

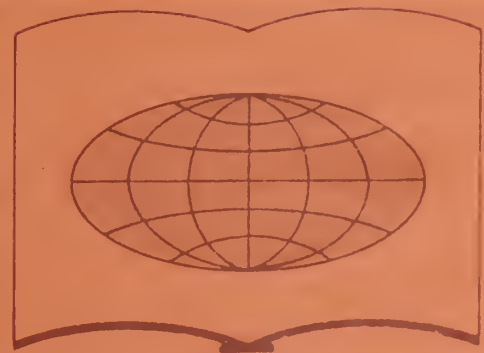
series
241
243

Pesticides DOCUMENTATION BULLETIN

U. S. DEPT. OF AGRICULTURE
NATIONAL AGRICULTURAL LIBRARY

JUN 17 1968

CURRENT SERIAL RECORDS



Volume 4
November 22, 1968

Number 24



Use Pesticides Safely
FOLLOW THE LABEL

U.S. DEPARTMENT OF AGRICULTURE

PESTICIDES DOCUMENTATION BULLETIN

Volume 4
November 22, 1968
Number 24

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.....	3
Genetics.....	7
Medical Entomology.....	*
20 CROP PROTECTION.....	8
Diseases.....	10
Arthropods.....	15
Nematodes.....	17
Weeds.....	18
Other Pests.....	18
30 LIVESTOCK PROTECTION.....	19
Diseases.....	19
Arthropods.....	23
Parasites.....	24
40 COMMODITY PROTECTION.....	24
Storage Diseases.....	*
Arthropods.....	24
Rodents and Other Pests.....	*
Microbial Contamination.....	24
50 ENVIRONMENTAL CONTAMINATION.....	25
55 RESIDUES.....	25
60 TOXICOLOGY.....	25
65 PLANT PHYSIOLOGY & BIOCHEMISTRY.....	25
70 CHEMISTRY.....	27
80 ENGINEERING.....	27
90 INDUSTRY.....	27
Economics.....	27
Education.....	27
Regulations.....	*
SUBJECT INDEX.....	29
BIOGRAPHICAL INDEX.....	83
AUTHOR INDEX.....	91
ORGANIZATIONAL INDEX.....	95

*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

- 21583-68
A METHOD FOR COLLECTING FEATHER LICE (MALLOPHAGA).
D B Crockett
Kans Entomol Soc J 40(2):192-194
Apr 1967 420 K13
Anoplura, Ethyl acetate, Fumigants, Predatory birds, Research.
- 21584-68
APPLICATION OF SCANNING MICROSCOPY IN THE STUDY OF VIRUS TRANSMISSION OF APHIDS.
G A De Zoeten
J Virology 2(7):745-751
Jul 1968 QR360.J6
Aphididae, Insect vectors, Morphology, Plant disease transmission, Plants, Research, Stylets.
- 21585-68
THE RESPONSE OF RHAGOLETIS POMONELLA (WALSH) ADULTS AND OTHER INSECTS TO TRAP BOARDS BAITED WITH PROTEIN HYDROLYSATE BAITS.
A J Howitt L J Connor
Entomol Soc Ontario Proc 95:134-136
1964 420 ON8
Insect pests, Proteins, Research, Rhagoletis pomonella, Tables (data), Traps.
- 21586-68
FLEAS FOUND ON RABBITS AND OTHER MAMMALS FROM A PASTURE.
A R Mead-Briggs R J C Page
Entomol Mon Mag (SER 4) 99(277-9 JAN-MAR):19-22
1963 421 EN86
Insect behavior, Mammals, Oryctolagus cuniculus, Pastures, Research, Tables (data), Traps.
- 21587-68
A FLIGHT TRAP FOR COLLECTING LIVING INSECTS.
W W Nijholt J A Chapman
Can Entomol 100(11):1151-1153
Nov 1968 421 C16
Insect collecting equipment, Insect flight, Insect traps, Scolytidae.
- 21588-68
RESISTANCE PATTERN IN FOUR STRAINS OF INSECTICIDERESISTANT GREEN RICE LEAF-HOPPER, NEPHOTETTIX CINCTICEPS UHLER, COLLECTED IN FIELDS.
K Ozaki Y Kurosu
Jap J Appl Entomol Zool 11(4):145-149
Dec 1967 475 J27
Chemicals, Insect control, Insecticide resistant insects, Insecticides, Nephotettix cincticeps. English summary
- 21589-68
COCKROACH INSECTICIDES. HOW REPELLENT ARE THEY.
B J Smittle G S Burden W A Banks
Pest Contr 36(11):9-10
Nov 1968 449.8 EX8
Blattella germanica, Insect control, Insecticides, Laboratories, Mortality, Research.
- 21590-68
MILKY DISEASE BACTERIA.
K H Steinkraus H Tashiro
Appl Microbiol 15(2):325-333 REF
Mar 1967 448.3 APS
Aging, Bacteria, Culture media, Geography, Insect names, Milky disease, Physiology, Research, Scarabaeidae.
- 21591-68
INFECTION OF CULTURED SILKWORM EMBRYOS WITH THE CYTOPLASMIC-POLYHEDROSIS VIRUS. (JA)
T Takam H Sugiyama T Kitazawa T Kanda
Jap J Appl Entomol Zool 11(4):182-186
Dec 1967 475 J27

Anatomy, Bombyx mori, Culture media, Cytoplasm, Injections, Polyhedroses, Research, Virus diseases (insects).

- 21592-68
TERMITES- ROASTED OR AS A SOUP. (GE)
P Valentin
Kosmos 64(10):424-425
Oct 1968 474 K842
Food, Insect behavior, Insect traps, Proteins, Temperature, Termites, Vitamins, Weather.
- 21593-68
ALDRIN, DIELDRIN, ENDRIN, AND CHLORDANE PERSISTENCE--A 3-YEAR STUDY.
G Winnett J P Reed
Pest Mont J 2(3):133-136
Dec 1968 SOB951.0A10P41
Aldrin, Chlordane, Dieldrin, Endrin, Insect pests, Pest control, Pesticides, Soils, Tables (data).

SYSTEMATICS

- 21594-68
SOME ORTHOPTEROID INSECTS OF THE ORDERS BLATTOPTERA, ORTHOPTERA, AND DERMAPTERA FROM AFGHANISTAN. (RUS)
G Ja Bey-Bienko
Acta Ent Bohemoslov 64(6):407-438 REF
20 Nov 1967 420 C33
Blattidae, Catalogs, Dermaptera, Insect taxonomy, Orthoptera, Zoogeography. English and Czech abstract
- 21595-68
NOTES ON MALLOPHAGA ON THE ASIATIC WILD ASS AND BISONS.
D I Blagoveschenskiy
Entomol Rev 46(4, OCT-DEC):513-515
Dec 1967 421 R322AE
Bovicola, Insect taxonomy, Parasitic insects, Wildlife. Russian journal pp. 860-863
- 21596-68
A NEW SPECIES OF BLACK FLY OF THE GENUS GYMNOPAIS (DIPTERA, SIMULIIDAE) FROM THE ALTAI.
S I Bobrova
Entomol Rev 46(4, OCT-DEC):529-530
Dec 1967 421 R322AE
Insect taxonomy, Simuliidae. Russian journal pp. 884-886
- 21597-68
PSEPHENUS (COLEOPTERA: PSEPHENIDAE) PARASITIZED BY A NEW CHALCIDOID (HYMENOPTERA: EULOPHIDAE), I. DESCRIPTION OF THE PARASITE.
B D Burkes
Entomol Soc Amer Ann 61(2):450-452
15 Mar 1968 420 EN82
Aquatic insects, Chalcididae, Eulophidae, Insect taxonomy, Parasitic insects, Psephenivorus mexicanus, Psephenus texanus.
- 21598-68
A FAUNISTIC STUDY OF PHILIPPINE APHIDS (APHIDIDAE, HOMOPTERA).
V J Calilung
Philippine Agr 51(2):93-170 REF
Jul 1967 25 P542
Aphididae, Insect identification, Insect taxonomy, Zoogeography.
- 21599-68
A NEW GENUS AND SPECIES OF APHIDIDAE (HOMOPTERA) ON PREMNA ODORATA BLANCO.
V J Calilung
Philippine Agr 51(2):89-92
Jul 1967 25 P542
Aphididae, Insect taxonomy.
- 21600-68
CONTRIBUTION TO THE FAUNA OF THE CONGO (BRAZZAVILLE). MISSION A. VIL-
LIERS AND A. DESCARPENTRIES. L. ORTHOPTERA GRYLLODEA. (FR)
L. Chopard
Inst Fondamental Afr Noire Bull Ser A Sci Natur (SER A) 29(2):758-776
Apr 1967 515 D14
Catalogs, Gryllidae, Insect taxonomy, Zoogeography.
- 21601-68
AN UNDESCRIBED PHYTOSEIUS FROM FLORIDA AND MEXICO. (ACARINA: PHYTOSEIIDAE).
D De Leon
Entomol News (philadelphia) 71(10):269-270
Dec 1960 421 EN88
Insect identification, Insect taxonomy, Phytoseius. Research.
- 21602-68
THE TREEHOPPERS OF WISCONSIN IN RELATION TO THE TENSION ZONE (HOMOPTERA, MEMBRACIDAE).
C J Dennis
Amer Midland Natur 81(1):236-242 MAP
Jan 1969 410 M58
Catalogs, Insect ecology, Membracidae, Zoogeography.
- 21603-68
STANDARD NAMES FOR COMMON INSECTS.
New Zeal J Agr 114(1):97-99, 101 (CONT.)
Jan 1967 23 N48J
Catalogs, Insect names.
- 21604-68
STATUS OF ZODION ZEBRINUM, Z. AURICAUDATUM, AND Z. ALBONOTATUM (DIPTERA: CONOPIIDAE).
B A Freeman
Entomol Soc Amer Ann 61(2):276-278 REF
15 Mar 1968 420 EN82
Conopidae, Diptera, Insect taxonomy. Synonymy and misidentification
- 21605-68
WESMAELIUS BALTICUS TJEDER, 1931 (NEUROPTERA, PLANIPENNIN) NEW TO NORWAY.
L Greve
Norsk Entomol Tidsskr 14(2):68-69 MAP
1967 421 N812
Insect taxonomy, Neuroptera, Zoogeography.
- 21606-68
NOTES ON ECPHYLUS FORST. AND DESCRIPTION OF TWO NEW SPECIES (ICHNEUMONOIDEA, BRACONIDAE, DORYCTINAE).
K J Hedqvist
Entomol Tidskr 88(1-2):66-71
1967 421 EN891
Braconidae, Insect taxonomy, Zoogeography.
- 21607-68
A NUMERICAL TAXONOMIC STUDY OF THE GENUS PSOROPHORA (DIPTERA: CULICIDAE).
J A Hendrickson R R Sokal
Entomol Soc Amer Ann 61(2):385-392 REF
15 Mar 1968 420 EN82
Aedes, Culicidae, Insect taxonomy, Psorophora.
Abstract: Study of phenetic relationships among 29 species of culture mosquitoes based on 158 adult characters. findings are reported as phenograms based on correlation and distance coefficients, and as graphs representing the positions of the species in a 3-dimensional factor space.
- 21608-68
THE MALE OF NEOASPIA PETSAMOENSIS KANERVO (DIPT., SYRPHIDAE) WITH REMARKS ON THE FEMALES AND THE DISTRIBUTION OF THE SPECIES.
H Hippa
Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(4):256-260
20 Dec 1967 421 SU7

ENTOMOLOGY

21609-68

Insect taxonomy, Syrphidae, Zoogeography.

21609-68

A REDESCRIPTION OF NEOASCIA AENEA MEIG. (DIPT., SYRPHIDAE).

H Hippa

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(2):113-117 MAP REF

30 Aug 1967 421 SU7

Insect taxonomy, Syrphidae, Zoogeography.

21610-68

COLEOPTERA IN SOUTHERN NORDLAND.

C Johnson

Norsk Entomol Tidsskr 14(2):70-82 MAP
1967 421 N812

Catalogs, Coleoptera, Insect taxonomy, Zoogeography.

A catalog of Coleoptera species found in southern Norway in the summer of 1965 is given.

21611-68

HADRODACTYLUS BRANDERI SP. N. (HYM., ICHNEUMONIDAE) FROM FINLAND.

R Jussila

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(3):148-151

02 Nov 1967 421 SU7

Ichneumonidae, Insect taxonomy.

21612-68

CATALOGUE ON THE INDIAN DERMAPTERA.

V C Kapoor

Agra Univ J Res Sci 16(PT 1):1-42

Jan 1967 513 AG8

Catalogs, Dermaptera, Insect taxonomy, Zoogeography.

21613-68

CATALOGUE ON THE INDIAN DERMAPTERA.

V C Kapoor

Agra Univ J Res Sci 16(PT:1):1-42

Jan 1967 513 AG8

Catalogs, Dermaptera, Insect taxonomy.

21614-68

SOME ANATOMICAL DIFFERENCES OF POSSIBLE TAXONOMIC VALUE IN THE FEMALE REPRODUCTIVE ORGANS OF SITOPHILUS (CURCULIONIDAE: COLEOPTERA).

N R Khan A J Musgrave

Can Entomol 100(11):1226-1228

Nov 1968 421 C16

Anatomy, Coleoptera, Curculionidae, Sitophilus, Taxonomy.

21615-68

REVISION OF SPHAEROCERA, WITH DESCRIPTION OF A NEW GENUS AFROMYIA (DIPTERA: SPHAEROCERIDAE).

K C Kim

Entomol Soc Amer Ann 61(2):296-312 REF

15 Mar 1968 420 EN82

Afromyia, Insect identification, Insect taxonomy, Sphaerocera, Sphaerocera richardsi, Sphaerocera tuberculosa, Zoogeography.

21616-68

TWO NEW SPECIES OF NOCTUID MOTHS OF THE GENUS PALLUPERINA HMPs. (LEPIDOPTERA, NOCTUIDAE).

Z F Klyuchko

Entomol Rev 46(4,OCT-DEC):519-521

Dec 1967 421 R322AE

Insect taxonomy, Noctuidae. Russian journal pp. 869-872

21617-68

THE ROLE OF CHEMICALS IN THE GENERAL INSECT CONTROL PICTURE.

E F Knipling

Entomol Soc Amer Bull 14(2):102-107 REF

Jun 1968 423.9 EN8

Bacillus thuringiensis, Chemicals, Chemosterilants, Heliothis zea, Insect control, Insecticides, Population.

BIBLIOGRAPHY

21618-68

NEW AND LITTLE-KNOWN SPECIES OF ALEYRODIDS (HOMOPTERA, ALEYRODOIDEA) FROM CRIMEA.

V G Korobitsin

Entomol Rev 46(4,OCT-DEC):510-512

Dec 1967 421 R322AE

Aleyrodidae, Insect taxonomy. Russian journal pp. 857-859

21619-68

A NEW EMPIDID, PLATYPALPUS CAUCASICUS, SP. N. (DIPTERA, EMPIDIAE), FROM NORTH CAUCASUS.

V G Kovalev

Entomol Rev 46(4,OCT-DEC):531-532

Dec 1967 421 R322AE

Empididae, Insect taxonomy. Russian journal pp. 887-889

21620-68

A REVISION OF THE GENUS BLISSUS (HETEROPTERA: LYGAEIDAE) IN EASTERN NORTH AMERICA.

D E Leonard

Entomol Soc Amer Ann 61(2):239-250 REF

15 Mar 1968 420 EN82

Blissus, Heteroptera, Insect taxonomy, Lygaeidae.

21621-68

DATA ON THE CADDISFLY (TRICHOPTERA) FAUNA OF SIBERIA AND THE FAR EAST.

