut Agriculture Experiment Station, New Haven
10476

Richard, G

La Quinoleine S. A., Paris, France; Services de Recherches Agronomiques
10220

Riek, E F

Australia. Commonwealth Scientific and Industrial Research; Organization. Division of Entomology, Canberra
9933

Riemann, J G

North Dakota. agricultural Research Service; Metabolism and Radiation Laboratory
10102

Riemer, D N

Rutgers University; Dept. of Soils and Crops, New Brunswick, N. J.
10448

Ritcher, P O

Oregon. state University; Dept. of Entomology
9934

Robards, G E

New South Wales. dept. of Agriculture. agricultural; Research Station, Trangie
10351

Roberts, P A

Oregon State Univ., Corvallis
10160

Robinson, M H

Balboa. smithsonian Tropical Research Institute
10103

Rock, G C

North Carolina. state University; Dept. of Entomology
10104

Rodin, J O

Syracuse. university; State University College of Forestry; Dept. of Chemistry, N. Y.
10105

Roeth, F W

Nebraska. university; Dept. of Agronomy, Lincoln
10477

Roller, H

Texas A and M Univ., College Station; Inst. of Life Science
10106

Rosay, B

Utah. salt Lake County Mosquito Abatement District, Midvale
10107

Roth, L M

U. S. Army. natick Laboratories; Pioneering Research Laboratories, Mass.
9935

Round, M C

Equine Research Station, Animal Health Trust, Newmarket
10380

Rounds, H D

Wichita State Univ., Kans.; Dept. of Biology
10108

Rozen, J G

The American Museum of Natural History, New York, N. Y.; Dept. of Entomology
10109

Sachan, J N

Udaipur. university; College of Agriculture, Jobner
10110

Saldarriaga V, A

Instituto Colombiano Agropecuario, Bogota, Columbia
10261

Sands, W A

London. ministry of Overseas Development; Termite Research Unit
9936

Satpathy, J M

College of Agriculture; Dept. of Entomology, Bhubaneswar
10262

Savulescu, A

Institutul de biologie, Traian Savulescu, Bucharest.; Romania
10221

Saxena, D K

Jawaharlal Nehru Krishi Vishwa Vidyalaya; Dept. of Entomology, Jabalpur
10263

Schaerffenberg, B

Graz. university; Zoologisches Institut
10353

Scheinberg, E

Calgary. university; Dept. of Biology
10161

Schildknecht, H

Heidelberg. universitat; Organisch-Chemisches Institut, Germany
10111

Schmeling, B von

Uniroyal, Inc., Bethany, Conn.; Biological Research
10222

Scholtzseck, E

Bonn. university; Zoologisches Institut; Protozoologische Arbeitsgruppe
10354

Schroder, R F W

U. S. dept. of Agriculture. agricultural Research Service; Entomology Research Division, Beltsville
9937

Sevastopulo, D G

Mombasa, Africa
9938

Sevastopulo, D G

Mombasa, Africa
9939

Shaldybidia, E S

Gorky. pedagogical Institute
9940

Sharma, S K

India. dept. of Agriculture; State Entomological Research Laboratory, Jaipur
10112

Shatoury, H H

Ulster. new University; Dept. of Biological and Environmental Studies, North; Ireland
10113