I M Levanidova

Entomol Rev 46(4,OCT-DEC):467-470

Dec 1967 421 R322AE

Catalogs, Insect taxonomy, Trichoptera, Zoogeography. Russian journal pp. 793-798

21622-68

THREE NEW SPECIES OF AFRICAN GABRIUS (COL. STAPHYLINIDAE PHILONTHINI). (FR)

L Levasscur

Inst Fondamental Afr Noire Bull Ser A Sci Natur (SER A)29(2):653-656

Apr 1968 515 D14

Insect taxonomy, Staphylinidae.

21623-68

NEW RECORDS OF CARABIDAE (COLEOPTERA) FROM NORTHUMBERLAND.

M L Luff

Entomologist (london) 101(1264):193-195

Sep 1968 421 EN8

Carabidae, Coleoptera, Taxonomy, Zoogeography.

21624-68

A REVIEW OF TWELVE APHID SPECIES DESCRIBED AS NEW BY EDITH M. PATCH.

M E MacGillivray

Entomol Soc Amer Ann 61(2):338-362 REF

15 Mar 1968 420 EN82

Acyrtosiphon, Aphididae, Dactynotus, Insect morphology, Insect taxonomy, Macrosiphum, Neocorylobium.

21625-68

GALL MIDGES OF THE USSR. 7. NEW SPECIES OF NONCECIDOGENOUS GALL MIDGES OF THE TRIBE OLIGOTROPHINI (DIPTERA, CECIDOMYIIDAE).

B M Mamayev

Entomol Rev 46(4,OCT-DEC):522-528 REF

Dec 1967 421 R322AE

Catalogs, Cecidomyiidae, Insect taxonomy. Russian journal pp. 873-883

21626-68

A NEW SPECIES OF FAHRENHOLZIA (ANOPLURA: HOPLOPLEURIDAE) FROM TEXAS, WITH A KEY TO THE SPECIES OF THE GENUS AND A LIST OF THEIR KNOWN HOSTS.

B McDaniel

Entomol Soc Amer Ann 61(2):402-405

15 Mar 1968 420 EN82

Anoplura, Fahrenholzia, Hoplopleuridae, Insect taxonomy, Parasitic insects, Rodents.

21627-68

SIX NEW SPECIES AND ONE NEW NAME OF SOME DIPTEROUS FAMILIES FROM JAPAN.

M Miyatake

Shikoku Entomol Soc Trans 8(4):105-114

May 1965 420 SH6

Insect identification, Insect taxonomy, Research, Xylophagus matsumurai, Xylophagus omogenis, Xylophagus albopilosus, Pachygaster japonica, Solva fuscitarsis, Solva shikokuana are insects listed.

21628-68

NEW PALEARCTIC SPECIES OF THE SUB-FAMILY MEDETERINAE (DIPTERA, DOLICHOPODIDAE).

O P Negrobov

Entomol Rev 46(4,OCT-DEC):533-544

Dec 1967 421 R322AE

Catalogs, Dolichopodidae, Insect taxonomy. Russian journal pp. 890-908

21629-68

ON PRESERVING BEETLE LARVAE. (NO)

T Palm

Opusc Entomol 33(1-2):64-68

1968 421 OP7

Coleoptera, Insect preservation, Larvae, Methodology. English abstract

21630-68

GENERA AND SPECIES OF THE DERMAPTERA. 8 EUDOHRNINAE, NEOLOBOPHORINAE, ANCISTROGASTRINAE, DIAPERASTICINAE AND ANECHURINAE (FORFICULIDAE).

E J Popham

Entomologist (london) 101(1264):196-201

Sep 1968 421 EN8

Dermaptera, Taxonomy, Zoogeography. Article includes: Eudohrninae, Neolobophorinae, Ancistrogastriinae, Diaperasticinae, Anechurinae.

21631-68

ON STENUS (PARASTENUS) ALPICOLA FAUVEL AND OTHER DIVERGENTLY EVOLVED PALEARCTIC PARASTENUS-SPECIES (COL., STAPHYLINIDAE). 44. CONTRIBUTION TO THE KNOWLEDGE OF THE STENIDIS. (GE)

V Puthz

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(4):226-256 MAP REF

20 Dec 1967 421 SU7

Insect evolution, Insect taxonomy, Staphylinidae, Zoogeography.

21632-68

A STROBOSCOPIC DEVICE FOR THE STUDY OF FLIGHT IN VERY SMALL INSECTS.

D M Robinson

Entomol Mon Mag (SER 4)99(277-9 JAN-MAR):41-42

1963 421 EN86

Equipment, Insect flight, Insects, Research.

21633-68

TROMBICULID MITES (ACARIFORMES, TROMBICULIDAE) FROM THE CRIMEA.

Ye G Schluger F N Vshivkov

Entomol Rev 46(4,OCT-DEC):545-549

Dec 1967 421 R322AE

Catalogs, Insect taxonomy, Trombiculidae. Russian journal pp. 909-915

21634-68

TRICHOPTERA COLLECTED IN SOR-TRONDELAG COUNTY. (NO)

J O Solem

Norsk Entomol Tidsskr 14(2):65-67 REF

1967 421 N812

Catalogs, Insect taxonomy, Trichoptera, Zoogeography. English abstract

21635-68

MEDOCOSTIDAE--A NEW FAMILY OF CIMICOMORPHAN HETEROPTERA BASED ON A NEW GENUS AND TWO NEW SPECIES

FROM TROPICAL AFRICA . I. DESCRIPTIVE PART.

P Stys

Acta Ent Bohemoslov 64(6):439-465

20 Nov 1967 420 C33

Heteroptera, Insect taxonomy. English and Czech abstracts

21636-68

FINNISH ENTOMOLOGICAL LITERATURE PUBLISHED IN 1966, INCLUDING ECONOMIC ENTOMOLOGY AND CONTROL OF INSECT PESTS.

N A Vappula

*Suomen Hyonteistieteellinen Aikakauskirj Ann**Entomol Fenn* 34(1A):1-22 REF

28 Mar 1968 421 SU7

Bibliography, Catalogs, Economic entomology, Entomology, Insect control, Literature.

21637-68

ENDOPHYTUM ANEMONES (HERING) IN FINLAND (HYM., TENTHREDINIDAE).

V Vikberg

*Suomen Hyonteistieteellinen Aikakauskirj Ann**Entomol Fenn* 33(4):265-268 REF

20 Dec 1967 421 SU7

Insect taxonomy, Leaf miners, Tenthredinidae.

21638-68

ON THE SYSTEMATIC POSITION OF ICHNEUMONIDS OF THE GENERA ODINOPHORA FORSTER AND EXETASTES GRAVENHORST AND DESCRIPTIONS OF NEW SPECIES (HYMENOPTERA, ICHNEUMONIDAE).

G A Viktorov

Entomol Rev 46(4,OCT-DEC):516-518 REF

Dec 1967 421 R322AE

Catalogs, Ichneumonidae, Insect taxonomy. Russian journal pp. 864-868

21639-68

CONTRIBUTION TO THE FAUNA OF THE CONGO (BRAZZAVILLE). MISSION A. VILLIERS AND A. DESCARPENTRIES. XLVIII. HEMIPTERA PYRRHOCORIDAE. (FR)

A Villiers

Inst Fondamental Afr Noire Bull Ser A Sci Natur

29(1):370-374

Jan 1967 515 D14

Catalogs, Insect taxonomy, Pyrrhocoridae, Zoogeography.

21640-68

EXAMINATION OF AFRICAN REDUVIIDAE. II. HARPACTORINAE. GENUS NAGUSTA STAL. (FR)

A Villiers

Inst Fondamental Afr Noire Bull Ser A Sci Natur

(SER A)29(2):657-694

Apr 1967 515 D14

Catalogs, Insect taxonomy, Reduviidae, Zoogeography.

21641-68

CONTRIBUTION TO THE FAUNA OF THE CONGO (BRAZZAVILLE). MISSION A. VILLIERS AND A. DESCARPENTRIES. LIV. HEMIPTERA PLATASPIDAE. (FR)

L Villiers

Inst Fondamental Afr Noire Bull Ser A Sci Natur

(SER A):29(2):807-814

Apr 1967 515 D14

Catalogs, Heteroptera, Insect taxonomy, Zoogeography.

21642-68

A COLLECTION OF SPIDERS FROM SON NORWAY.

P F Waaler

Norsk Entomol Tidsskr 14(2):91-93

1967 421 N812

Catalogs, Insect ecology, Insect taxonomy, Spiders.

21643-68

WHAT IS A BEE .

G M Walton

New Zeal J Agr 114(1):53

Jan 1967 23 N48J

Apidae, Bees, Economic entomology, Hymenoptera, Insect ecology, Insect identification.

A brief description is given of New Zealand bees and wasps, including morphology, ecology and economic values.

21644-68

MIMICRY IN PLANTS AND ANIMALS.

W Wickler

255P. MCGRAW-HILL, NEW YORK

1968 QH546.W53

Animals, Insects, Mimicry, Plants. Translated from German by R. D. Martin. includes insects.

21645-68

HETEROPTERA BEATEN FROM BLACKCURRANTS AT LONG ASHTON RESEARCH STATION IN 1967.

J A Wightman

Entomologist (london) 101(1264):202-204

Sep 1968 421 EN8

Cimicidae, Currants, Heteroptera, Miridae, Pentatomidae, Taxonomy, Tingidae, Zoogeography.

21646-68

GEOMETRIDAE, NEW FOR TURKEY, DISCOVERED IN 1939-42 BY J. ROMIEUX.

E P Wiltshire

Entomol Gesell Basel 14(6,NOV-DEC):151-153

Dec 1964 Q0L461.0E58

Entomology, Geometridae, Insect identification, Insect taxonomy. German summary

21647-68

MORPHOLOGY OF THE MALE PINK SUGARCANE MEALYBUG, SACCHARICOCCUS SACCHARI CKLL. (PSEUDOCOCCIDAE: HOMOPTERA)--PART II. APTEROUS FORM.

R L Yadava

Agra Univ J Res Sci 16(P1):101-133

Jan 1967 513 AG8

Insect morphology, Saccharicoccus sacchari.

21648-68

A NEW GENUS AND THREE NEW SPECIES OF STONEFLIES (PLECOPTERA) FROM CAUCASUS AND CRIMEA.

L A Zhil'tsova

Entomol Rev 46(4,OCT-DEC):505-509

Dec 1967 421 R322AE

Insect taxonomy, Plecoptera. Russian journal pp. 850-856

PHYSIOLOGY AND BIOCHEMISTRY

21649-68

PORPHYRINIA PURPURINA HB. (LEP., NOCTUIDAE), NEW FOR FINLAND. (FI)

J Alvas

*Suomen Hyonteistieteellinen Aikakauskirj Ann**Entomol Fenn* 33(2):112-113

30 Aug 1967 421 SU7

Noctuidae, Zoogeography.

21650-68

MORTALITY DUE TO BACILLUS THURINGIENSIS IN POST-LARVAL STAGES OF SOME LEPIDOPTERA.

T A Angus

Entomol Soc Ontario Proc 95:133-134

1964 420 ON8

Bacillus thuringiensis, Bacteria, Larvae, Lepidoptera, Mortality, Research, Spraying.

21651-68

CONTRIBUTION TO STUDIES OF ZEUZERA 'ZEUZERA PYRINA' L. (LEPIDOPTERA COSSIDAE) IN THE LOWER VALLEY OF THE RHINE: THE LIFE CYCLE AND BIOLOGICAL CHARACTERISTICS OF DIFFERENT STAGES. (FR)

H Audemard

Rev Zool Agr Appl 66(7-9, 3RD

TRIMESTER):65-91 REF

1967 410.9 SO12

Cossidae, Insect biology, Life cycle, Zeuzera pyrina.

21652-68

CROP POLLINATION AND THE FLOWER RELATIONSHIPS OF THE WILD BEES OF LUDHIANA, INDIA (HYMENOPTERA: APOIDEA).

S W T Batra

Kans Entomol Soc J 40(2):164-177

Apr 1967 420 K13

Aging, Bees, Climate, Crops, Insect behavior, Insect identification, Pollination.

21653-68

SLOW AND SPIKE POTENTIALS RECORDED FROM RETINULA CELLS OF THE HONEYBEE DRONE IN RESPONSE TO LIGHT.

F Bauman

J Gen Physiol 52(6):855-875 REF

Dec 1968 447.8 J822

Apidae, Apis mellifera, Bees, Insect physiology, Light, Phototropism, Retina.

21654-68

HYMENOPTERA ASSOCIATED WITH ELM BARK BEETLES IN WYTHAM WOOD, BERKS.

R A Beaver

Soc Brit Entomol Trans 17(P1):141-150 REF

Aug 1967 420 SO15

Hymenoptera, Parasitic insects, Scolytidae, Scolytus multistriatus.

21655-68

LARVAL DIAPAUSE IN THE TICK IXODES RICINUS L. AND ITS DEPENDENCE ON EXTERNAL CONDITIONS. IV. INTERACTION BETWEEN EXOGENOUS AND ENDOGENOUS FACTORS IN THE REGULATION OF LARVAL DIAPAUSE.

V N Belozerv

Entomol Rev 46(4,OCT-DEC):447-451 REF

Dec 1967 421 R322AE

Diapause, Environment, Insect biology, Ixodes ricinus, Larvae, Metamorphosis, Photoperiodism, Temperature. Russian journal pp. 760-768

21656-68

WEATHER CONDITIONS AND DAILY ACTIVITY OF DRAGONFLIES (ODONATA).

B F Belyshev

Entomol Rev 46(4,OCT-DEC):457-460

Dec 1967 421 R322AE

Insect ecology, Insect flight, Odonata, Weather. Russian journal pp. 778-783

21657-68

INTRODUCING QUEEN BEES.

F S Benecke

Agr Gaz New S Wales 78(P1):513-516

Sep 1967 23 N472

Apiculture, Methodology, Queen bees.

Methods of introducing queen bees into bee colonies in Australia are discussed.

21658-68

DEVELOPMENT OF SAMPLING TECHNIQUES AND LIFE TABLES FOR THE FIR ENGRAVER SCOLYTUS VENTRALIS (COLEOPTERA: SCOLYTIDAE).

A A Berryman

Can Entomol 100(11):1138-1147 REF

Nov 1968 421 C16

Aging, Coleoptera, Population, Sampling (statistics), Scolytidae, Scolytus ventralis.

21659-68

INFLUENCE OF SOIL HUMIDITY ON THE LOCATION IN DEPTH OF THE GALLEY BEET WORM DURING A FAVORABLE SEASON. (FR)

J Biernaux

Gembloux Inst Agron Etat Bull 3(2):234-240

1968 105.1 G285

Diplopoda, Insect ecology, Soil moisture, Sugar beets.

Millipedes of sugar-beets (*Blaniulus guttulatus*)

ENTOMOLOGY

21660-68

Bosc. and Archiboreaiulus pallidus Br. Bx.) avoid soils with less than 110 water content but readily dwell in soils with more than 130 water content.

21660-68

OBSERVATIONS ON THE HIBERNATION OF PSILA ROSAE F. (FR)

J Biernaux

Gembloux Inst Agron Etat Bull 3(2):241-248 REF

1968 105.1 G285

Diapause, Larvae, Metamorphosis, Psila rosae, Pupae. English, German and Afrikaan abstract

The hibernating larvae of Psila rosae developed into adults faster than the diapausing pupae.

21661-68

BREEDING INSECTS WITH ARTIFICIAL FOOD. (GE)

M Boness

Umschau 68(18):561

29 Aug 1968 474 UM7

Breeding, Food, Insect pests, Insect rearing, Leaves, Methodology, Plant extracts.