Shaw, D D

Canada. forest Research Laboratory, New Brunswick
10114

Shaw, W C

U. S. Dept. of Agriculture; Agriculture Research Service; Crops Research Division
10486

Shay, J W

Kansas. university; Dept. of Physiology and Cell Biology
10115

Sheridan, J E

Victoria University of Wellington; Botany Dept.
10223

Shrivastav, H P O

College of Veterinary Science, Jabalpur, India; Dept. of Parasitology
10381

Shulman, S

New York. state University; Dept. of Bacteriology and Immunology
10166

Sinclair, W

Wales. university College; Dept. of Zoology
9942

BIOGRAPHICAL INDEX

Wilkinson, R E

- Singh, G R**
Sugarcane Breeding Inst., Coimbatore, India
10224
- Singh, J**
Canada. dept. of Agriculture; Scientific Services
Laboratory, Ottawa
10478
- Singh, O P**
Punjab. agricultural University
10116
- Singh, R P**
Indian Agricultural Research Institute; Division of
Entomology, New Delhi
10117
- Slater, C H**
Oregon. state University; Dept. of Farm Crops
10305
- Smiley, I E**
Purdue University, Lafayette, Ind.; Dept. of
Biochemistry
10356
- Smith, C N**
U. S. Dept. of Agriculture, Gainesville, Fla.; Agricul-
tural Research Service; Entomology Research Divi-
sion
10118
- Smith, P D**
Connecticut. university; Dept. of Genetics
10162
- Smith, W H**
Yale University, New Haven; School of Forestry
10225
- Sonenshine, D E**
Virginia. old Dominion College; Dept. of Biology,
Norfolk
10119
- Springer, W T**
Louisiana. state University; Dept. of Veterinary
Science
10383
- Srivastava, B P**
Udaipur. university; Dept. of Entomology
10266
- Srivastava, P D**
Indian Agricultural Research Institute; Division of
Entomology, New Delhi
10320
- Srivastava, P D**
Indian Agricultural Research Institute; Division of
Entomology, Delhi
10321
- Srivastava, P D**
Indian Agricultural Research Institute; Division of
Entomology, New Delhi
10322
- Stenersen, J**
Norwegian Plant Protection Institute, Vollebakk
10449
- Steward, K K**
U. S. dept. of Agriculture. agricultural Research
Service; Crops Research Service, Fort Lauderdale
10306
- Stoffolano, J G**
Massachusetts University; Entomology Dept.
10120
- Strambi, A**
Centre National de la Recherche Scientifique,
Marseille.; France; Inst. de Neurophysiologie et
Psychophysiologie
10121
- Streams, F A**
Connecticut. university; Biological Sciences Group
10122
- Struble, G R**
Forest Service, Berkeley, Calif.; Pacific Southwest
Forest and Range Experiment Station
10267
- Stussi, T**
France. centre National de la Recherche Scien-
tifique; Laboratoire associe de Physiologie com-
paree de la; Thermoregulation, Strasbourg
10123
- Sullivan, D T**
New Mexico State University, Las Cruces, New
Mexico; Dept Of Horticulture
10450
- Sullivan, N D**
Queensland. animal Research Institute; Dept. of
Primary Industries
10358
- Swanson, C R**
Mississippi. delta Branch Experiment Station,
Stoneville
10308
- Szmidt, A**
Organisation Internationale de Lutte Biologique,
Paris; France
10124
- Tahori, A S**
Roosevelt University, Chicago
10125
- Tanada, Y**
California. university; Division of Entomology,
Berkeley
10126
- Taylor, R W**
Australia. commonwealth Scientific and Industrial
Research; Organization; Division of Entomology,
Canberra
9944
- Taylor, T A**
Ibadan. university; Dept. of Agricultural Biology
10268
- Taylorson, R B**
U. S. dept. of Agriculture. agricultural Research
Service; Crops Research Division, Beltsville
10309
- Taylorson, R. B.**
U. S. dept. of Agriculture. agricultural Research
Service; Crops Research Division, Beltsville
10451
- Teotia, T P S**
Government Agricultural College, Kanpur
10127
- Thiele, G F**
Lincoln College, Canterbury, New Zealand
10128
- Thiele, H U**
Koln. universitat; Zoologisches Institut
10129
- Thind, B S**
Punjab. agricultural University; Dept. of Botany
and Plant Pathology
10226
- Thomson, J A**
McIbourne. university; Dept. of Genetics
10130
- Todd, D H**
New Zealand. Dept. of Scientific and Industrial
Research; Entomology Division, Palmerston North
10131
- Tottenham, C E**
Cambridge, 39 Eltitsley Avenue, England
9945
- Tsukamoto, M**
Nagasaki Univ., Japan; Inst. for Tropical Medicine
10163
- Tueller, P T**
U. S. dept. of Agriculture. agricultural Research
Service; Division of Renewable Natural Resources,
Reno, Nev.
10310
- Uffen, R W J**
London, 4 Vaughan Avenuc, England
10132
- Upchurch, R P**
Monsanto Co.; Agricultural Division, St. Louis,
Mo.
10311
- Vago, C**
France. institut National de la Recherche
Agronomique; Station de Recherches
Cytopathologiques, Montpellier
10133
- Vail, P V**
U. S. dept. of Agriculture; Entomology Research
Division, Mesa, Ariz.
10134
- Varma, J P**
Udaipur. university. agriculture Experiment Sta-
tion
10227
- Varshney, R K**
India. zoological Survey; Eastern Regional Station,
Shillong
10135
- Vendrell, M**
Sydney. university School of Biological Sciences
10452
- Vereecke, A**
Belgium. faculty of Agricultural Sciences, Ghent
10136
- Vick, K**
Oklahoma. state University
10138
- Vir, D**
Indian Agricultural Research Institute; Division of
Mycology and Plant Pathology, New Delhi
10228
- Voerman, S**
Netherlands. laboratory for Research on Insecti-
cides.; Wageningen
10479
- Voss, G**
CIBA Ltd.; Agrochemical Division, Basel
10419
- Wadhi, S R**
Indian Agricultural Research Institute; Division of
Entomology, New Delhi
9948
- Wagner, E**
Hamburg, 103 Moorreye, Germany (Federal
Republic)
9949
- Wagner, E**
Hamburg, 103 Moorreye, Germany (federal
Republic)
9950
- Wagner, E**
Hamburg, 103 Moorrcye, Germany (federal
Republic)
9951
- Wagner, E**
Hamburg, 103 Moorreye, Germany (Federal
Republic)
9952
- Wallace, H A H**
Canada Dept. of Agriculture Research Station,
Winnipeg.; Manitoba
10229
- Wallace, J B**
Georgia. university; Dept. of Entomology
10139
- Ware, G W**
Arizona. university; Dept. of Entomology
10403
- Ware, G W**
Arizona. university; Dept. of Entomology
10480
- Watt, J C**
New Zealand. dept. of Scientific and Industrial
Research; Entomology Division
9953
- Watt, J C**
New Zealand. dept. of Scientific and Industrial
Research; Entomology Division
10140
- Wax, L M**
U. S. dept. of Agriculture. agricultural Research
Service; Crops Research Division, Urbana
10312
- Wene, G P**
Arizona. university; Dept. of Entomology
10269
- Wheeler, W B**
Florida. university; Pesticide Research Laboratory
10420
- Whitworth, J W**
New Mexico. state University; Dept. of Agronomy
10313
- Wiktor, T J**
Wistar Institute of Anatomy and Biology, Philadel-
phia, Pa.
10360
- Wilcox, M**
Florida. university; Dept. of Agronomy, Gainesville
10314
- Wiley, M**
U. S. Dept. of Agriculture, Albany, Calif.; Agricul-
tural Research Service; Western Utilization
Research and Development Division; Western Re-
gional Research Laboratory
10481
- Wilkinson, R E**
Georgia. university. college Of Agriculture Experi-
ment; Stations
10315

BIOGRAPHICAL INDEX

Williams, M C

Williams, M C
U. S. dept. of Agriculture. agricultural Research Service; Crops Research Division, Logan, Utah
10454

Williams, P W
U. S. dept. of Interior. federal Water Pollution Control; Administration, Athens, Ga.
10421

Williams, S A
Kent, 78 Cedar Drive, England
9954

Williams, S A
Sutton at Honc, 79 Cedar Drive, England
9955

Wilson, H P
Rutgers- The State University, New Brunswick, N.j.; Dept. of Soils and Crops
10316

Wisk, E L
University of Delaware Substation, Georgetown
10317

Wollerman, E H
U. S. dept. of Agriculture. forest Service; Northeastern Forest Experiment Station; Forest In-

sect and Discase Laboratory, Ohio
10141

Wright, D S C
New Zealand. Dept. of Scientific and Industrial Research; Crop Research Division, Lincoln
10230

Wright, D S C
New Zealand. Dept. of Scientific and Industrial Research; Crop Research Division, Lincoln
10231

Wright, F C
U. S. dept. of Agriculture. toxicological Investigations; Laboratory, Kerrville
10482

Wu, Y F
Oklahoma. agricultural Experiment Station; Dept. of Botany and Plant Pathology
10455

Yadav, T D
Indian Agricultural Research Institute; Division of Entomology, Delhi
10270

Yarwood, C E
California. university; Dept. of Plant Pathology,

Berkeley
10232

Yinon, U
Hebrew University; Dept. of Entomology and Venomous Animals, Jerusalem
10142

Yonke, T R
Missouri. university; Dept. of Entomology, Columbia
9956

Yonke, T R
Missouri. university; Dept. of Entomology, Columbia
9957

Yurkiewicz, W J
Millersville. state College; Dept. of Biology
10143

Zavattari, E
Accademia Nazionale Italiana di Entomologia
10144

Zemskaya, A A
USSR. academy of Medical Sciences; Institute of Epidemiology and Parasitology, Moscow
10145

AUTHOR INDEX

Abbruzzese, L	10457	Black, C C	10274	Conha, A B da	10158	Flanders, S E	10006
Abeygunawardena, D V	10170	Block, W	9975	Couture, G	9993	Fleck, E E	10463
Acland, H	10351	Blum, M S	10139	Crawford, J G	10330	Folwaczny, B	9891
Acton, A B	10003	Bluthgen, P	9873	Crawley, I.	10050	Fonseca, J P de	9892
Adams, C	10141	Bode, L E	10483	Crompton, D W T	10373	Forcom, D L	10007
Adams, P B	10213	10484		Crossley, D A	10069	Ford, J B	10086
Adcakha, K L	10228	Boertitz, S	10432	Crovetti, A J	10460	Fox, K J	10008
Adhikari, H R	10324	Bogawat, J K	9976	Crumpacker, D W	10153	Frank, J H	10009
Ahrens, R W	10171	10433		Cuerrier, J P	10406	10010	
Alexander, C P	9865	Bohra, O P	10112	Cunningham, H B	9889	Frank, R	10286
9866		Borutzky, E V	9874	Cunningham, I C	10239	10287, 10288	
Alexander, M	10422	Boston, E	10030	10240		Frazier, L C	10447
Alexander, R R	10326	Boursin, C	9875	Dallyn, S L	10289	Freed, V H	10464
Ali, G M	10173	9977		Dang, K	9994	Freeman, B E	10011
Alumot, E	10057	Bovey, R W	10275	Danielson, L L	10280	Freeman, T E	10183
Amargier, A	10133	Bowman, M C	10404	Das, K K	9989	French, M C	10425
Amhral, V do	10327	Bradley, J	10378	Das, N M	10319	Freytag, P H	9883
Ananthakrishman, T N	9867	Bradley, S G	10340	Daum, R J	10068	Fricke, D H	10289
Ananthakrishnan, T N	9958	Bradoo, B L	9978	David, H	10046	Fridlund, P R	10184
Anderson, L E	10284	Brady, H A	10276	David, J	9995	Friedhoff, K	10012
10285		Breidenhach, A W	10396	Davies, T H	9882	10013	
Anderson, N H	9965	Brewerton, H V	10405	Davis, D G	10154	Fromm, P O	10408
Anderson, R J	10328	Brookes, H M	9876	Dawson, J H	10305	Frosheiser, F I	10185
Anderson, W P	10313	Brown, F M	9877	Day, C L	10483	Fuhrmann, T W	10058
Appleby, A P	10305	Brown, L R	10386	10484		Fujimoto, M S	10032
Argyriou, I C	10241	Brown, R H	10274	Dayal, R	10178	Fujita, T	10437
Arieta, P A	10334	Browning, L S	10148	DeBaca, P	10241	Fukami, J I	10426
Arnott, H J	9960	Bryan, D E	10040	Dee, M K	10403	Fukunaga, K	10426
Arny, D C	10171	Buck, F D	9878	10480		Fukuto, T R	10014
Aronson, J N	9961	9979		Delanoue, P	10256	Furman, D P	10015
Arthur, D R	9962	Buckett, J S	9879	Delfel, N E	10461	Fursch, H	9893
Ashrafi, S H	10173	Bueding, E	10369	Delmas, J C	9996	Furtick, W R	10305
Assche, Ch J V	10434	Burke, J A	10470	DeLong, D M	9883	Gaedike, R	9894
Atanassov, N	9868	10472, 10475		Demolin, G	9980	Gajan, R J	10409
Atchley, W R	9963	Burkholder, W E	10105	9996		10475	
Atienza Fernandez, M	10367	Burnside, O C	10277	Denell, R E	10155	Galluzzi, G	10457
Atwal, A S	10026	10477		Derevici, A	9997	Gaur, A C	10438
Auerbach, S	10431	Burrows, P M	10091	Deschka, G	9884	Gebhardt, M R	10483
Avidov, Z	9964	10092		Dessart, P	9885	10484	
Ayala, F J	10146	Butler, L I	10248	Dhamdhare, S V	10259	Gellatly, J G	10466
Azam, K M	9965	Butterworth, P E	10370	Dharmaraju, E	9998	Genn, B G	10237