21662-68

THE METHOD OF ACTION OF THE DARK AND LIGHT PHASES ON THE PRODUCTION OF WINGED GYMNOPORES OF DYSAPHIS PLANTAGINEA PASS. (HOMOPTERA, APHIDIDAE). (FR)

L Bonnemaison

Acad Sci Compt Rend Ser D Sci Nat (SER D)267(2, 2ND SEMESTER):218-220

08 Jul 1968 505 P21

Diurnal rhythm, Dysaphis plantaginea, Hormones, Insect physiology, Wings (insects).

21663-68

NOTES ON BIVOLTINISM IN THE LESSER PEACH TREE BORER, SYNANTHEDON PICTIPES (G AND R).

H R Boyce

Entomol Soc Ontario Proc 95:139

1964 420 ON8

Environment, Larvae, Plant cuttings, Reports, Research, Synanthedon pictipes.

21664-68

THE LARVAE AND PUPAE OF THE BRITISH CYLINDROTOMINAE AND LIMONIINAE (DIPTERA, TIPULIDAE).

A Brindle

Soc Brit Entomol Trans 17(P7):151-216 REF

Aug 1967 420 SO15

Catalogs, Insect ecology, Insect morphology, Larvae, Pupae, Tipulidae.

21665-68

EFFECTS OF ALTERING THE COMPOSITION AND VOLUME OF THE HAEMOLYMPH ON WATER INGESTION OF THE BLOWFLY, LUCILIA CUPRINA.

L B Browne

J Insect Physiol 14(11):1603-1620

Nov 1968 421 J825

Consumption, Hcmolymph, Insect physiology, Lucilia cuprina, Research, Sodium chloride, Water.

21666-68

BIOSYNTHESIS AND OCCURRENCE OF FREE AMINO ACIDS IN EGGS OF THE GRASSHOPPER, AULOCARA ELLIOTTI.

D E Bunde J H Pepper

J Insect Physiol 14(11):1635-1649 REF

Nov 1968 421 J825

Amino acids, Aulocara elliotti, Chromatography, Culture media, Insect eggs, Insect rearing, Metabolism, Population, Radioactivity.

21667-68

SIGNIFICANCE OF THE TIME FACTOR IN THE IRRADIATION OF IMAGO INSECTS (EXPERIMENTS ON GRANARY WEEVILS).

I B Bychkovskaya G K Ochinskaya T P Volynova

Radiobiology 8(2):93-98 REF

Nov 1968 442.8 R11AE

BIBLIOGRAPHY

Chemical control (insects), Cureulionidae, Insect physiology, Irradiation, Larvae, Mortality, Time. Russian journal- vol.8(2):235-238, 1968

21668-68

THE AUSTRALIAN PLAGUE LOCUST CHORTICETES TERMINIFERA.

M Casimir

Agr Gaz New S Wales 78(P11):626-632

Nov 1967 23 N472

Chemical control (insects), Chortoicetes terminifera, Insect outbreak forecasting, Life cycle, Lindane, Spraying.

The life cycle and habits of Chortoicetes terminifera, the Australian plague locust and its chemical control and outbreak forecasting are discussed.

21669-68

ECOLOGY OF GOMPHOMASTAX CLAUATA PLOTNIKOVI C. BOL. (ORTHOPTERA EUMASTACIDAE).

M Ye Chernyakhovskiy

Entomol Rev 46(4,OCT-DEC):452-456

Dec 1967 421 R322AE

Acrididae, Food habits, Insect behavior, Insect ecology, Insect physiology, Life cycle, Zoogeography. Russian journal pp. 769-777

21670-68

THE RELIABILITY OF A METHOD OF SAMPLING STREAM INVERTEBRATES.

F M Chutter R G Noble

Arch Hydrobiol 62(1):95-103

May 1966 410 AR28

Aquatic insects, Ecology, Invertebrates, Methodology, Sampling (statistics), Surveys.

21671-68

THE MODIFICATION OF ADULT LIFE SPAN IN BRACON HEBETOR (HYMENOPTERA: BRACONIDAE) BY IRRADIATION IN NITROGEN.

A M Clark R E Smith

Entomol Soc Amer Ann 61(2):541-542 REF

15 Mar 1968 420 EN82

Air, Bracon hebetor, Braconidae, Gamma rays, Insect behavior, Longevity, Nitrogen, X-rays.

21672-68

LOCALIZATION AND DESCRIPTION OF STRETCH RECEPTORS AT THE LEVEL OF THE TIBIO-FEMORAL JOINT OF THE JUMPING LEG OF THE CRICKET, SCHISTOCERCA GREGARIA. (FR)

J P Coillot J Boistel

J Insect Physiol 14(11):1661-1667 REF

Nov 1968 421 J825

Cells, Insect histology, Insect morphology, Insect physiology, Joints, Legs, Locomotion, Schistocerca gregaria. English summary

21673-68

WARNING SOUNDS OF MOTHS.

D Covalt-Dunning

Z Tierpsychol 25(2):129-138 REF

Mar 1968 410 Z35

Bats, Insect behavior, Moths, Stridulation. German summary

21674-68

FOUR IMPORTANT BEE DISEASES.

N A Cutts

Agr Gaz New S Wales 78(P12):698-702

Dec 1967 23 N472

Apiculture, Apis mellifera, Bee diseases, Foulbrood, Nosema disease, Paralysis, Sacbrood, Sanitation control (insects).

Economic importance, causal organisms, symptoms and control methods for four bee diseases in Australia are discussed.

21675-68

THE EFFECTS OF HIGH TEMPERATURES ON GREENBUG, SCHIZAPHISGRAMINUM, REPRODUCTION.

N E Daniels

Kans Entomol Soc J 40(2):133-137

Apr 1967 420 K13

Aging, Laboratories, Reproduction, Research, Schizaphis graminum, Temperature.

21676-68

CONTRIBUTION TO THE FAUNA OF THE CONGO (BRAZZAVILLE). MISSION A. VILLIERS AND A. DESCARPENTRIES. XLV. COLEOPTERA OCHODAEIDAE. (FR)

J Decelle

Inst Fondamental Afr Noire Bull Ser A Sci Natur 29(1):344

Jan 1967 515 D14

Coleoptera, Insect taxonomy, Zoogeography.

21677-68

SOURCES OF LARVAL SALIVARY GLAND SECRETION IN THE DIPTERAN CHIRONOMUS TENTANS.

D Doyle H Laufer

J Cell Biol 40(1):61-78 REF

Jan 1969 442.8 J828

Chironomidae, Chironomus tentans, Larvae, Proteins, Salivary glands (insects), Secretion.

21678-68

THE ROLE OF SOIL ARTHROPODS IN COMMUNITY ENERGETICS.

M D Engelmann

Amer Zool 8(1):61-69 REF

Feb 1968 410 AM3

Arthropoda, Insect ecology, Soil insects, Surveys.

21679-68

SEXUAL REPRODUCTION OF 'GREEN PEACH APHID' MYZUS PERSICAE (SULZ) IN MENDOZA (ARGENTINA). (SP)

J C Espul P S Mansur

Rev Invest Agr Ser 5, Patol Veg 5(6):63-71

1968 464.8 R322

Insect physiology, Myzus persicae, Reproduction, Sex. English abstract

21680-68

RESPONSE CHARACTERISTICS AND PROBABLE BEHAVIOURAL ROLES FOR ABDOMINAL VIBRATION RECEPTORS OF SOME COCKROACHES.

G J Florentine

J Insect Physiol 14(11):1577-1588 REF

Nov 1968 421 J825

Abdomen, Insect behavior, Insect physiology, Insect respiration, Leucophaea maderae, Nauphocta cinerea, Periplaneta americana, Research, Vibration.

21681-68

RESEARCH ON FOREST ECOSYSTEMS. SERIES B: THE MIXED CALCIFIED OAK-GROVE OF VIRELLES-BLAIMONT. CONTRIBUTION NO. 19 INSECT COLLECTIONS IN TUBES OF WATER. (FR)

C Gaspar S Krzelj C Verstraeten F Wolf

Gembloux Inst Agron Etat Bull 3(2):294-300

1968 105.1 G285

Diptera, Forests, Hymenoptera, Insect collecting equipment, Insect ecology, Quercus. French abstract

21682-68

A WAXED-PAPER LABORATORY CAGE FOR STERILIZATION STUDIES WITH THE ORIENTAL FRUIT MOTH, GRAPHOLITHA MOLESTA (BUSCK) (LEPIDOPTERA: TORICIDAE).

J A George M G Howard

Entomol Soc Ontario Proc 95:146-147

1964 420 ON8

Fertility, Gamma rays, Grapholitha molesta, Insect cages, Laboratories, Morphology, Research, Sterilization.

21683-68

QUANTITATIVE RELATIONSHIPS BETWEEN FLEAS AND RODENTS IN A HAWAIIAN CANE FIELD.

G E Haas

Pacific Sci 23(1):70-82 REF

Jan 1969 475 P11

Host relationships, Quantitative analysis, Rodents, Siphonaptera, Sugarcane.

21684-68

A BIOCHEMICAL LOOK AT INSECT DIAPAUSE.

D K Hayes

Entomol Soc Amer Bull 14(2):108-111 REF

Jun 1968 423.9 EN8

Biochemistry, Biological control (insects), Cells, Insect eggs, Insect morphology, Insecticides, Metabolism, Reproduction, Temperature, Viscera.

21685-68

THE BIONOMICS AND ECOLOGY OF ANTHOCORIS CONFUSUS REUTER IN SCOTLAND.

A R Hill

Soc Brit Entomol Trans 18(Pt. 3):35-48

Dec 1968 420 SO15

Anthocoridae, Demography, Insect ecology.

21686-68

EPIZOOTIOLOGICAL RESEARCH ON MILKY DISEASE CAUSED BY BACILLUS POPILLIAE (MELOLONTHA). (FR)

B Hurpin

Ann Epiphyt 18(2):127-173 REF

1967 464.9 F84AN

Bacillus popilliae, Bacteria, Insect diseases, Milky disease, Research. English summary

21687-68

THE FINE STRUCTURE OF THE GASTRIC CAECA OF Aedes Aegypti LARVAE.

J C Jones V H Zeve

J Insect Physiol 14(11):1567-1575 REF

Nov 1968 421 J825

Absorption, Aedes aegypti, Gastrointestinal system, Insect physiology, Microscopy, Mitochondria, Muscles.

21688-68

A LIST OF SINHALESE APHIDS (HEM., APHIDIDAE).

E Judenko V F Eastop

*Entomol Mon Mag (SER 4)*99(277-9, JAN-MAR):62-63

1963 421 EN86

Aphididae, Insect names, Insect taxonomy, Myzus persicae, Traps.

21689-68

ICHNEUMONOLOGICAL (HYM.) REPORTS FROM FINLAND I.

R Jusilla

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(2):107-112 REF

30 Aug 1967 421 SU7

Ichneumonidae, Insect taxonomy.

Three species of Ichneumonid wasps new to Finland are taxonomically described.

21690-68

SYNANTHEDON FLAVIVENTRIS STGR. (LEP., AEGERIIDAE) FOUND IN SUOMESTA. (FI)

J Kaisila

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(2):125-129 MAP REF

30 Aug 1967 421 SU7

Insect ecology, Synanthedon, Zoogeography. German abstract

21691-68

STUDIES ON THE OLFACTORY STIMULI GUIDING THE BARK BEETLE BLASTOPHAGUS PINIPERDA L. (COLEOPTERA, SCOLYTIDAE) TO ITS HOST TREE.

E Kangas V Perttunen H Oksanen

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(3):181-211 REF

02 Nov 1967 421 SU7

Chemoreceptors, Insect biology, Pinus sylvestris, Plant biochemistry, Scolytidae.

21692-68

DEVELOPMENTAL CHANGES IN THE LATE LARVA OF CALLIPHORA STYGIA. I. OLYMPH.

J F Kinnear M D Martin J A Thompson G J Neufeld

Australian J Biol Sci 21(5):1033-1045 REF

Oct 1968 442.8 AU72

Biochemistry, Blood proteins, Calliphora stygia, Calliphoridae, Larvae, Metamorphosis.

21693-68

EFFECTS OF PARENTAL AGE ON THE LIFE CYCLE OF THE SOUTHERN GREEN STINK BUG, NEZARA VIRIDULA L. (HETEROPTERA: PENTATOMIDAE).

K Kiritani K Kimura

Appl Entomol Zool 2(2):69-78 REF

Jun 1967 SB599.A6

Aging, Insect eggs, Insect morphology, Insect physiology, Metamorphosis, Nezara viridula, Research.

21694-68

THE PRESENT DISTRIBUTION OF HYLOTRUPES BAJULUS L. (COL., CERAMBYCIDAE) IN NORWAY AND ITS ABUNDANCE IN SOME DISTRICTS.

P Knudsen A Bakke

Norsk Entomol Tidsskr 14(2):94-102 MAP REF

1967 421 N812

Cerambycidae, Demography, Insect ecology, Zoogeography.

21695-68

ACTION OF INSECT HORMONES ON THE FATE OF C-GLUCOSE IN THE DIAPAUSING, BRAINLESS PUPA OF SAMIA CYNTHIA PRYERI (LEPIDOPTERA: SATURNIIDAE).

M Kobayashi S Kimura M Yamazaki

Appl Entomol Zool 2(2):79-84 REF

Jun 1967 SB599.A6

Brain, Glucose compounds, Hormones, Insect morphology, Insect physiology, Metabolism, Samia cynthia pryeri, Tables (data).

21696-68

A PROBLEM IN THE DIAGNOSIS OF HEAD LICE.

F W Kutz

Entomol News (philadelphia) 80(1):27-28

Jan 1969 421 EN88

Diagnosis, Insect identification, Pediculus humanus capitis, Public health.

21697-68

BIOLOGY OF THE BLACK WIDOW SPIDER, LATRODECTUS HASSELI THORELL (ARANEIDA: THERIDIIDAE).

B L Lariaso

Philippine Agr 51(2):171-180 REF

Jul 1967 25 P542

Insect rearing, Latrodectus, Life cycle, Oviposition, Sex behavior.

21698-68

THE NEUROSECRETORY CELLS OF THE BRAIN OF Aedes Aegypti IN RELATION TO LARVAL MOLT, METAMORPHOSIS AND OVARIAN DEVELOPMENT.

J R Larsen A Broadbent

Amer Microscop Soc Trans 87(4):395-410 REF

Oct 1968 440.9 AM33

Aedes aegypti, Histochemistry, Insect physiology, Metamorphosis, Nervous system, Ovaries.

21699-68

DEVELOPMENTAL INTERACTIONS IN THE DIPTERAN SALIVARY GLAND.

H Laufer

Amer Zool 8(2):257-271 REF

May 1968 410 AM3

Biochemistry, Chironomidae, Chromosomes, Insect histology, Insect physiology, Salivary glands (insects).

21700-68

CRICKET NUTRITION: SUPPLEMENTATION OF GRASS BY KNOWN NUTRIENTS.

T D Luckey P C Stone

J Insect Physiol 14(11):1533-1538 REF

Nov 1968 421 J825

Acheta domesticus, Blattella germanica, Diet, Experimental insects, Food additives, Grasses, Insect nutrition, Insect physiology.

21701-68

DISTRIBUTION AND ADAPTIVE DIVERSITY OF TRAPDOOR SPIDERS.

B Y Main

Australian Natur Hist 16(2):49-53

Jun 1968 475 AU7

Aging, Ctenizidae, Habitats, Insect behavior, Insect dissemination, Predaceous insects.

21702-68

THE RATE OF PASSAGE OF FOOD AND THE EFFECT OF TEMPERATURE IN TWO NOCTUID CATERPILLARS.

L M L Mathur

Ann Zool 5(6):57-64

23 May 1967 410 AN78

Digestion, Food habits, Insect physiology, Noctuidae, Temperature.