Bae, S H	10234	Byrom, M H	10282	Dhillon, A J	10027	Gentner, W A	10290
Baggiolini, M	10065	Caceva, K	10371	Diaz-Colon, J D	10275	Gentry, C R	10404
Baker, D W	10363	Cadahia, D	9980	Dima, V	9997	George, D A	10248
Baker, J M	10082	Cahill, W P	10403	Disthaporn, S	10197	Gershon, H	10202
Balfour-Browne, J	9869	Calderara, P	9880	Doane, J F	9999	Getzdanner, M E	10410
Ball, B D	10167	Calderon, M	10389	Dobson, K J	10332	Ghai, S	9920
Baloch, G M	10272	Cals, P	9969	Dobson, W J	10115	9921	
Banerjee, B	9966	Calvo, J M	10326	Doharey, K L	9994	Ghani, M A	10272
Banerji, D K	10046	10329		Donahaye, E	10389	Giannattasio, M	10439
Banita, E	10235	Camhi, J M	9981	Dowler, C C	10275	Gibbins, L N	10186
Bantari, E E	10174	9982, 9983		10282		Gilliland, F R	10016
Barnett, R D	10192	Carney, G C	9984	Drake, E F	10045	Gillon, D	10017
Barnley, G R	9915	Carter, C I	9881	Drew, W A	10138	Gillon, Y	10017
Barr, W F	9870	Casida, J E	10278	Drooz, A T	10000	Gingrich, J B	10018
Barthel, W F	10392	Castello, G	10395	Dubey, J P	10381	Giran, F	10019
Basler, E	10455	Castro, J G	10372	Dugdale, J S	9886	Glassman, E	10152
Batiste, W C	10236	Castro, L E	10156	Dumbleton, L J	9887	Gochauer, T A	10020
Baur, J R	10308	Cavalcaselle, B	9985	9888		Goddard, P A	9895
Bazzi, B	10457	Chaboussou, F	10149	Dustman, E H	10407	9896	
Beames, C G	10368	Chadha, K C	10176	Duthoit, J L	10133	Goldin, M	10187
Beattie, H E R	10336	Chamberlain, W F	10034	Dutta, D N	10262	Gomez Garcia, V	10367
Beever, D J	10175	Chambers, V H	9986	Ebert, E	10434	Gonnert, R	10374
Bell, M R	10068	Champ, B R	10237	Eckert, R E	10283	Gonzalez Castro, J	10367
Bell, W J	10083	Chand, J N	10177	Economides, C V	10212	Gouder, B V	10345
Benassy, C	9967	10226		Edgington, L V	10179	Goonewardene, H F	10021
Benjamin, D M	10049	Chang, G Y	10126	Ehara, Y	10180	Gorman, J E	10105
Bennett, N	10481	Chapman, F R H	10279	Eichlin, T D	9889	Gouger, R J	10022
Bentley, D R	9968	Chapman, R F	9987	Eisenbraun, E J	10138	Granobles, L A	10156
Bergman, S J	10089	Chatterjee, G C	10352	Eldefrawi, M E	10242	Grant, D L	10465
Beri, Y P	10365	Chatterji, S M	9988	Elliott, J M	10001	Grant, G G	10023
Berkaloff, A	9969	Chattoraj, A N	10063	Elms, K D	10237	Graves, P N	10024
Berlowitz, A	10236	Chen, T M	10274	Elser, H J	10393	Green, A A	10387
Beroza, M	10404	Chernov, Yu I	9918	Enders, B	10341	Green, N	10025
10471		Chin, B H	10441	Endrody-Younga,	10243	Greenberg, L	10122
Berreur, P	9969	Chiykowski, L N	10238	Engelmann, F	10002	Grewal, G S	10026
Beshovski, V	9871	Choudhuri, D K	9989	Epstein, S S	10333	Grillo Torrado, J M	10334
Besovski, V L	9872	Christie, P H	10401	Erickson, J	10003	Grissinger, E H	10392
Betbeder-Natibet, M	9970	Chubareva, L A	10150	Erokhina, L I	10435	Gruener, R K	10188
Bevenue, A	10458	Church, K	10151	Erwin, D C	10181	Gruenhagen, R D	10440
Bhatia, K R	9971	Chillers, C J	9990	10244, 10394, 10436, 10462		Guelph Univ., Ontario	10179
Bhatia, S S	9972	Clavel, M F	9995	Esposito, J E	10442	Gupta, V K	9897
Bhattacharya, A K	9973	Cleveland, T C	10068	Eto, M	10424	Gurnet, A B	9935
Bianchi, H	9967	Cmelik, S H W	9991	Evans, R A	10283	Haberkorn, A	10354
Biliotti, E	9980	Coble, H D	10311	10310		Hackman, W	9898
Bishop, J B	10147	Cognet, J	10220	Fagel, G	9890	Hafiz, S	10173
Bishop, Y	10333	Colby, S R	10459	Feltner, K C	10284	Hafner, W	10271
Bisht, D S	9974	Cole, R H	10317	10285		Haines, L C	9899
Biss, J M	10231	Coleman, R L	10423	Ferrari, P	10004	9900	
Biswas, P K	10273	Coles, E H	10339	Filipponi, A	10005	Hall, I M	10134
Bjerke, J S	10106	Collins, H L	9992	Fish, J R	9961	Halstead, D G H	9901
Bjornstad, H O	10453	Collins, J F	10152	Fisher, W F	10363	Hamilton, K C	10291

AUTHOR INDEX

Hamilton, R I

Hamilton, R I	10335	Joyner, A	10337	Loev, B	10021	Modi, B N	9932
Hamilton, W	10273	July, J R	10338	Long, P L	10378	Mohrig, W	10077
Hammad, S M	10242	Kadel, W L	10339	Lopez-Gorge, J	10379	Mohyuddin, A I	10272
Hanbal, I	10242	Kadoun, A M	10044	Lowe, M D	10030	Monastero, S	10256
Hanna, A D	10245	10413, 10414		Lower, H F	10253	Monteoliva, M	10379
Hansberry, R	10411	Kaiser, M N	9908	Lucchesi, J C	10162	Mookherjee, P B	10251
Hansing, E D	10189	Kajita, H	10045	Luke, H H	10183	10388	
Hardcastle, W S	10315	Kalra, A N	10046	Lutz-Ostertag, y	10430	Moore, A D	10247
flarjai, S C	9971	Kamm, J A	10047	Lyall, M	10344	Moore, B J	10206
10027		Kanitz, S	10395	Lykken, L	10278	Moraes, W B C	10443
Harley, J M B	10028	Kar, N C	10352	MacCollom, G B	10399	Morland, D E	10299
Harmelin, M L	10123	Karns, P D	10375	MacConnell, W P	10485	Moreno, D S	10101
Harrington, G W	10368	Kaufman, D D	10427	Macer, R C F	10200	Morey, D I	10199
Harrison, R A	10128	Kaul, C I.	10043	Mackauer, M	10059	Morgan, I	10347
Hart, I. T	10429	Kaurava, A S	10259	Mackay, R J	10060	Morgan, P W	10300
Hatta, R	10190	Kavadia, V. S.	10048	Macruz, R	10327	Moriarty, F	10078
Hawes, D	10459	Kawahara, F K	10396	Magnoler, A	10061	10079	
Haynes, W C	10029	Kay, B L	10283	Mahoney, D F	10345	Morris, O N	10257
flayward, K J	9902	Kearby, W H	10049	Maitland, P S	10062	Moseman, J G	10207
Heaton, G C	10141	Kearney, P C	10468	Maitlen, J C	10471	Mosna, B	10005
Helling, C S	10468	Keaton, J A	10311	Mall, S B	10063	Muckenthaler, F A	9961
Helrich, K	10412	Keith, J A	10406	Malone, B	10416	Mukherjee, D	10352
10467		Keller, J C	10025	10472		Muma, M H	10264
Hely, P C	10466	Kelley, D C	10339	Mance, V	10169	Murray, M D	10347
Henzell, R F	10030	Kennedy, J S	10050	Margolin, P	10329	Muslero, P B de	10334
Hepper, H C	9903	Kennett, C E	10252	Martin, J P	10400	Musumeci, M R	10443
Herhert, T T	10191	Kerr, H D	10294	Mathot, G	9916	Nair, M R G K	10319
Hermanson, H P	10412	Kevan, D K M	9909	Mathur, K C	10254	Nakajima, M	10437
10467		Khan, N H	10096	Mathur, I. M I.	10064	Nakano, A	10338
Hewitt, G B	10246	Khan, R M	10250	Mathur, S B	10201	Nalewaja, J D	10293
Hewlett, P S	10031	Khandelwal, G L	10193	Mathys, G	10065	10301, 10440	
Hickin, N E	9904	Khoo, S G	10051	May, C	10280	Narain, A	10208
Himel, C M	10247	Kianta, B	10157	McCalmont, J R	10282	Navarro, S	10389
Himme, M van	10307	Kiesling, R L	10194	McCart, M	10417	Neff, S E	10080
Hodges, R W	9905	Kilpatrick, R A	10195	McCoy, C E	10016	Neisham, O	10209
Hoengsberg, H F	10156	Kim, Y B	10340	McCoy, C W	10264	Nestorova, E	10165
Holbrook, F R	10032	Kimbrough, J W	10022	McCully, K A	10465	Neundorf, M V	10460
Holloway, J D	10033	King, E G	10052	10473		Newson, L D	10402
Holthaus, L M	10106	Kinugawa, J	10190	McDaniel, B	9917	Nieser, N	9922
Hoogstraal, H	9908	Klassen, W	10100	McDonough, L M	10471	Nieuwenhuis, E J	9923
Hopkins, D E	10034	Klein, J M	9910	McDowell, L L	10392	Nikolajev, G V	9924
Horn, D H S	10130	Kline, D M	10196	McEnroe, W D	10067	Nikolova, V	10081
Horn, D J J	9937	Knulle, W	10053	McFlachlan, A J	10066	Nilsson-Tillgren, T	10210
Howe, R W	10035	Knuth, L A	10312	McGavin, M D	10346	Nilsson, M R	10348
Howland, A F	10248	Kohler, H.	10428	McGuire, J M	10206	10349	