21703-68

TERRITORIAL BEHAVIOR OF BARK-BEETLE MALES.

J H McGhehey

Can Entomol 100(11):1153

Nov 1968 421 C16

Insect behavior, Scolytidae.

21704-68

ARE HYLEMYA CILICRURA AND HYLEMYA LITURATA TWO SEPARATE SPECIES.

D G R McLeod

Entomol Soc Ontario Proc 95:140-142

1964 420 ON8

Culture media, Diet, Hylemya cilicrura, Hylemya liturata, Insect cages, Laboratories, Research.

21705-68

ON MY ACQUAINTANCE WITH MIDDLE AND NORTHERN EUROPEAN SPECIES OF THE GENUS PSENULUS KOHL (HYM., SPHECOIDEA). (GE)

A K Merisuo

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(3):151-154

02 Nov 1967 421 SU7

Hymenoptera, Insect taxonomy, Zoogeography.

21706-68

STUDIES ON BIOLOGY OF BANMALIKA LEAF MINOR (AGROPTISTIS LIMATUS, MOTH, COLEOPTERA, HALTICIDAE). A SERIOUS PEST OF BANMALIKE (JASMINUM AQUESTIFOLIUM, VOHL.) IN RAJASTHAN.

V P Mital

Agra Univ J Res Sci 16(Pt 1):89-91

Jan 1967 513 AG8

Chrysomelidae, Insect biology, Leaf miners, Plant diseases.

21707-68

STABILITY OF CHILO IRIDESCENT VIRUS. (JA)

J Mitsuhashi K Koyama

Jap J Appl Entomol Zool 11(4):177-181

Dec 1967 475 J27

Chemicals, Chilo, Iridescent virus, Research, Storage, Temperature. English summary

21708-68

THE EFFECT OF AGE, SKF 525-A HYDROCHLORIDE, AND CHLORCYCLIZINE DIHYDROCHLORIDE ON THE TOXICITY OF PARATHION TO ADULT ALKALI BEES, NOMIA MELANDERI CKLL.

M J Moradeshaghi

Diss Abstr Sect B 29(5):1722B

Nov 1968 Z5055.U49D53

21709-68

Aging, Bees, Chlorides, Hydrogen, Nomia melan-
deri, Parathion, Toxicology.

21709-68

HOW FLIES FLY. (GE)

W Nachtigall

Kosmos 64(10):434-437

Oct 1968 474 K842

Coleoptera, Diptera, Grasshoppers, Insect anat-
omy, Insect behavior, Insect dissemination, Insect
flight, Mechanization, Muscles, Nervous system.

21710-68

A CYTOLOGICAL STUDY OF CHANGES IN
THE FAT BODY OF TROGODERMA
GRANARIUM DURING METAMORPHOSIS,
WITH SPECIAL REFERENCE TO THE
PROTEINACEOUS GLOBULES.

K S S Nair G K Karnavar

J Insect Physiol 14(11):1651-1659 REF

Nov 1968 421 J825

Cytology, Fat body, Insect morphology, Insect
physiology, Metamorphosis, Proteins, Research,
Trogoderma granarium.

21711-68

STUDIES ON THE FEEDING BEHAVIOR OF
GREEN RICE LEAFHOPPER, NEPHOTETTIX
CINCTICEPS UHLER. II. PROBING FREQUEN-
CY OF THE ADULT LEAFHOPPER. (JA)

A Naito J Masaki

Jap J Appl Entomol Zool 11(4):150

Dec 1967 475 J27

Environment, Feeding, Insect behavior, Laborato-
ries, Nephotettix cincticeps, Research. English
summary

21712-68

ON THE REINFORM NEMATODE
ROTYLENCHULUS NICOTIANA (YOKOO ET
TANAKA, 1954) N. COMB. IN JAPAN
(TYLENCHIDA: HOPLLOLAIMIDAE). (JA)

K Nakasono M Ichinohe

Jap J Appl Entomol Zool 11(4):169-176 REF

Dec 1967 475 J27

Anatomy, Crops, Insect identification, Insect
names, Research, Rotylenchulus nicotiana. English
summary

21713-68

ACID PHOSPHATASE ACTIVITY IN THE
DIGESTIVE SYSTEM OF THE DESERT
LOCUST SCHISTOCERCA GREGARIA (FOR-
SKAL).

S N H Naqui S H Ashrafi M A H Qadri

Australian J Biol Sci 21(5):1047-1052 REF

Oct 1968 442.8 AU72

Acid phosphatase, Biochemistry, Gastrointestinal
system, Insect physiology, Schistocerca gregaria.

21714-68

ECOLOGICAL STUDIES OF CERTAIN NATU-
RAL MORTALITY FACTORS OF THE SUGAR-
CANE BORER, DIATRAEA SACCHARALIS
(FABRICIUS) IN LOUISIANA.

A A G Negrin

Diss Abstr Sect B 29(5):1722B

Nov 1968 Z5055.U49D53

Diatraea saccharalis, Ecology, Insect physiology,
Mortality, Research, Sugarcane.

21715-68

FIELD OBSERVATIONS ON THE ROOSTING
BEHAVIOR OF THE AFRICAN MIGRATORY
LOCUST (LOCUSTA MIGRATORIA MIGRA-
TORIOIDES R. AND F.) IN THE SOLITARY
PHASE.

B Nickerson

*Entomol Mon Mag (SER 4)*99(277-9.JAN-

MAR):51-53

1963 421 EN86

Habitats, Insect behavior, Locusta migratoria
migratorioides, Research.

21716-68

ON THE HABITATS OF SOME LONCHAEA
SPECIES IN FENNOSCANDIA (DIPT.,
LONCHAEIDAE).

M Nuorteva

*Suomen Hyonteistieteellinen Aikakauskir Ann**Entomol Fenn* 33(2):118-121

30 Aug 1967 421 SU7

Diptera, Habitats, Insect ecology, Insect rearing.

21717-68

STUDIES ON THE POSSIBILITIES OF USING
BLOWFLIES (DIPT.) AS MEDICOLEGAL IN-
DICATORS IN FINLAND. I. REPORT OF FOUR
INDOOR CASES FROM THE CITY OF HELSIN-
KI.

P Nuorteva M Isokoski K Laiho

*Suomen Hyonteistieteellinen Aikakauskir Ann**Entomol Fenn* 33(4):217-225 REF

20 Dec 1967 421 SU7

Autopsies, Calliphoridae, Death, Insect physiology,
Medical entomology.

21718-68

CHANGES IN THE RESPIRATORY METABOL-
ISM OF RHODNIUS PROLIXUS AS INDUCED
BY TEMPERATURE.

A Y K Okasha

J Insect Physiol 14(11):1621-1634 REF

Nov 1968 421 J825

Feeding, Insect metabolism, Insect physiology, In-
sect respiration, Larvae, Rhodnius prolixus, Tem-
perature.

21719-68

THE APPEARANCE AND DISTRIBUTION OF
EPICUTICULAR INFRAMICROSCOPIC FOR-
MATIONS OF THREE COLLEMBOLS. (FR)

C Palevody

*Acad Sci Compt Rend Ser D Sci Nat (SER**D)*267(2, 2ND SEMESTER):214-217

08 Jul 1968 505 P21

Biochemistry, Collembola, Cuticle, Insect histolo-
gy.

21720-68

ANTS.

G Pasfield

Agr Gaz New S Wales 78(PT 2):105-109

Feb 1967 23 N472

Catalogs, Chemical control (insects), Formicidae.

Nuisance species of ants in Australia and their con-
trols are discussed.

21721-68

THE ORGANIZATION OF THE SAR-
COPLASMIC RETICULUM AND T SYSTEM IN
THE FEMORAL MUSCLE OF THE HOUSEFLY,
MUSCA DOMESTICA.

I Pasquali-Ronchetti

J Cell Biol 40(1):269-273 REF

Jan 1969 442.8 J828

Electron microscopy, Insect histology, Musca
domestica, Muscles.

21722-68

THE ARTHROPOD FAUNA ASSOCIATED
WITH THE BIRCH BRACKET FUNGUS
POLYPORUS BETULINUS, IN EASTERN
CANADA.

D P Piouli A N Verma

Can Entomol 100(11):1179-1199

Nov 1968 421 C16

Arthropoda, Betula, Fungus diseases (plants), In-
sect behavior, Polyporus betulinus.

21723-68

BIOLOGY OF APIS DORSATA F.

H A Qayyum N Ahmad

Pakistan J Sci 19(3):109-113

May 1967 475 P172

Apis dorsata, Insect biology, Queen bees. English
abstract

21724-68

CUTICULAR ESTERASE IN THE STERNAL
GLAND OF CALOTERMES FLAVICOLLIS F.
(ISOPTERA, TERMITIDAE). (FR)

A Quennedy C Noirot

*Acad Sci Compt Rend Ser D Sci Nat (SER**D)*266(26, 2ST SEMESTER):2456-2458

24 Jun 1968 505 P21

Enzymes, Esterases, Glands (insects), Insect
histology, Termites.

21725-68

ON THE EXISTENCE OF CELLS WITH
VACUOLES IN THE BRAIN OF MUSCA
DOMESTICA L. (FR)

F Ramade

*Acad Sci Compt Rend Ser D Sci Nat (SER**D)*266(26, 2ST SEMESTER):2437-2440

24 Jun 1968 505 P21

Brain, Cytology, Insect histology, Musca
domestica.

21726-68

CROSS-BRIDGES AND PERIODS IN INSECT
FLIGHT MUSCLE.

M K Reedy

Amer Zool 7(3):465-481 REF

Aug 1967 410 AM3

Belostomatidae, Electron microscopy, Insect
physiology, Muscles, Myosins. PHS 2F2-NB-
21075-02 and 03

21727-68

BUPRESTIS AURULENTA L. (COL.,
BUPRESTIDAE) IN IRELAND.

G Roche

*Entomol Mon Mag (SER 4)*99(277-9.JAN-

MAR):42

1963 421 EN86

Buprestis aurulenta, Insect identification,
Research, Timber.

21728-68

REARING OF CATERpillARS OF THE EU-
DEMIS MOTH (LOBESIA BOTRANA SCHIFF.)
ON SOME SUBSTITUTED NATURAL FOODS.
(FR)

R Roehrich

Rev Zool Agr Appl 66(7-9, 3RD

TRIMESTER):111-115

1967 410.9 SO12

Color, Feeding, Grapes, Insect rearing, Olethreu-
tidae, Polychrosis botrana.

21729-68

SEX PHEROMONE SPECIFICITY TESTS IN
THE TORTRICIDAE--AN INTRODUCTORY RE-
PORT.

W L Roelofs K C Feng

Entomol Soc Amer Ann 61(2):312-316 REF

15 Mar 1968 420 EN82

Epithelium, Glands (insects), Hormones, Insect
histology, Lepidoptera, Pheromones, Tortricidae.

21730-68

CONTRIBUTION TO THE DEVELOPMENT OF
THE ANTERIOR HEAD AND THE MOUTH RE-
GION OF PERIPLANETA AMERICANA. (GE)

I Rohrschneider

Zool Jahrbucher Abt Allg Zool Physiol Tiere

85(4):537-578 REF

1968 410 Z751Z

Head, Insect histology, Insect morphology, Mouth
parts, Periplaneta americana. English abstract

21731-68

TERRITORIALITY IN THE SHEET-WEB
SPIDER LINYPHIA TRIANGULARIS (CLERCK)
(ARANEAE, LINYPHIIDAE).

R S Rovner

Z Tierpsychol 25(2):232-242 REF

Mar 1968 410 Z35

Insect behavior, Insect ecology, Linyphia triang-
ularis, Research, Social insects, Spiders. German
summary

21732-68

ATP-DRIVEN OSCILLATION OF GLYCEROL-
EXTRACTED INSECT FIBRILLAR MUSCLE:
MECHANOCHEMICAL COUPLING.

J C Ruegg

Amer Zool 7(3):457-464 REF

Aug 1967 410 AM3

Adenosine triphosphates, Belostomatidae,
Biochemistry, Insect flight, Insect physiology,
Muscles.