Huang, Y-M	10164	Kolehmainen-Seveus, L	10210	McGurk, D J	10138	Nineham, A W	10355
Hubby, J. L.	10159	Koob, K	10111	McLaughlin, R E	10068	Nooden, L D	10444
Hudson, N M	9876	Kopp, E	10271	McMahon, K J	10415	Norgard, D W	10106
Huggans, J L	9937	Koprowski, H	10360	McNew, G L	10202	Norland, J F	10100
Hukuhara, T	10126	10361		McShan, W H	10106	Norman, P A	10258
Hull, R J	10292	Kovoor, A	10439	McWhorter, C G	10309	Norris, D M	10082
Hunter, R C	10408	Koyumdjieva, M	9911	McClelland, G A H	10072	Norris, F A	10454
Huot, I.	9993	10364		Medler, J T	9956	Ochs, G	9925
Hurpin, B	10036	Krehan, I	10129	9957		Odak, S C	10259
10133, 10249		Krogerus, H	9912	Medvedev, L N	9918	Ofori, C S	10445
Hurst, G W	10037	9913		Meggitt, W F	10296	Ogloblin, A A	9926
Hurst, H R	10284	Kugler, J	10054	Mehrotra, K N	10098	Oguni, I	10446
10285		Kulka, M	10222	Meikle, R W	10401	Oldroyd, H	9927
Hylin, J W	10441	Kunze, G W	10397	Meinander, M	9919	Oshima, K	10446
Hnicki, R D	10316	Kuratie, H	10295	Meiniel, R	10430	Ou, S H	10198
Imaseki, H	10446	Kuwert, E	10360	Meneghini, M	10443	Padhi, G K	10262
Ing, B	10038	10361		Menhinick, E F	10069	Pal, B P	10211
lnukai, T	10318	L'Arrivee, J C M	10020	10255		Pamic, S	10169
Iperti, G	10039	Lacher, V	10055	Menon, M G R	9920	Pan, M L	10083
Israel, P	10075	Lagace, C F	9914	10365		Pandey, N D	10084
Ivashkin, V M	10382	Lal, R.	10048	Menon, m G R	9921	Pant, N C	9974
Jackson, C G	10040	Lamartiniere, C A	10429	Mentzelos, I	10070	10098	
Jackson, D	9906	Lamey, H A	10197	Merkle, M G	10300	Panwar, V P S	9988
Jacob, A	10319	Lammler, G	10341	Merkle, O G	10195	Papasolomontos, A	10212
Jacobsen, N S	10368	Larson, A D	10429	Mertz, D B	10071	Papavizas, G C	10213
Jacobson, M	10025	Launer, J E	10469	Messner, B	10077	Pareek, R P	10438
Jagadish, A	9867	Lavciev, V	10165	Metabele,	10168	Parikh, G C	9917
Jakovljevic, D	10336	Lavers, D W	10376	Meyer, R E	10300	Parker, A H	10085
Jaques, R P	10041	Lavy, T L	10477	Meyers, J	10073	Parker, B	10399
Jarnicka-Stanios, H	10042	Lawrence, J H	10470	Meynadier, G	10036	Parry, W H	10086
Jeannin, G	10439	Lee, C C	10377	10133		Parshad, B	9948
Jefferies, D J	10425	Lee, D L	10378	Michno-Zatorska, Z.	10203	10087, 10117	
Jeffery, L S	10293	Lee, W R	10147	Millard, B J	10378	Parsons, D A	10392
Johnson, J	10383	LeGrand, H E	10398	Miller, B E	10007	Patana, R	10040
Johnson, R R	10442	Leibovitz, L	10342	Miller, T	10073	Patel, H K	10088
Johnstone, D B	10399	Lempke, B J	10056	10074		Patel, V C	10088
Jonathan, J K	9897	Lensny, Y	10057	Milles, K	10271	Pathak, K D	10228
Jones, J P	10192	Lenz, M	10343	Milthollon, R W	10297	Pathak, M D	10234
Jordan, P A	10375	Lewis, D J	9915	Milo, G E	10204	Pavan, C	10158
Joshi, H C	10043	Lewontin, R C	10159	Minshall, W H	10298	Pearson, K G	10089
10250		Liang, T T	10058	Minter, D M	9915	Pearl, G R	10351
Joshi, L M	10228	Lichtenstein, E P	10058	Misato, T	10205	Pederson, V D	10214
Joshi, M M	10178	Ling, K C	10198	Misawa, T	10180	Pegler, D N	10215
Josifov, M	9907	Lingg, A J	10415	Mishra, R K	10266	10216, 10217, 10218	
Joslyn, J J	10485	Linn, M B	10209	Misra, B C	10075	Pelov, P	9928
Jotwani, M G	10251	Littrell, R H	10199	Misra, S S	10365	Penney, M M	10062
10270, 10388		Lloyd, C J	10114	Mitchell, R	10076	Perelents, C	10136

AUTHOR INDEX

Zuberi, R I

Perkow, W	10474	Savulescu, A	10221	Stahl, J	10065	Villemson, S	10187
Perrott, D C F	10090	Saxena, D K	10263	Stallman, N D	10358	Vir, D	10228
Peters, E J	10303	Saz, H J	10369	Staples, K J	10357	Voerman, S	10479
Peters, J V	9929	Schaerffenberg, B	10353	Steele, R W	10237	Voss, G	10419
Petrova, N A	10150	Schall, E D	10356	Steiner, J	10323	Wadh, S R	9948
Phatak, H C	10201	Scheinberg, E	10161	Stenersen, J	10449	Waerebeke, D. van	10039
Phelps, R J	10091	Schildknecht, H	10111	Steward, K K	10306	Wagner, E	9949
10092		Schmeling, B von	10222	Stickel, L F	10407	9950, 9951, 9952	
Philogene, B J R	10093	Scholtzseck, E	10012	Stoffolano, J G	10120	Waiss, A C	10481
Piercy, C K	10337	10354		Stone, E	10406	Waldbauer, G P	9973
Pitre, H N	9992	Schroder, R F W	9937	Strambi, A	10121	Wallace, H A H	10229
Poinar, G O	10094	Schulz, K R	10058	Streams, F A	10122	Wallace, J B	10080
Pokrovskiy, A A	10418	Selhime, A G	10264	Streu, H T	10018	10139	
Pollard, E	10260	Sevastopulo, D G	9938	Stritzke, J F	10303	Waller, G R	10138
Porter, M L	10475	9939		Strout, R G	10354	Ware, G W	10403
Posada O, L	10261	Shaldybida, E S	9940	Struble, G R	10267	10480	
Power, R J B	10095	Sharma, G C	9988	Stryckers, J	10307	Waterston, J M	10215
Pradhan, S	10390	Sharma, S K	10112	Stussi, T	10123	10216, 10217, 10218	
Prakash, O	10208	Shatoury, H H	10113	Sullivan, D T	10450	Wathanakol, L	10197
Prakash, S	10159	Shaw, D D	10114	Sullivan, N D	10358	Watson, D W	10340
Prasad, R	10193	Shaw, W C	10486	Sumina, I	10190	Watt, J C	9953
Prasher, R D	10188	Shay, J W	10115	Surin, P	10197	10140	
Price, R D	9930	Sheridan, J E	10223	Sutton, R A	10258	Wax, L M	10312
Price, W C	10219	Sherwood, C R	10465	Suzuki, S	10190	Wegorek, W	10124
Prufer, P	10431	Shishido, T	10426	Swanson, C R	10308	Weise, G	10431
Pryor, R L	10447	Shrivastav, H P O	10381	Switzer, C M	10286	Wene, G P	10269
Puscasu, A	10221	Shulman, S	10166	10287, 10288		Westwood, M N	10453
Puthz, V	9931	Siddiqui, K H	9988	Szmidt, A	10124	Weststein, D von	10210
Rael, C D	10007	Siewierski, M	10412	Tahori, A S	10125	Wheeler, J R	10007
Rahman, S J	10096	10467		Tallent, W H	10461	Wheeler, W B	10420
Rahn, E M	10295	Silfverberg, H	9941	Tamura, B	10190	Whitham, F	9987
Rawat, R R	9932	Silverstein, R M	10105	Tanada, Y	10126	Whitworth, J W	10313
10097, 10263		Simanton, W A	10264	Tasehev, D G	9943	Wicks, G A	10277
Rawnsley, J	10391	Simmons, E E	10115	Taylor, H J	10030	Wiktor, T J	10360
Ray, B	10304	Sinclair, W	9942	Taylor, R W	9944	10361	
Ray, S	10098	Singh, G R	10224	Taylor, T A	10268	Wilcox, J	10248
Raychaudhuri, S P	10176	Singh, J	10320	Taylorson, R B	10309	Wilcox, M	10304
Read, K H	10483	10478		Taylorson, R. B.	10451	10314	
10484		Singh, O P	10116	Teasley, J I	10421	Wiley, M	10481
Reich, F P	10099	Singh, R P	10087	Teller, W H	10083	Wilkin, D R	10387
Reich, J J	10099	10117		Teotia, T P S	10084	Wilkinson, R E	10315
Reid, W. M	10383	Singh, V S	10127	10116, 10127, 10135		Williams, M C	10454
Reinecke, L H	10100	Sinha, R C	10238	Thiele, G F	10128	Williams, P W	10421
Rhodes, L J	10029	Sirear, P	10251	Thiele, H U	10129	Williams, S A	9954
Rice, R E	10101	10270, 10388		Thind, B S	10226	9955	
Rich, S	10476	Skryabine, K I	10382	Thomas, C	10376	Wilson, H P	10316
Richard, G	10220	Slack, R	10355	Thomas, H	10374	Wimber, D E	10151
Riek, E F	9933	Slater, C H	10305	Thomson, J A	10130	Wisk, E L	10317
Riemann, J G	10102	Slife, F W	10312	Thorson, B J	10102	Wollberg, Z	10054
Riemer, D N	10448	Smiley, I E	10356	Tigner, J A	10119	Wollerman, E H	10141
Riner, J C	10482	Smith, C N	10118	Tint, H	10359	Wood, R H	10362
Riteher, P O	9934	Smith, K M	9960	Todd, D H	10131	Woodmansee, C W	10295
Robards, G E	10351	Smith, P D	10162	Toth, S J	10448	Wolf, C	10362
Robert, P	10036	Smith, R. F.	10265	Tottenham, C E	9945	Worf, G L	10171
Roberts, P A	10160	Smith, W H	10225	Tsukamoto, M	10163	Wrage, L J	10171
Robinson, M H	10103	Snow, K R	9962	Tueller, P T	10310	Wright, D S C	10186
Roek, G C	10104	Sobel, Z	10125	Uffen, R W J	10132	10230, 10231	
Rodin, J O	10105	Sobolev, A A	10382	Umbarger, H E	10329	Wright, F C	10482
Roeth, F W	10477	Sokol, F	10360	Upchurch, R P	10311	Wu, Y F	10455
Roller, H	10106	Soller, M	10125	Uritani, I	10446	Yadav, T D	10251
Rosay, B	10107	Sonenshine, D E	10119	Vaehrabhorn, V	10223	10270, 10388	
Rosen, D	9964	Sousa, O E	10015	Vago, C	10036	Yadava, D R	10084
Rossler, Y	9964	Spadafora, R R	10053	10133		Yamamoto, H	10190
Roth, L. M	9935	Spangler, P E	10442	Vail, P V	10134	Yarwood, C E	10232
Round, M C	10380	Spink, W T	10052	Vakil, U K	10324	Yeo, C Y	10458
Rounds, H D	10108	Spratt, D M	10376	Varma, J P	10227	Yinon, U	10142
Rozen, J G	10109	Springer, W T	10383	Varshney, R K	10135	Yonke, T R	9956
Ruth, G	10335	Sreenivasan, A	10324	Vasilev, I B	9946	9957	
Saeahan, J N	10110	Srekajs, A	10169	Vendrell, M	10452	York, G	9937
Sahu, H R	10097	Srivastava, B I S	10204	Venkatesh, M V	10027	Young, J A	10283
Salceda, V M	10153	Srivastava, B K	10433	Verecke, A	10136	Young, W R	9988
Saldarriaga V, A	10261	Srivastava, B P	10266	Verma, P S	10177	Yurkiewicz, W J	10143
Sands, W A	9936	Srivastava, M L	10087	Vetch, J VAN DER	9947	Zahner, H	10341
Sasmal, N	10352	Srivastava, P D	10320	Vevai, E F	10137	Zavattari, E	10144
Satpathy, J M	10262	10321, 10322		Viek, K	10138	Zemskaya, A A	10145
		Srivastava, Y N	10320			Zuberi, R I	10173