- 21733-68
ULTRASTRUCTURE OF MOTH ALARY MUSCLES AND THEIR ATTACHMENT TO THE HEART WALL.
 J W Sanger F V McCann
J Insect Physiol 14(11):1539-1544 REF
 Nov 1968 421 J825
 Cells, Dorsal vessel, Hyalophora cecropia, Insect anatomy, Insect physiology, Muscles.
- 21734-68
RESEARCH ON BIOLOGICAL PEST CONTROL. (GE)
 F Scherney E Naton H D Mueller
Gesunde Pflanzen 20(10):219-223 REF
 Oct 1968 464.8 G33
 Attractants, Biological control (pests), Insects, Integrated control (insects), Parasitism, Research, Sterilization.
- 21735-68
MAIN CURRENTS IN RESEARCH CONCERNING STERILIZATION METHODS OF INSECTS. (GE)
 E M Schumakov
Pflanzenschutzberichte 38(12):157-165 REF
 Oct 1968 464.9 P48
 Biological control (insects), Breeding, Chemosterilants, Insect genetics, Insect rearing, Population, Research, Sterilization. Report given to 6th Int. Congress for Plant Protection, vienna 1967. english summary
- 21736-68
BETTER BEEKEEPING: THE SUMMER ROUTINE.
 S Singh
Indian Farming 16(3):28-29
 Jun 1966 22 IN283
 Apiculture, Bee behavior.
- 21737-68
BETTER BEE-KEEPING:II. MONSOON MEASURES AND AUTUMN NEEDS.
 S Singh
Indian Farming 16(5):22
 Aug 1966 22 IN283
 Apiculture, Climate.
- 21738-68
COMPETITION BETWEEN INSECT SPECIES. (TU)
 M N Sisli
Bitki Koruma Bulteni 6(3):111-118 REF
 1966 464.8 B542
 Competition, Entomology, Insects, Research.
- 21739-68
RING GLAND TRANSPLANTATIONS AND BODY WEIGHT IN DROSOPHILA.
 K C Sondhi
J Insect Physiol 14(11):1553-1557 REF
 Nov 1968 421 J825
 Drosophila melanogaster, Experimental insects, Glands (insects), Hormones, Injections, Insect physiology, Temperature, Transplanting.
- 21740-68
DESCRIPTION OF THE ADULT TETRANYCHUS TELARIUS L. (ACARINA, TETRANYCHIDAE).
 B K Srivastava L M L Mathur
Entomol Mon Mag (SER 4)99(277-9 JAN-MAR):4-6
 1963 421 EN86
 Crop yields, Cuticle, Geography, Insect identification, Morphology, Research, Tetranychus telarius.
- 21741-68
ON THE ALKALINE AND ACID PHOSPHATASE IN THE ALIMENTARY TRACT OF PERIPLANETA AMERICANA L. (BLATTARIA: BLATTIDAE).
 J P Srivastava S C Saxena
Appl Entomol Zool 2(2):85-92 REF
 Jun 1967 SB599.A6
 Acid phosphatase, Alkaline phosphatase, Biochemistry, Digestion, Gastrointestinal system, Hydrogen-ion concentration, Insect physiology, Periplaneta americana, Research, Salivary glands (insects).
- 21742-68
BIOLOGY OF THE GALL-FORMER PROCECIDOCHARES STONEI ON A COMPOSITE.
 M J Tauber C A Tauber
Entomol Soc Amer Ann 61(2):553-554 REF
 15 Mar 1968 420 EN82
 Chrysothamnus viscidiflorus, Gall-making insects, Insect biology, Procecidochares stonei.
- 21743-68
PHARMACOLOGY PROPERTIES OF THE TOXINS IN THE VENOM OF THE SCORPION (ANDROCTONUS AUSTRALIS). (FR)
 F Tazieff-Depierre
Acad Sci Compt Rend Ser D Sci Nat (SER D)267(2, 2ND SEMESTER):240-243
 08 Jul 1968 505 P21
 Biochemistry, Pharmacology, Scorpionida, Toxins, Venoms.
- 21744-68
NEW SPECIES OF THE SUB-FAMILY BOMBINAE OF THE PALAEARCTIC REGION (HYMENOPTERA, APOIDEA). (GE)
 B Tkalcu
Acta Ent Bohemoslov 1(65):21-51 REF
 1968 420 C33
 Bombinae, Entomology, Insect identification, Insect taxonomy.
- 21745-68
CHANGES IN THE ACID-SOLUBLE NUCLEOTIDES DURING THE PUPAL DEVELOPMENT OF THE RICE STEM BORER, CHILO SUPPRESSALIS WALKER (LEPIDOPTERA: PYRALIDAE).
 S Tojo C Hirano
Appl Entomol Zool 2(2):93-99 REF
 Jun 1967 SB599.A6
 Acids, Biochemistry, Chilo suppressalis, Chromatography, Insect morphology, Metamorphosis, Nucleotides, Pupae.
- 21746-68
RANGE OF HOST PLANTS AND LARVAL FEEDING IN PHYTOMYZA ATRICORNIS MEIGEN (DIPT., AGROMYZIDAE).
 K N Trehan V K Sehgal
Entomol Mon Mag (SER 4)99(277-9 JAN-MAR):1-3
 1963 421 EN86
 Feeding, Food plants, Larvae, Morphology, Phytomyza atricornis, Research.
- 21747-68
NUCLEAR AND SPINDLE DAMAGE DURING EMBRYONIC SEGMENTATION, PROCESSES, YOLK ABSORPTION, SEROSA AND BLASTODERM NUCLEUS IN TOTAL X-RAY IRRADIATED EGGS OF KALOTERMES FLAVICOLLIS FABR. (ISOPTERA). (FR)
 W Truckenbrodt
Zool Jahrbucher Abt Allg Zool Physiol Tiere 85(4):609-640 REF
 1967 410 Z751Z
 Eggs, Embryology, Insect biochemistry, Insect morphology, Irradiation, Isoptera.
- 21748-68
INSECT NEUROMUSCULAR MECHANISMS.
 P N R Usherwood
Amer Zool 7(3):553-582 REF
 Aug 1967 410 AM3
 Bibliography, Biochemistry, Insect physiology, Muscles, Neurology.
- 21749-68
RESULTS OF THE TRANSPLANTATION OF THE OVARIES OF IMAGOS TO LOCUSTA MIGRATORIA (L.). (FR)
 A Vogcl
Acad Sci Compt Rend Ser D Sci Nat (SER D)267(12, 2ND SEMESTER):1043-1046
 16 Sep 1968 505 P21
 Insect histology, Insect morphology, Insect physiology, Locusta migratoria, Ovaries.
- 21750-68
THE FALL WEBWORM, HYPHANTRIA CUNEA, ITS DISTRIBUTION AND NATURAL ENEMIES: A WORLD LIST (LEPIDOPTERA: ARCTIIDAE).
 L O Warren M Tadic
Kans Entomol Soc J 40(2):194-202 REF
 Apr 1967 420 K13
 Geography, Habitats, Hyphantria cunea, Insect behavior, Insect migration, Predaceous insects, Research.
- 21751-68
LABORATORY STUDIES ON INTERSPECIES TRAIL FOLLOWING AND TRAIL PREFERENCE OF ARMY ANTS (DORYLINAE).
 J F Watkins T W Cole R S Baldrige
Kans Entomol Soc J 40(2):146-151
 Apr 1967 420 K13
 Formicidae, Insect behavior, Insect identification, Laboratories, Research, Neivamyrmex nigrescens, N. opacithorax, N. pilosus, N. pauxillus, N. wheeleri, and Labidus coecus- insect listed.
- 21752-68
AUSTRALIAN DRAGONFLIES.
 J A L Watson
Australian Natur Hist 16(2):33-38
 Jun 1968 475 AU7
 Insect behavior, Insect identification, Insect migration, Odonata, Predaceous insects, Research.
- 21753-68
TRANSDETERMINATION IN THE LAYOUT OF THE ORGANS OF THE DROSOPHILA FLY. (GE)
 R Wehner
Umschau 68(11):325
 23 May 1968 474 UM7
 Drosophila, Insect physiology, Larvae, Metamorphosis, Viscera.
- 21754-68
A CONTRIBUTION TO THE ALIMENTARY CANAL, SALIVARY GLANDS AND MALPIGHIAN TUBULES OF SACCHARICOCCUS SACCHI COCKERELL (HOMOPTERA PSEUDOCOCCIDAE).
 R L Yadava B S Chandel
Zool Jahrbucher Abt Allg Zool Physiol Tiere 85(4):597-608 REF
 1967 410 Z751Z
 Gastrointestinal system, Insect histology, Insect morphology, Malpighian tubes, Pseudococcidae, Saccharicoccus sacchari, Salivary glands (insects).
- 21755-68
INVESTIGATION OF STERILIZING DOSES FOR EPHESTIA KUNNIELLA L. IN IRRADIATION IN VARIOUS STAGES OF DEVELOPMENT.
 N I Yusifov
Radiobiology 8(2):158-164 REF
 Nov 1968 442.8 R11AE
 Chemical control (insects), Ephestia, Insect reproduction, Irradiation, Phycitidae, Sterilization. Russian journal- vol.8(2):275-278, 1968

GENETICS

- 21756-68
MATING CHOICE IN CROSSES BETWEEN GEOGRAPHIC POPULATIONS OF DROSOPHILA PSEUDOBSCURA.
 W W Anderson L Ehrman
Amer Midland Natur 81(1):47-53 MAP REF
 Jan 1969 410 M58
 Demography, Drosophila pseudoobscura, Insect evolution, Insect genetics, Zoogeography.

21757-68

21757-68
GENOTYPE FREQUENCY AND MATING SUCCESS IN THE WILLISTON: SPECIES GROUP OF DROSOPHILA.

L Ehrman C Pctit
Evolution 22(4):649-658 REF
30 Dec 1968 443.8 EV62
Demography, Drosophila, Insect genetics.

21758-68

21758-68
THE FREQUENCY OF INTERBREEDING BETWEEN TWO SIBLING SPECIES OF DACUS (DIPTERA) IN WILD POPULATIONS.

G W Gibbs
Evolution 22(4):667-683
30 Dec 1968 443.8 EV62
Dacus, Demography, Insect genetics.

21759-68

21759-68
THE TEMPERATURE-SENSITIVE PERIOD IN THE DEVELOPMENT OF ROLLED HEMIZYGOTES OF DROSOPHILA MELANOGASTER.

R Hackman S Lakovaara
Suomalainen Tiedeakatemia Ann Ser A Iv Biol 4(118):3-13 REF
1967 442.9 H36
Drosophila melanogaster, Insect genetics, Insect physiology, Temperature.

21760-68

21760-68
GENETIC VARIABILITY IN ISCHNURAN DAMSELFLIES.

C Johnson
Amer Midland Natur 81(1):39-46
Jan 1969 410 M58
Insect evolution, Insect genetics, Odonata, Venation (insects), Wings (insects).

21761-68

21761-68
AN EXPERIMENTAL AND GENETIC ANALYSIS OF DISPERSAL BEHAVIOR IN TRIBOLIUM.

J C Ogden
Diss Abstr Sect B 29(5):1723B
Nov 1968 Z5055.U49D53
Genetics, Insect behavior, Research, Tribolium.

21762-68

21762-68
EVOLUTION AND HYBRIDIZATION IN THE UTETHEISA ORNATRIX COMPLEX (LEPIDOPTERA: ARCTIIDAE). I. INTER- AND INTRAPOPULATION VARIATION AND ITS RELATION TO HYBRIDIZATION.

R W Pease
Evolution 22(4):719-735 REF
30 Dec 1968 443.8 EV62
Arctiidae, Breeding, Demography, Insect evolution, Zoogeography.

21763-68

21763-68
MIMETIC VERSUS DISRUPTIVE COLORATION IN INTERGRADING POPULATIONS OF LIMENITIS ARTHEMIS AND ASTYANAX BUTTERFLIES.

A P Platt L P Brower
Evolution 22(4):699-718 MAP REF
30 Dec 1968 443.8 EV62
Color, Demography, Insect genetics, Nymphalidae, Zoogeography.

21764-68

21764-68
ADAPTIVE SIGNIFICANCE OF MYCOPHAGY IN STORED-PRODUCT ARTHROPODA.

R N Sinha
Evolution 22(4):785-798 REF
30 Dec 1968 443.8 EV62
Fungi, Insect adaptation, Insect evolution, Mites, Predaceous insects, Stored products.

21765-68

21765-68
GENETICAL CONTROL OF PENETRANCE AND EVOLUTION OF DOMINANCE IN DROSOPHILA.

M J Whitten
Heredity 23(Pt 2):263-278 REF
May 1968 443.8 H42

Drosophila melanogaster, Insect evolution, Insect genetics.

CROP PROTECTION

21766-68

21766-68
USE OF FORMALINIZED MYCOPLASMA GALLISEPTICUM ANTIGENS AND CHICKEN ERYTHROCYTES IN HEMAGGLUTINATION AND HEMAGGLUTINATION-INHIBITION STUDIES.

H E Adler A J Da Massa
Appl Microbiol 15(2):245-248
Mar 1967 448.3 AP5
Antigens, Chickens, Erythrocytes, Formaldehyde, Hemagglutination, Mycoplasma gallisepticum, Physiology, Research.

21767-68

21767-68
NEW KNOWLEDGE CONCERNING WIRE STRINGING IN FRUIT GROWING. (GE)

F Afscharpour
Gesunde Pflanzen 20(5):113-115
May 1968 464.8 G33
Amines, Frost, Fruit, Plant injuries, Plant physiology, Plant protection, Spraying.

21768-68

21768-68
LETTUCE GROWTH AND TIPBURN INCIDENCE UNDER CONTROLLED HUMIDITY. (ABSTRACT).

G E Bottenberg T W Tibbitts
Hortscience 3(2,SUMMER):124
1968 SB1.H6
Humidity, Lettuce, Light, Peat, Plant physiology, Research, Tipburn (lettuce).

21769-68

21769-68
EFFECT OF FLUORESCENT LIGHTING BEYOND THE NORMAL DAY ON THE FLOWERING OF THE CARNATION.

N W Butterfield G A Hmerick A Kinoshita
Hortscience 3(2,SUMMER):78
1968 SB1.H6
Dianthus caryophyllus, Equipment, Fluorescent lamps, Reproduction, Research, Temperature.

21770-68

21770-68
CORN EARWORM DAMAGE TO EARS WITH STARCHY (SU.) VERSUS (SU.) KERNELS ON GENETICALLY UNIFORM MOTHER PLANTS. (ABSTRACT).

J W Cameron L D Anderson H H Shorey
Hortscience 3(2,SUMMER):110
1968 SB1.H6
Harvesting, Heliothis zea, Plant injuries, Pollination, Research, Starches.

21771-68

21771-68
THE LEACHING OF AUXIN FROM AIR LAYERS.

R J Cameron
New Zeal J Bot 6(2):237-239
Jun 1968 450 N48
Aluminum foil, Carbon isotopes, Indoleacetic acid, Musci, Pinus radiata, Plant hormones, Soil leaching.

21772-68

21772-68
SPONTANEOUS VARIABILITY OF SINGLE ISOLATES OF PHYTOPHTHORA INFESTANS. I. CULTURAL VARIATION.

C E Caten J L Jinks
Can J Bot 46(4):329-348 REF
Apr 1968 470 C16C
Culture media, Phytophthora infestans, Plant genetics, Reproduction, Research.

21773-68

21773-68
SURVEY OF EPIDEMIC DISEASES OF FOREST TREES IN TAIWAN IV.

C C Chen
*Acad Sinica Bot Bull (N s)*8:295-315
Oct 1967 451 AC10B
Research, Surveys, Tree diseases, Trees. Japanese summary

21774-68

21774-68
COMPARISON OF STAMINATE FLOWER PRODUCTION ON GYNOECIOUS STRAINS OF CUCUMBERS BY PURE GIBBERELLINS (A3, A4, A7, AND A13) AND MIXTURES. (ABSTRACT).

R K Clark D S Kenney
Hortscience 3(2,SUMMER):102
1968 SB1.H6
Cucumbers, Fermentation, Gibberella fujikuroi, Gibberellins, Plant anatomy, Research.

21775-68

21775-68
FOLIAR ABSORPTION OF BORON BY BARTLETT PEARS. (ABSTRACT).

O C Crandall C C Woodbridge
Hortscience 3(2,SUMMER):106
1968 SB1.H6
Boron, Foliar application, Harvesting, Pears, Research, Spraying, Water.

21776-68

21776-68
IMPORTANT PLANT PROTECTION PROBLEMS IN BAVARIAN AGRICULTURE. (GE)

R Diercks
Gesunde Pflanzen 20(10):200-202,204-206,
Oct 1968 464.8 G33
Beets, Fungicides, Grain, Herbicides, Millet, Pest control, Pesticides, Plant diseases, Plant protection, Potatoes, Research, Weed control.

21777-68

21777-68
FINE STRUCTURAL CHARACTERIZATION OF PLANT MICROBODIES.

S E Frederick E H Newcomb E L Vigil W P Wergin
Planta 81(3):229-252 REF
1968 450 P693
Cells, Electron microscopy, Plant anatomy, Plant morphology, Research, Tissues.

21778-68

21778-68
SOME NOTES ON THE STUDY OF BARK FUNGI.

J H B Garner
Can J Bot 45(4):540-541
Apr 1967 470 C16C
Bark, Biology, Fungi, Research.

21779-68

21779-68
FOLIAR PENETRATION OF NAPHTHALENEACETIC ACID. (ABSTRACT).

D W Green M J Bukovac
Hortscience 3(2,SUMMER):120
1968 SB1.H6
Absorption, Foliar application, Kidney beans, Leaves, Naphthaleneacetic acid, Pears, Radioactivity, Research.

21780-68

21780-68
THE CHEMICAL MAKE-UP AND SELECTIVE EFFECT OF TRIAZINE HERBICIDES. (GE)

H Gysin
Pflanzenschutzberichte 38(12):211-223
Oct 1968 464.9 P48
Biochemistry, Chemical control (pests), Chemistry, Fungicides, Herbicides, Setaria, Sorghum, Triazine. Given at 6th Int. Congress for Plant Protection, Vienna, 1967 english summary

21781-68

21781-68
NEW ANTIBACTERIAL AGENT (U-24,544) ISOLATED FROM STREPTOMYCES GRISEUS.

R R Herr F Reusser
Appl Microbiol 15(5):1142-1144
Sep 1967 448.3 AP5
Antibiotics, Bacteria. Chemistry, Chromatography, Culture media, Microbiology, Research, Streptomyces griseus.

21782-68

21782-68
DORMANCY OF ONION SETS AS INFLUENCED BY IRRADIATION, GIBBERELLIN AND TEMPERATURE TREATMENTS. (ABSTRACT).