ORGANIZATIONAL INDEX

- Abbott Labs., North Chicago, Ill.
10460
- Agricultural Research Council (Central Africa)
10092
- Agricultural Research Council (Central Africa)
Tsetse Biology Unit
10091
- Agricultural Research Service, Beltsville, Md.
Crops Research Div.,
10196
- Agricultural Research Service, Hyattsville, Md.
Animal Health Div.
10325
- Aligarh. muslim University
10096
- Allied Chemical Corp., New York, N. Y.
10362
- American Cyanamid Co., Stamford, Conn.
10337
- American Home Products Corp., New York, N. Y.
10359
- Arkansas. university
Dept. of Entomology, Fayetteville, Ark
10016
- Auckland. university
Dept. of Botany
10175
- Australia. commonwealth Scientific and Industrial
Research
Organization; Plant Physiology Unit, Ryde
10452
- Belgium. rijksfakulteit der
Landbouwwetenschappen, Ghent
10307
- Bundesanstalt für Materialprüfung, Berlin-
dahlm,
West Germany; Fachgruppe, Biologische Materi-
alprüfung
10343
- Calicut. centre
Dept. of Zoology
9978
- California. dept. of Public Health
Bureau of Vector Control, Fresno
10107
- California. university
Dept. of Biological Control, Riverside
10241
- Cambridge. university
Moltano Institute
10370
- Canada. atomic Energy
Biology and Health Physics Division, Chalk
River
9984
- Canada. dept. of Agriculture
Research Station, Nova Scotia
10041
- Canada. Dept. of Agriculture
Research Institute
10059
- Chas. Pfizer and Co., Inc., New York, N. Y.
10330
- Cold Spring Harbor Laboratory, N. Y.
10329
- Consortium für Elektrochemische Industrie G.
m.b.H.,
Munich, Germany
10271
- Delaware. university
Dept. of Plant Science
10295
- Department of Agriculture, Washington, D. C.
Agricultural Research Service
10331, 10384
- Dept. of Agriculture, New South Wales
10466
- Dow Chemical Co., Midland, Mich.
10281
- Durham. university
Dept. of Zoology, England
9975
- East African Trypanosomiasis Research
Organization, Uganda
10028
- England. agricultural Research Council
Pest Infestation Laboratory
10114
- Entebbe. east African Virus Research Institute.
10072
- Entomological Society of Helsinki
9941
- Florida. university
Dept. of Agronomy
10304
- Florida. university
Dept. of Zoology
10076
- Forest Service Madison, Wisc.
Forest Products Lab.
10182
- France. centre National de la Recherche
Scientifique,
Montpellier
10133
- France. institut National de la Recherche
Agronomique
Station de Recherche Cytopathologiques, Mont-
pellier
10019
- France. organisation Internationale de Lutte
Biologique
9893
- France. organization Internationale de Lutte
Biologie
10249
- Georgia. university
Dept. of Poultry Science
10383
- Georgia. university
Dept. of Zoology and Institute of Ecology
10255
- Georgia. university College of Agriculture
10274
- Glasgow. university
Dept. of Zoology
10062
- Government Agricultural College, Kanpur
10116
- Harvard University
Biological Laboratories
9981, 9982, 9983
- Hawaii. university
Dept. of Agricultural Biochemistry
10441
- Ibadan. university
Dept. of Zoology
10085
- Illinois. university
Dept. of Entomology
10074
- Indian Agricultural Research Institute
Division of Entomology, Delhi
10088
- Indian Agricultural Research Institute
Division of Entomology, New Delhi
10048
- Indian Agricultural Research Institute
Division of Mycology and Plant Pathology, New
Delhi
10201
- Indian Lac Research Institute
Division of Entomology, Ranchi
10135
- Israel. institute for Biological Research, Ness-
Ziona
10125
- Kalyani. university
Dept. of Zoology
9989
- Koln Univ., West Germany
Inst. für vergleichende Tierphysiologie
9968
- Liverpool. university
Dept. of Zoology, England
10051
- London. university
Dept. of Zoology, Surrey
9966
- Louisiana. state University Medical Center
Dept. of Tropical Medicine and Medical
Parasitology
10377
- Menlo Park. stanford Research Institute
Life Sciences Division
10105
- Missouri Univ., Columbia
Agricultural Experiment Station
10483
- Moscow. akademiia Nauk
Gel'mintologicheskai Laboratory, USSR
10382
- National Pest Control Association, Inc.
10385
- Nederlandse Entomologische Vereniging,
Amsterdam
9947
- New South Wales. royal Zoological Society,
Mosman
9929
- North Carolina. state University
Crop Science Dept.
10311
- North Carolina. university
Dept. of Biochemistry
10152
- North Carolina. university
Dept. of Zoology
10162
- North Dakota. state University
Dept. of Agronomy
10440
- North Wales. university College
Dept. of Agricultural and Forest Zoology
10086
- Oak Ridge. national Laboratory
Biology Division, Tenn.
10154
- Oak Ridge. national Laboratory
Radiation Ecology Section
10069
- Oklahoma State Univ., Stillwater
Dept. of Physiology and Pharmacology
10368
- Oregon. state University
Dept. of Entomology
9965
- Oregon. state University
Dept. of Soils
10302
- Ottawa. animal Research Institute
Central Experimental Farm, Canada
10161
- Oxford. university
Hope Dept. of Entomology
10009, 10010
- Pacific Science Center, Seattle, Wash.
10350
- Purdue University
Dept. of Botany and Plant Pathology, Lafayette
10292
- Queensland. dept. of Primary Industries
Animal Health Station, Oonoonba
10346
- Rhode Island. providence College
10024
- Rhodesia. university College
Dept. of Biology
10066
- Rockefeller University, New York (city)
10153
- Smith Klein and French Labs., Philadelphia, Pa.
10021
- Societe de Zoologie agricole
Laboratoire de Zoologie, Paris, France
10149
- Society of Chemical Industries, Belgrave Square,
London
10436
- Society of Chemical Industry, Belgrave square,
London
10462
- Sofia. academie Bulgare des Sciences
Section de Biologie
9868, 9872, 9873, 9911, 9943, 9946, 10081,
10165, 10371
- Sofia. Academie Bulgare des Sciences
Section de Biologie
9871, 9907, 9928
- South London Entomological and Natural History
Society,
England
9904
- Southampton. university
Dept. of Zoology
10011
- Surrey. commonwealth Mycological Institute
10215, 10216, 10217, 10218

ORGANIZATIONAL INDEX

- Takeda Pharmaceutical Industries, Ltd., Osaka,
Japan
10190
- Tucuman Nacional Univ. argentina
Inst. Miguel Lillo
9902
- Tucuman Nacional Univ., Argentina
Inst. Miguel Lillo
9926
- U. S. agricultural Research Service.
Crop Production Engineering Research Branch
10484
- U. S. dept. of Agriculture. agricultural Research
Service
Boll Weevil Research Laboratory, State College,
Miss.
10068
- U. S. dept. of Agriculture. agricultural Research
Service
Crops Research Division
10299
- U. S. dept. of Agriculture. agricultural Research
Service
Crops Research Division, College Station
10308
- U. S. dept. of Agriculture. agricultural Research
Service
Crops Research Division, Columbia, Mo.
10294
- U. S. dept. of Agriculture. agricultural Research
Service
Entomology Research Division, Riverside, Cal.
10101
- U. S. dept. of Agriculture. agricultural Research
Service
Metabolism and Radiation Research Laboratory,
Fargo, N. D.
10100
- U. S. dept. of Agriculture. cooperative State
Research
Service, Wash., D. C.
10265
- U. S. Agricultural Research Service
9959
- U. S. Agricultural Research Service, Riverside
Entomology Research Division
10134
- Univ. of Illinois, Urbana
10209
- Virginia. polytechnic Institute
Dept. of Entomology
10104
- Wisconsin University. madison
Dept. of Zoology
10106
- Wisconsin. university
Dept. of Entomology, Madison
9956, 9957
- World Review of Pest Control. fisons Limited
Cambridge Division, England
10245

U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

OFFICIAL BUSINESS



POSTAGE AND FEES PAID
U.S. DEPARTMENT OF AGRICULTURE

To stop mailing or to change your
address send this sheet with new
address to Pesticides Information
Center, National Agricultural Library,
Washington, D.C. 20250.

G 3 8 5 3