H J Hopen R R Dedolph W F Whiteside W Chorney
Hortscience 3(2,SUMMER):94

- 1968 SB1.H6
Gibberellins, Greenhouses, Harvesting, Irradiation, Onions, Research, Temperature.
- 21783-68**
CHEMICAL ALTERATION OF SEX EXPRESSION IN CUCUMBERS AND CANTALOUPE. (ABSTRACT).
R M Irving M A Zawawi
Hortscience 3(2,SUMMER):101
1968 SB1.H6
Cantaloupes, Chemicals, Crop yields, Cucumbers, Greenhouses, Morphology, Plant regulators, Research, Spraying.
- 21784-68**
PROTECTION AGAINST PSEUDOMONAS AERUGINOSA INFECTION BY IMMUNISATION WITH FRACTIONS OF CULTURE FILTRATES OF PS. AERUGINOSA.
R J Jones
Brit J Exp Pathol 49(5):411-420 REF
Oct 1968 448.8 B772
Drug plants, Drug therapy, Humans, Immunization, Mortality, Pseudomonas aeruginosa, Research.
- 21785-68**
THE IMPORTANCE OF PLANT PROTECTION FOR THE WORLD HARVEST. (GE)
W Kaiser
Gesunde Pflanzen 20(7):155-156
Jul 1968 464.8 G33
Agricultural productivity, Crops, Harvesting, Plant diseases, Plant protection, Weeds, World agricultural situation. Continuation from issue number 6.
- 21786-68**
THE IMPORTANCE OF PLANT PROTECTION FOR WORLD HARVEST. (GE)
W Kaiser
Gesunde Pflanzen 20(6):131-132
Jun 1968 464.8 G33
Agricultural productivity, Crop yields, Population, Supply and demand, World agricultural situation. Continued in number 7.
- 21787-68**
PLANT PROTECTION PROBLEMS IN THE CULTIVATION OF FORAGE PLANTS IN BAVARIA. (GE)
K Koenig
Gesunde Pflanzen 20(10):234-235
Oct 1968 464.8 G33
Biochemistry, Chemical control (pests), Clover, Corn, Crop rotation, Forage plants, Plant diseases, Plant protection.
- 21788-68**
CHARACTERIZATION OF THREE BACTERIOPHAGES OF XANTHOMONAS ORYZAE (UYEDA ET ISHIYAMA) DOWSON.
T T Kuo T C Huang R Y Wu C M Yang
*Acad Sinica Bot Bull (N s)*8:246-254 REF
Oct 1967 451 AC10B
Bacteriophages, Chemicals, Electron microscopy, Plants, Temperature, Xanthomonas oryzac. Japanese summary
- 21789-68**
INHIBITION OF AXILLARY BUD GROWTH OF CHRYSANTHEMUM MORIFOLIUM WITH FATTY ACIDS ESTERS. (ABSTRACT).
P J Lert A M Kofranek
Hortscience 3(2,SUMMER):118
1968 SB1.H6
Chrysanthemum morifolium, Fatty acids, Harvesting, Physiology, Plant anatomy, Plant injuries, Research, Spraying.
- 21790-68**
AUXIN AND GIBBERELLIN-LIKE ACTIVITY IN BLUEBERRY FLOWERS AND FRUIT. (ABSTRACT).
C M Mainland P Eck
Hortscience 3(2,SUMMER):113
1968 SB1.H6
Blueberries, Gibberellins, Morphology, Plant regulators, Pollination, Research.
- 21791-68**
THE BAVARIAN DEPARTMENT FOR AGRICULTURE, PLANTING AND PLANT PROTECTION, AND ITS 'GROUP PLANT PROTECTION'. (GE)
H R Mayer
Gesunde Pflanzen 20(10):198-200
Oct 1968 464.8 G33
Fruit, Grain, Organizations, Pesticides, Plant diseases, Plant protection.
- 21792-68**
THE EFFECT OF THE NEAR ULTRA-VIOLET LIGHT (3000A4000A) ON THE PHYSIOLOGICAL DEVELOPMENT OF CUCUMBERS CUCUMIS SATIVIUS, CULTIVAR SPARTAN DAWN. (ABSTRACT).
J I McKenzie H Tiessen
Hortscience 3(2,SUMMER):101
1968 SB1.H6
Cucumbers, Equipment, Physiology, Reproduction, Research, Ultraviolet rays.
- 21793-68**
PENETRATION OF NAPHTHALENEACETIC ACID AND NAPHTHALENEACETAMIDE THROUGH ISOLATED PEAR LEAF CUTICLE.
R F Norris M J Bukovac
Hortscience 3(2,SUMMER):120
1968 SB1.H6
Anatomy, Cuticle, Naphthaleneacetic acid, Pears, Research, Temperature.
- 21794-68**
GIBBERELLIN A4/A7, FOR INDUCTION OF STAMINATE FLOWERS ON THE GYNOCIOUS CUCUMBER. (ABSTRACT).
L M Pike C E Peterson
Hortscience 3(2,SUMMER):101
1968 SB1.H6
Cucumbers, Gibberellin a4, Gibberellin a7, Plant anatomy, Research, Spraying.
- 21795-68**
INCREASED REVERSION OF AN APPLE SPORT FOLLOWING X IRRADIATION AND PRUNING. (ABSTRACT).
C Pratt D K Pireclu
Hortscience 3(2,SUMMER):92
1968 SB1.H6
Abnormalities, Apples, Harvesting, Irradiation, Pruning, Research, X-rays.
- 21796-68**
EFFECTS OF ALAR TREATMENT ON GROWTH, FLOWERING, AND FRUITING OF GREENHOUSE TOMATO CULTIVARS. (ABSTRACT).
P E Read
Hortscience 3(2,SUMMER):101
1968 SB1.H6
Greenhouses, Physiology, Reproduction, Research, Succinic acid, 2,2-dimethylhydrazide, Tillage, Tomatoes.
- 21797-68**
THE EFFECTS OF INTEGRATED PLANT PROTECTION METHODS.
K Russ
Pflanzenarzt 21(5):67-68
01 May 1968 464.9 P482
Biology, Chemosterilants, Ecology, Insect pests, Insecticides, Integrated control (insects), Methodology, Plant protection, Tables (data).
- 21798-68**
AFLATOXIN PRODUCTION BY ASPERGILLUS FLAVUS AS RELATED TO VARIOUS TEMPERATURES.
A F Schindler J G Palmer W V Eisenberg
Appl Microbiol 15(5):1006-1009
Sep 1967 448.3 AP5
Aflatoxin, Aspergillus flavus, Culture media, Fungi, Microbiology, Physiology, Research, Temperature.
- 21799-68**
FOREST PLANT PROTECTION PROBLEMS IN BAVARIA. (GE)
W Schwenke
Gesunde Pflanzen 20(10):208-210
Oct 1968 464.8 G33
Bacillus thuringiensis, Chemical control (insects), Forests, Insect pests, Plant injuries, Plant protection, Spraying, Weeds.
- 21800-68**
BREEDING PEACHES FOR ROOT-KNOT NEMATODE RESISTANCE.
R H Sharpe C O Hesse B F Lownsberry C J Hanscn
Hortscience 3(2,SUMMER):92
1968 SB1.H6
Breeding, Meloidogyne incognita, Meloidogyne javanica, Nematodes, Peaches, Plant diseases, Research.
- 21801-68**
AUXIN (PLANT HORMONES) PRODUCTION IN PLANTS. (GE)
A R Sheldrake
Umschau 68(18):568
29 Aug 1968 474 UM7
Amino acids, Bacteria, Cells, Crown galls, Fungi, Indoleacetic acid, Plant hormones, Plant metabolism, Tryptophan.
- 21802-68**
INSECTICIDES FROM PLANTS.
A A Siddiqui
Sci Cltronic 5(12):8-9
Jun 1967 Q1.0S33
Anabasine, Biochemistry, Insecticides, Nicotine, Nicotinic, Poisonous plants, Pyrethrum, Rotenone, Sabadilla.
- 21803-68**
THE EFFECTS OF KINETIN IN OVERCOMING HIGH-TEMPERATURE INHIBITION OF LETTUCE SEED GERMINATION. (ABSTRACT).
O E Smith W Yen J M Lyons
Hortscience 3(2,SUMMER):124
1968 SB1.H6
Kineticin, Lettuce, Research, Seed germination, Temperature, Water.
- 21804-68**
INFLUENCE OF GIBBERELLIN UPON TIME OF BUD DEVELOPMENT IN GLOBE ARTICHOKE (CYNARA SCOLYMUS). (ABSTRACT).
M J Snyder N C Welch V E Rubatzk
Hortscience 3(2,SUMMER):101
1968 SB1.H6
Artichokes, Crop yields, Gibberellins, Plant morphology, Research.
- 21805-68**
INFLUENCE OF GROWTH REGULATORS ON THE CONCENTRATION OF PROTEIN AND NUCLEIC ACIDS IN GRAPE FLOWERS. (ABSTRACT).
A Soleimani W M Kliever R J Weaver
Hortscience 3(2,SUMMER):113
1968 SB1.H6
Grapes, Nucleic acids, Physiology, Plant regulators, Proteins, Research, Spraying.
- 21806-68**
THE NEED FOR INTERNATIONAL TESTING CENTERS FOR CROP PESTS AND PATHOGENS.
E C Stakman
Entomol Soc Amer Bull 14(2):124-128
Jun 1968 423.9 EN8
Food supply, International cooperation, Laboratories, Plant disease resistance, Plant diseases, Plant pest resistance, Plant protection, Research, Supply and demand.
- 21807-68**
PRODUCTION OF AFLATOXIN ON WHEAT AND OATS: MEASUREMENTS WITH A RECORDING DENSITOMETER.
R D Stubblefield O L Shotwell C W Hesselstine M L Smith
Appl Microbiol 15(1):186-190 REF
Jan 1967 448.3 AP5

21808-68

Aflatoxin, *Aspergillus flavus*, Chromatography, Culture media, Fermentation, Oats, Wheat.

21808-68

CONCENTRATE SPRAY-THINNING OF APPLES. (ABSTRACT).

A H Thompson B L Rogers

Hortscience 3(2,SUMMER):91

1968 SB1.H6

Apples, Carbaryl, Harvesting, Pesticides, Research, Spraying, Thinning sprays.

21809-68

DISTRIBUTION OF SOLUBLE COMPONENT AND QUALITY FACTORS IN THE EDIBLE PORTION OF CITRUS FRUIT. (ABSTRACT).

S V Ting

Hortscience 3(2,SUMMER):113

1968 SB1.H6

Amino acids, Ascorbic acid, Chemistry, Citrus, Hydrogen-ion concentration, Research.

21810-68

PROJECT AND PROBLEMS OF PLANT PROTECTION IN THE DEVELOPING COUNTRIES. (GE)

W Tornow

Gesunde Pflanzen 20(7):137,138,140,1

2,144,146,148-149

Jul 1968 464.8 G33

Agricultural policies, Extension work, Pest control, Plant disease transmission, Plant protection.

21811-68

ARTIFICIAL LIGHT INDUCED LEAF LESIONS IN A DIPLOID SOLANUM ACCESSION. (ABSTRACT).

K N Wilsen D R Bienz

Hortscience 3(2,SUMMER):124

1968 SB1.H6

Equipment, Fluorescent lamps, Leaves, Plant physiology, Research, Solanaceae.

21812-68

THE ULTRASTRUCTURE OF PIRICULARIA ORYZAE CAV.

H K Wu T H Tsao

*Acad Sinica Bot Bull (N s)*8:353-363 REF

Oet 1967 451 AC10B

Anatomy, Cells, Crop yields, Cytoplasm, Piricularia oryzae, Plant protection, Research, Rice, Japanese summary

21813-68

THE USE OF ACTIDIONE ON THE CONTROL OF RICE BLAST.

L H Yang T T Kuo L T Chou

Acad Sinica Bot Bull (N s):390-397

Oet 1967 451 AC10B

Blast (rice), Crop yields, Cycloheximide, Greenhouse culture, Piricularia oryzae, Rice, Seedlings, Japanese summary

DISEASES

21814-68

SURVIVAL OF ROOT-INFECTING FUNGI IN SOIL. III. THE EFFECT OF CELLULOSE AMENDMENT ON CHLAMYDOSPORE GERMINATION OF FUSARIUM SOLANI F. SP. PHASEOLI IN SOIL.

P B Adams G C Papavizas J A Lewis

Phytopathology 58(3):373-377 REF

Mar 1968 464.8 P56

Beans, Cellulose, Fungus diseases (plants), Fusarium solani phaseoli, Oat straw, Sodium nitrate, Soil amendments, Soil fungi, Spore germination.

21815-68

TOMATO BUSHY STUNT VIRUS FROM PRUNUS AVIUM L. I. FIELD STUDIES AND VIRUS CHARACTERIZATION.

W R Allen T R Davidson

Can J Bot 45(12):2375-2383 REF

Dec 1967 470 C16C

Bushy stunt (tomatoes), Mazzard cherries, Research, Virus diseases (plants).

21816-68

TOMATO BUSHY STUNT VIRUS FROM PRUNUS AVIUM. II. SEROLOGICAL TYPING AND THE CHARACTERIZATION OF ANTIBODY TYPES AND ACTIVITIES.

W R Allen

Can J Bot 46(3):229-233 REF

Mar 1968 470 C16C

Antibodies, Bushy stunt (tomatoes), Mazzard cherries, Serological tests, Virus diseases (plants).

21817-68

ELECTRON MICROSCOPIC OBSERVATIONS ON THE APPARENT REPLICATION IN VIVO OF A PLANT VIRUS.

H J Arnott K M Smith

Virology 34(1):25-35 REF

Jan 1968 448.8 V81

Biology, Electron microscopes, Plants, Research, Virus diseases (plants).

21818-68

AMERICAN COTTON IS ALLERGIC TO 2,4-D.

B Bakshi

Indian Farming 16(11):25

Feb 1967 22 IN283

D, 2,4-, Plant physiology, Toxicology, Upland cotton, Vapors.

The author discusses the susceptibility of upland cotton to 2,4-D vapors in India.

21819-68

CLONAL SELECTION OF GRAPEVINES IN SOME AREAS OF ITALY. (IT)

E Baldacci G Belli E Refatti R Cesati F Pessina

*Riv Patol Veg (SER 4)*3(1 JAN-MAR):15-22 REF

1967 464.8 R52

Chenopodium amaranticolor, Chenopodium quinoa, Clones, Forage plants, Gomphrena globosa, Grapes, Host indexing (plants), Virus diseases (plants), English summary

21820-68

RESEARCH AND IDENTIFICATION OF LOW LITRE AND AVIRULENT VIRUSES OR GRAPEVINES. (IT)

E Baldacci G Belli

*Riv Patol Veg (SER 4)*3(1 JAN-MAR):4-14 REF

1967 464.8 R52

Biochemistry, Forage plants, Grapes, Host indexing (plants), Research, Virus diseases plants, English summary

21821-68

DEVELOPMENT OF DOWNY MILDEW RESISTANT BROCCOLI, CABBAGE, AND COL-LARDS. (ABSTRACT).

W C Barnes

Hortscience 3(2,SUMMER):110

1968 SB1.H6

Broccoli, Cabbage, Crop yields, Kale, Morphology, Plant disease control, Research.

21822-68

DIFFERENCE IN PHENOLIC EXTRACTS FROM HEALTHY DOUGLAS-FIR ROOTS AND THOSE INFECTED WITH PORIA WEIRII.

G M Barton

Can J Bot 45(9):1545-1552 REF

Sep 1967 470 C16C

Fungus diseases (plants), Phenols, Plant extracts, Poria weirii, Pseudotsuga menziesii, Root rot (evergreens), Roots.

21823-68

FACTORS AFFECTING VIRULENCE AND PIGMENT PRODUCTION OF XANTHOMONAS PHASEOLI VAR. FUSCANS.

P K Basu V R Wallen

Can J Bot 45(12):2367-2374 REF

Dec 1967 470 C16C

Beans, Fungus diseases (plants), Seeds, Xanthomonas phaseoli.

21824-68

FREE AMINO ACIDS OF SUNFLOWER HYPOCOTYL TISSUE DURING CROWN GALL TUMOR DEVELOPMENT.

R M Bekki S M Lesley

Can J Bot 46(3):217-223 REF

Mar 1968 470 C16C

Amino acids, Crown galls, Plant diseases, Sunflowers, Tissues.

21825-68

DIAMOND SPOT OF BANANAS CAUSED BY FUSARIUM ROSEUM 'GIBBOSUM'.

L A Berg

Phytopathology 58(3):388-389

Mar 1968 464.8 P56

Bananas, Fungus diseases (plants), Fusarium roseum.

21826-68

TUMOR FORMATION THROUGH DEOXYRIBONUCLEIC ACID FROM AGROBACTERIUM TUMEFACIENS (SMITH AND TOWNSEND) CONN. (GE)

J Bieber E Sarfert

Phytopathol Z 62(4):323-326 REF

Aug 1968 464.8 P562

Agrobacterium tumefaciens, Cells, Crown galls, Deoxyribonucleic acid, Plant diseases, Proteins, English summary

21827-68

ACCUMULATION OF AFLATOXINS IN STORED RICE IN RELATION TO COMPETITION BETWEEN ASPERGILLUS PARASITICUS AND A. CHEVALIERI. (ABSTRACT).

R A Boller H W Schroeder

Phytopathology 58(6):725-726

Jun 1968 464.8 P56

Aflatoxin, Aspergillus chevalieri, Aspergillus parasiticus, Fungus diseases (plants), Rice, Storage, Temperature.

21828-68

CHEMICAL, PHYSICAL AND BIOLOGICAL PROPERTIES OF FOUR STRAINS OF SUGARCANE MOSAIC VIRUS.

W P Bond

Diss Abstr Sect B 29(5):1540B-1541B

Nov 1968 Z5055.U49D53

Biology, Chemistry, Mosaic (sugarcane), Physiology, Properties, Sugarcane, Virus diseases (plants).

21829-68

EFFECTS OF TWO CARBAMATES ON SEVERAL PESTS OF PEACH.

H R Boyce

Entomol Soc Ontario Proc 95:125-127

1964 420 ON8

Carbamates, Grapholita molesta, Insect pests, Panonychus ulmi, Peaches, Plant injuries, Research.

21830-68

STUDIES OF THE HOST-PARASITE RELATIONSHIP IN THE PINEAPPLE DISEASE OF SUGARCANE.

H W Boyd C C Allison

Phytopathology 58(6):839-842

Jun 1968 464.8 P56

Ceratocystis paradoxa, Fungus diseases (plants), Greenhouse culture, Pineapple disease, Sugarcane.

21831-68

THE RELATION OF GROWTH REGULATORS TO THE DEVELOPMENT OF SYMPTOMS AND EXPRESSION OF STEM RESISTANCE IN WHITE PINE INFECTED WITH BLISTER RUST.

M G Boyer

Can J Bot 45(4):501-513 REF

Apr 1967 470 C16C

Blister rust (pinus), Pinus, Plant disease resistance, Plant regulators.

21832-68

TOBACCO LEAF VEINS IN SOURCES OF A CUCUMBER MOSAIC VIRUS FOR APHIDS.

- R H E Bradley
Virology 34(1):172-173
Jan 1968 448.8 V81
Aphididae, Cucumbers, Mosaic (cucumbers), Tobacco, Veins, Virus diseases (plants).
- 21833-68**
TOXICITY OF FERMENTATION PRODUCTS ACCUMULATING IN WATERCORED 'DELICIOUS' APPLES. (ABSTRACT).
W J Bramlage R E Bir
Hortscience 3(2,SUMMER):122
1968 SB1.H6
Apples, Fermentation, Plant diseases, Plant injuries, Research, Temperature, Toxicology, Water core (apples).
- 21834-68**
MEASUREMENT OF OXYGEN CONSUMPTION OF WHEAT STEM RUST UREDOSPORES WITH AN OXYGEN ELECTRODE.
L Bush
Phytopathology 58(6):752-754
Jun 1968 464.8 P56
Electrodes, Fungus diseases (plants), Oxygen, Plant physiology, Stem rust, Uredospires, Wheat.
- 21835-68**
CITRUS FRUIT VIRUS DISEASES IN THE LIGHT OF THE RESULTS OF THE 4TH CONFERENCE OF THE I.O.C.V. (it)
A Catara
Riv Patol Veg (SER 4)3(1,JAN-MAR):47-82 REF
1967 464.8 R52
Citrus, Fruit, Virus diseases (plants).
- 21836-68**
TAICHUNG NATIVE-I VS BACTERIAL BLIGHT.
G V Chalam
Indian Farming 16(3):3,47,52
Jun 1966 22 IN283
Bacterial diseases (plants), Crop yields, Rice.
- 21837-68**
HOST RANGE OF PEANUT STUNT VIRUS IN TRIFOLIUM SPP. (ABSTRACT).
D Choopanya J E Halpin
Phytopathology 58(6):726
Jun 1968 464.8 P56
Clover, Host indexing (plants), Peanuts, Stunt, Virus diseases (plants).
- 21838-68**
ACCUMULATION OF HYPOXANTHINE IN POTATO LEAVES AND ITS EFFECT ON SPORE GERMINATION IN PHYTOPHTHORA INFESTANS.
M C Clark O T Page
Can J Bot 46(3):267-270
Mar 1968 470 C16C
Fungus diseases (plants), Hypoxanthine, Leaves, Phytophthora infestans, Potatoes, Seed germination, Spores.
- 21839-68**
RELATIVE SIGNIFICANCE OF PARASITISM VERSUS SAPROPHYTISM IN COLONIZATION OF WHEAT STRAW BY FUSARIUM ROSEUM CULMORUM IN THE FIELD.
R J Cook G W Bruchl
Phytopathology 58(3):306-308
Mar 1968 464.8 P56
Fusarium roseum, Parasitism, Saprophytes, Wheat straw.
- 21840-68**
INFLUENCE OF RHIZOPUS NIGRICANS EHRENB. ON THE DEVELOPMENT OF ALTERNARIA SOLANI (ELL. AND MART.) JONES AND GROUT.
C R Das A Pal
Phytopathol Z 63(1):40-46 REF
Sep 1968 464.8 P562
Alternaria solani, Fungus diseases (plants), Leaves, Plant physiology, Potatoes, Research, Rhizopus nigricans. German summary
- 21841-68**
THE RELATIONSHIP BETWEEN CALCIUM MAGNESIUM, AND POTASSIUM ACCUMULATION AND TITRATABLE ACIDITY IN THE LEAVES OF SELECTED MCINTOSH APPLE CLONES. (ABSTRACT).
J C M Ddungu R Eggert
Hortscience 3(2,SUMMER):106-107
1968 SB1.H6
Absorption, Apples, Calcium, Deficiency diseases, Extracts, Leaves, Magnesium, Potassium, Research, Water.
- 21842-68**
WRINKLED SKIN DISEASE OF APPLES. (FR)
H De Meirleire
Phytoma 19(193):31
Dec 1967 464.8 P563
Apples, Diagnosis, Plant diseases, Research, Skin diseases, Virus diseases (plants).
- 21843-68**
BLOSSOM END ROT OF THE TOMATO. (FR)
H De Meirleire
Phytoma 19(193):30
Dec 1967 464.8 P563
Blossom end rot (tomatoes), Calcium, Diagnosis, Pimientos, Plant diseases, Plant water relations.
- 21844-68**
THE NATA DE COCO. 2. CHEMICAL NATURE AND PROPERTIES OF NATA.
L S Dimaguila
Philippine Agr 51(6):475-488 REF
Nov 1967 25 P542
Acetobacter, Biochemistry, Coconuts.
- 21845-68**
QUANTITATIVE MEASUREMENTS OF INTERACTIONS BETWEEN CROWN-GALL TUMORS AND THE PINTO BEAN HOST.
M D El Khalifa J A Lippincott
Amer J Bot 55(3):382-391 REF
Mar 1968 450 AM36
Agrobacterium tumefaciens, Crown galls, Kidney beans, Plant physiology.
- 21846-68**
BIOCHEMICAL CHANGES DURING THE DEVELOPMENT OF CORK SPOT OF 'YORK IMPERIAL' APPLES. (ABSTRACT).
M Faust C B Shear
Hortscience 3(2,SUMMER):122
1964 SB1.H6
Apples, Biology, Chemistry, Cork spot (apples), Morphology, Research, Tissues.
- 21847-68**
THE OCCURRENCE OF AN ASH-COLORED MOLD ON PEANUTS IN THE STATE OF SAO PAULO. (POR)
M B Figueiredo R M Cardoso
Biologico 34(10):217-220
Oct 1968 442.8 B529
Botrytis, Crop losses, Fungus diseases (plants), Peanuts.
- 21848-68**
CYLINDROCLADIUM ROOT ROT OF BLACK WALNUT. (ABSTRACT).
T H Filer
Phytopathology 58(6):728
Jun 1968 464.8 P56
Cylindrocladium, Fungus diseases (plants), Juglans nigra, Root rot, Temperature.
- 21849-68**
A SELECTIVE MEDIUM FOR ISOLATION OF PHYTOPHTHORA PARASITICA VAR. NICOTIANAE FROM SOIL. (ABSTRACT).
R A Flowers J W Hendrix
Phytopathology 58(6):728
Jun 1968 464.8 P56
Black shank, Culture media, Fungus diseases (plants), Phytophthora parasitica nicotianae, Soil-borne plant diseases, Tobacco.
- 21850-68**
GROWTH REGULATORS TO CONTROL LETTUCE BOLTING. (ABSTRACT).
R E Foster
Hortscience 3(2,SUMMER):102
1968 SB1.H6
Chemicals, Greenhouse culture, Lettuce, Plant diseases, Research, Spraying, Temperature.
- 21851-68**
GONATOBOTRYS ZEAE SP. N. A NEW PATHOGEN ON CORN. (ABSTRACT).
C Futrell D C Bain
Phytopathology 58(6):728
Jun 1968 464.8 P56
Corn, Fungus diseases (plants), Gonatobotrys zeae, Plant taxonomy.
- 21852-68**
HISTOCHEMICAL STUDIES ON THE ALTERATION OF LIGNIN AND PECTIC SUBSTANCES IN WHITE ELM INFECTED BY CERATOCYSTIS ULMI.
C Gagnon
Can J Bot 45(9):1619-1623 REF
Sep 1967 470 C16C
Ceratocystis ulmi, Fungus diseases (plants), Histochemistry, Lignin, Pectins, Research, Ulmus americana.
- 21853-68**
LONGEVITY OF TOMATO PLANTS IN DISEASED FIELDS AS AFFECTED BY BREEDING. (ABSTRACT).
J C Gilbert J S Tanaka J T Chinn
Hortscience 3(2,SUMMER):110
1968 SB1.H6
Agricultural policies, Breeding, Longevity, Plant disease resistance, Research, Tomatoes.
- 21854-68**
RATE OF MOVEMENT OF BARLEY YELLOW DWARF VIRUS OUT OF INOCULATED CEREAL LEAVES.
C C Gill
Phytopathology 58(6):870-871
Jun 1968 464.8 P56
Aphididae, Barley, Grain, Immunization, Insect vectors, Leaves, Oats, Plant translocation, Virus diseases (plants), Yellow dwarf.
- 21855-68**
TRANSMISSION OF TOBACCO MOSAIC VIRUS IN GRAPE SEEDS.
R M Gilmer L J Kelts
Phytopathology 58(3):277-278
Mar 1968 464.8 P56
Grapes, Mosaic, Mosaic (tobacco), Seed-borne plant diseases, Seeds, Virus diseases (plants).
Abstract: The possible role of the pollen parent in causing seed infection is not known.
- 21856-68**
BURLEY TOBACCO NATURALLY INFECTED WITH PEANUT STUNT VIRUS IN NORTH CAROLINA. (ABSTRACT).
G V Jr. Goodling
Phytopathology 58(6):728
Jun 1968 464.8 P56
North carolina, Peanuts, Stunt, Tobacco, Virus diseases (plants).
- 21857-68**
VERTICILLIUM WILT OF TOMATOES. TESTS WITH RESISTANT LINES.
R Gottl R J Conroy
Agr Gaz New S Wales 78(PT 9):504-506
Sep 1967 23 N472
Fungus diseases (plants), Plant breeding, Plant disease resistance, Tomatoes, Verticillium dahliae.
The development and testing of Verticillium wilt resistant tomatoes in Australia is discussed.
- 21858-68**
RELATIVE QUANTITIES OF ANTIFUNGAL METABOLITES PRODUCED IN RESISTANT AND SUSCEPTIBLE SOYBEAN PLANTS IN-

OCULATED WITH PHYTOPHTHORA MEGASPERMA VAR. SOJAE AND CLOSELY RELATED NONPATHOGENIC FUNGI.
G Gray W L Klarman M Bridge

Can J Bot 46(3):285-288
Mar 1968 470 C16C

Fungus- diseases (plants), Metabolites, Phytophthora megasperma, Plant disease resistance, Soybeans.

21859-68

CANKER OF PEACHES BY FUSICOCCUM AMYGDALI. BIOLOGY OF THE PARASITE AND METHODS OF CONTROL. (FR)
C Grosclaude

Rev Zool Agr Appl 66(7-9, 3RD TRIMESTER):103-110
1967 410.9 S012

Canker, Chemical control (plant diseases), Fungus diseases (plants), Fusicoecum amygdali, Peaches.

21860-68

PRODUCTION OF PECTIC AND CELLULOLYTIC ENZYMES BY PHYTOPHTHORA INFESTANS DE BY. II. INFECTION OF POTATO TUBERS. (GE)

F Grossman
Phytopathol Z 63(1):15-22 REF
Sep 1968 464.8 P562

Assay, Cellulase, Enzymes, Pectins, Phytophthora infestans, Plant extracts, Potatoes, Research, Tissues. English summary.

21861-68

INFECTION AND DEVELOPMENT OF HELMINTHOSPORIUM SOROKINIANUM IN AGROSTIS PALUSTRIS.

M J Healy M P Britton
Phytopathology 58(3):273-276 REF
Mar 1968 464.8 P56

Fungus diseases (plants), Golf courses, Helminthosporium sorokinianum, Turf.

21862-68

THREE-YEAR EFFECTS OF SYSTEMIC FUNGICIDES APPLIED FOR THE CONTROL OF CYTOSPORA IN ITALIAN PRUNE TREES.

A W Helton W J Koehlan
Can J Bot 45(11):2017-2020
Nov 1967 470 C16C

Cytospora, Fungicides, Plant physiology, Plums, Time.

21863-68

A DISTINCTION BETWEEN PUCCINIASTRUM GOEPPERTIANUM AND P. EPILOBII WITH CLARIFICATION OF STATUS OF PERIDERMIUM HOLWAYI AND PER. ORNAMENTALE.

Y Hiratsuka L E McArthur F J Emond
Can J Bot 45(10):1913-1915
Oct 1967 470 C16C

Fungus diseases (plants), Peridermium holwayi, Peridermium ornamentale, Pucciniastrum epilobii, Pucciniastrum goeppertianum.

21864-68

FACTORS GOVERNING ZOOSPORE RESPONSES OF PHYTOPHTHORA MEGASPERMA VAR. SOJAE TO PLANT ROOTS.

H H Ho C J Hickman
Can J Bot 45(11):1983-1994 REF
Nov 1967 470 C16C

Fungus diseases (plants), Pcas, Phytophthora megasperma, Plant physiology, Roots, Soybeans, Zoospores.

21865-68

GENETIC ANALYSIS IN RICE, VIII. INHERITANCE OF RESISTANCE TO RACES 4, 22 AND 25 OF PIRICULARIA ORYZAE.

S C Hsieh M H Lin H L Liang
Acad Sinica Bot Bull (N s) 8:255-260 REF
Oct 1967 451 AC10B

Blast (rice), Injections, Leaves, Piricularia oryzae, Plant protection, Research, Rice. Japanese summary

21866-68

EFFECT OF ANTIFUNGAL COMPOUNDS ON ASPERGILLOSIS IN HATCHING CHICK EMBRYOS.

C N Huhtanen J M Pensack
Appl Microbiol 15(1):102-109
Jan 1967 448.3 AP5

Amphotericin b, Aspergillus flavus, Aspergillus fumigatus, Chick embryos, Research, Water.

21867-68

ANALYSIS OF EPIDEMICS OF THE TOBACCO (PERONOSPOR TABACINA ADAM) MILDEW IN THE GEMBLOUX AREA. (FR)

R Jadot
Gembloux Inst Agron Eiat Bull 3(2):308-327
REF

1968 105.1 G285

Belgium, Humidity, Peronospora tabacina, Plant disease transmission, Spore germination, Temperature, Tobacco. English and Afrikaan abstract

21868-68

TOBACCO MOSAIC VIRUS STRAINS IN GREENHOUSE TOMATOES.

M H Jensen B L Pollack E H Varney
Hortscience 3(2,SUMMER):124

1968 SB1.H6

Greenhouses, Mosaic (tobacco), Research, Serological tests, Tomatoes.

21869-68

THE MODE OF SEEDLING INFECTION OF GRAIN SORGHUM WITH SCLEROSPORA SORGHII. (ABSTRACT).

B L Jones
Phytopathology 58(6):729
Jun 1968 464.8 P56

Fungus diseases (plants), Plant disease transmission, Sclerospora sorghi, Seedlings, Sorghum.

21870-68

ORCHARD SANITATION AND BROWN ROT CONTROL.

P F Kable
Agr Gaz New S Wales 78(PT 11):665
Nov 1967 23 N472

Brown rot, Crop losses, Fruit, Orchards, Sanitation control (pests).

21871-68

STUDIES ON SOME STRAINS OF TOBACCO MOSAIC VIRUS IN ORCHIDS. I. BIOLOGICAL, CHEMICAL, AND SEROLOGICAL STUDIES.

C I Kado M H V Van Regenmortel C A Knight
Virology 34(1):17-24 REF
Jan 1968 448.8 V81

Biology, Chemistry, Mosaic (tobacco), Orchidaceae, Research, Serological tests, Virus diseases (plants).

21872-68

VIRULENCE OF RHIZOCTONIA SOLANI AS INFLUENCED BY AGE OF INOCULUM IN SOIL.

M Kamal A R Weinhold
Can J Bot 45(9):1761-1765 REF
Sep 1967 470 C16C

Fungus diseases (plants), Rhizoctonia solani, Soils, Time.

21873-68

NON-RANDOM SEGREGATION OF GENE 1 FOR FUSARIUM RESISTANCE IN THE TOMATO.

N Kedar N Betig J Katan
Euphytica 16(2):258-266
Sep 1967 450 EU6

Fungus diseases (plants), Fusarium, Genetics, Plant disease resistance, Tomatoes.

21874-68

THE EFFECT OF SEVERAL DITHIOCARBAMATE FUNGICIDES ON BLACK SPOT CONTROL AND FRUIT QUALITY IN VALENCIA ORANGES.

T B Kiely

Agr Gaz New S Wales 78(PT 5):309-317

May 1967 23 N472

Black spot (oranges), Bordeaux mixture, Carbamates, Guignardia, Oranges.

21875-68

THE EFFECT OF LEAF WATER BALANCE ON THE SUSCEPTIBILITY OF FRENCH BEAN TO TOBACCO NECROSIS VIRUS.

W C Kimmins R E Litz
Can J Bot 45(11):2115-2118
Nov 1967 470 C16C

Beans, Leaves, Necrosis, Plant disease resistance, Tobacco, Virus diseases (plants), Water.

21876-68

SUSCEPTIBILITY TO TOBACCO MOSAIC VIRUS IN RELATION TO RNA AND PROTEIN SYNTHESIS IN TOBACCO AND BEAN PLANTS.

Z Kiraly M El Hammady B I Pozsar
Phytopathol Z 63(1):47-63 REF
Sep 1968 464.8 P562

Beans, Biochemistry, Metabolism, Mosaic (tobacco), Plant disease resistance, Proteins, Ribonucleic acid, Tobacco, Virus diseases (plants). German summary.

21877-68

MATHEMATICAL MODELS FOR INFECTIVITY DILUTION CURVES OF PLANT VIRUSES.

A Kleczkowski
Virology 34(1):186-187
Jan 1968 448.8 V81

Mathematical analysis, Mathematics, Virus diseases (plants).

21878-68

IDENTIFICATION OF TWO SEROTYPES IN SQUASH MOSAIC VIRUS STRAINS.

H K Knuhtsen M R Nelson
Phytopathology 58(3):345-347
Mar 1968 464.8 P56

Cantaloupes, Electrophoresis, Mosaic, Mosaic (watermelons), Pumpkins, Serological tests, Virus diseases (plants), Watermelons.

21879-68

BREEDING GLASSHOUSE CUCUMBERS IN THE NETHERLANDS.

E Kooistra
Hortscience 3(2,SUMMER):107
1968 SB1.H6

Breeding, Cucumbers, Fungus diseases (plants), Greenhouse culture, Research.

21880-68

INFLUENCE OF SEED SIZE ON THE INCIDENCE OF LOOSE SMUT IN FUNZA BARLEY. (SP)

C F Krull G Robayo L A Valbuena G Rico L E Castiblanco
Agr Trop 23(1):20-25
Jan 1967 26 AG8

Barley, Fungus diseases (plants), Loose smut (barley), Seeds, Ustilago nuda.

21881-68

RESPIRATORY PATTERNS IN TRIFOLIUM PRATENSE INOCULATED AND NONINOCULATED WITH ERYSIPEHE POLYGOINI.

G C M Latch E W Hanson
Phytopathology 58(3):297-300 REF
Mar 1968 464.8 P56

Erysiphe polygoni, Fungus diseases (plants), Leaves, Plant disease resistance, Plant respiration, Powdery mildew, Red clover.

21882-68

A FURTHER LOOK AT NECK ROT IN ONIONS.

G S Lawes
New Zeal J Agr 114(1):50-51
Jan 1967 23 N48J

Botrytis allii, Fertilizers, Fungicides, Neck rot (onions), Onions, Soil series.

Neck rot of onions caused by Botrytis allii in New

Zealand is discussed as well as the control of the fungus with fungicides and other methods.

21883-68

MAJOR AND MINOR GENES IN WHEAT FOR RESISTANCE TO PUCCINIA STRIIFORMIS AND THEIR RESPONSES TO TEMPERATURE CHANGES.

R T Lewellen E L Sharp E R Hahn
Can J Bot 45(11):2155-2172 REF
Nov 1967 470 C16C

Fungus diseases (plants), Genetics, Puccinia striiformis, Temperature, Wheat.

21884-68

OZONE DAMAGE AND SEMIMATURE-TISSUE NEEDLE BLIGHT OF EASTERN WHITE PINE.

S N Linzon
Can J Bot 45(11):2047-2061 REF
Nov 1967 470 C16C

Fungus diseases (plants), Needle blight (pinus), Ozone, Pinus strobus, Plant injuries, Tissues.

21885-68

HISTOLOGICAL STUDIES OF SYMPTOMS IN SEMIMATURE-TISSUE NEEDLE BLIGHT OF EASTERN WHITE PINE.

S N Linzon
Can J Bot 45(1):133-143 REF
Jan 1967 470 C16C

Histology, Needle blight (pinus), Pinus strobus, Plant diseases, Research.

21886-68

THE INCIDENCE OF CROWN ROT OF BOXED BANANAS IN RELATION TO MICROBIAL POPULATIONS OF THE CROWN TISSUE.

F L Lukeziec W J Kaiser M M Martinez
Can J Bot 45(4):413-421
Apr 1967 470 C16C

Bacterial diseases (plants), Bananas, Crown rot (bananas), Microbiology.

21887-68

FIELD TEST OF LABORATORY RESULTS IN SELECTING SEED DRESSING FUNGICIDES AGAINST SEED-BORNE DISEASES OF JUTE (CORCHORUS CAPSULARIS L.).

S Mahboob-E-Ilah Q A Ahmed
Pakistan J Sci Res 19(4):163-170
Oct 1967 475 P173

Fungicides, Fungus diseases (plants), Jute, Seed-borne plant diseases.

21888-68

PESTS OF CULTIVATED PLANTS IN FINLAND IN 1967.

M Markkula
Ann Agr Fenn 7(2):107-110
1968 20 AN7

Catalogs, Crop yields, Insect pests, Nematodes, Plant diseases, Zoogeography.

21889-68

THERMAL STABILITY OF STEM RUST RESISTANCE IN OAT SEEDLINGS.

J W Martens R I A McKenzie G J Green
Can J Bot 45(4):451-458 REF
Apr 1967 470 C16C

Fungus diseases (plants), Oats, Plant disease resistance, Seedlings, Stem rust (oats), Temperature.

21890-68

DISEASE DEVELOPMENT IN GUAR (CYAMOPSIS PSORALOIDES DC.) AND GRAM (CICER ARIETINUM L.) ATTACKED WITH SCLEROTIUM ROLFSSII UNDER DIFFERENT SOIL PH CONDITIONS.

S B Mathur S Sinha
Phytopathol Z 62(4):319-322
Aug 1968 464.8 P562

Chickpeas, Crop losses, Guar, Sclerotium rolfsii, Seedlings, Soil hydrogen-ion concentration, Soil-borne plant diseases. German summary.

21891-68

VARIATION IN RESPONSE TO IRON NUTRITION AMONG SOME CORN INBREDS. (ABSTRACT).

D N Maynard S Odurukwe
Hortscience 3(2,SUMMER):110
1968 SB1.H6

Chlorosis (plants), Corn, Deficiency diseases, Environment, Iron, Physiology, Research.

21892-68

PREVENTIVE MEASURES CAN CONTROL BUNCHY TOP.

M R Menon S P Christudas
Indian Farming 16(2):22-23
May 1966 22 IN283

Aphididae, Bunchy top (bananas), Chemical control (insects), Insect vectors, Virus diseases (plants).

Control of the bunchy top virus of bananas and its aphid vector is discussed.//uui s l i n d i a

21893-68

CHLAMYDOSPORE FORMATION IN CONIDIA OF HELMINTHOSPORIUM SATIVUM.

R A Meronuck E H Pepper
Phytopathology 58(6):866-867 REF
Jun 1968 464.8 P56

Barley, Fungus diseases (plants), Helminthosporium sativum, Plant physiology, Spot blotch.

21894-68

RESEARCH ON FUSARIUM DISEASES. II. ECOLOGY AND PATHOLOGY OF FUSARIUM OXYSPORUM. (FR)

J A Meyer
Ann Epiphyt 18(2):241-247 REF
464.9 F84AN

Ecology, Fungus diseases (plants), Fusarium, Fusarium oxysporum, Research. English summary

21895-68

AN ARYLSULFATASE IN THE WOOD-ROTTING BASIDIOMYCETE, FOMES GEOTROPUS.

F H Milazzo G J Loughheed
Can J Bot 45(4):532-534
Apr 1967 470 C16C

Arylsulfatase, Fomes geotropus, Wood, Wood destroying fungi.

21896-68

BACTERIAL SCAB, SCLEROTINIA AND BOTRYTIS ROTTS OF GLADIOLUS CORMS.

Agr Gaz New S Wales 78(PT 6):BACK COVER
Jun 1967 23 N472

Botrytis gladiolorum, Chemical control (plant diseases), Cultural control (plant diseases), Gladiolus, Plant diseases, Pseudomonas, Sclerotinia.

21897-68

FOOT-ROT OF WHEAT.

Agr Gaz New S Wales 78(PT 10):598-601
Oct 1967 23 N472

Cultural control (plant diseases), Fungus diseases (plants), Root rot, Seedbeds, Superphosphates, Wheat.

Control of wheat foot rot by baring fallow infested land, crop rotation, seedbed preparations, and stubble burning is discussed.

21898-68

VIRUS DISEASES OF DECIDUOUS FRUIT TREES: APPLE MOSAIC.

Agr Gaz New S Wales 78(PT 9):BACK COVER
Sep 1967 23 N472

Crop losses, Germ-free life, Mosaic (apples), Plant quarantine, Virus diseases (plants).

21899-68

POWDERY MILDEW OF THE GRAPEVINE.

Agr Gaz New S Wales 78(PT 11):BACK COVER
Nov 1967 23 N472

Chemical control (plant diseases), Fungus diseases (plants), Oidium, Powdery mildew (grapes), Sulfur.

Symptoms and chemical control of powdery mildew of grapes are discussed.

21900-68

TOMATO SPOTTED WILT (TOMATO SPOTTED WILT VIRUS).

Agr Gaz New S Wales 78(PT 10):BACK PAGE
Oct 1967 23 N472

Chemical control (insects), Dimethoate, DDT, Insect vectors, Spotted wilt (tomatoes), Thrips tabaci, Virus diseases (plants).

21901-68

RHIZOCTONIA STEM ROT.

Agr Gaz New S Wales 78(PT 2):BACK COVER
Feb 1967 23 N472

Chemical control (plant diseases), Fungus diseases (plants), Pentachloronitrobenzene, Rhizoctonia, Soil sterilization, Stem rot.

21902-68

INTERCEPTIONS IN PLANT QUARANTINE FOR THE YEAR ENDING 30TH JUNE, 1966.

Agr Gaz New S Wales 78(PT 1):52-53
Jan 1967 23 N472

Catalogs, Fungus diseases (plants), Plant quarantine, Virus diseases (plants).

21903-68

LOOSE SMUT OF WHEAT.

Agr Gaz New S Wales 78(PT 4):BACK COVER
Apr 1967 23 N472

Air-borne plant diseases, Hot water treatment (plants), Seed-borne plant diseases, Smut (wheat), Ustilago nuda, Wheat.

Symptoms of wheat smut caused by Ustilago nuda and its control are discussed.

21904-68

SCLEROTIUM STEM ROT.

Agr Gaz New S Wales 78(PT 1):BACK COVER
Jan 1967 23 N472

Chemical control (plant diseases), Fungus diseases (plants), Pentachloronitrobenzene, Sclerotium rolfsii, Stem rot.

21905-68

BACTERIAL CANKER OF TOMATO (CORYNEBACTERIUM MICHIGANENSE).

Agr Gaz New S Wales 78(PT 8):BACK COVER
Aug 1967 23 N472

Bacterial canker, Chemical control (plant diseases), Corynebacterium michiganense, Crop losses, Tomatoes.

The symptoms of bacterial canker of tomatoes and measures for its control and prevention are discussed.

21906-68

GENETIC STUDY OF THE RESISTANCE OF COFFEA SPP. TO LEAF RUST I. IDENTIFICATION AND BEHAVIOR OF FOUR FACTORS CONDITIONING DISEASE REACTION IN COFFEA ARABICA TO TWELVE PHYSIOLOGIC RACES OF HEMILEIA VASTATRIX.

M Noronha-Wagner A J Bettencourt
Can J Bot 45(11):2021-2031 REF
Nov 1967 470 C16C

Coffee, Fungus diseases (plants), Genetics, Hemileia vastatrix, Leaf rust (coffee), Plant disease resistance, Plant physiology, Research.

21907-68

FERTILIZER-FUNGICIDE COMBINATIONS FOR THE CONTROL OF PYTHIUM DAMPING-OFF OF TOBACCO.

F P Obrero T T Reyes A N Pordesimo
Philippine Agr 51(3):231-240 REF
Aug 1967 25 P542

Chemical control (plant diseases), Fertilizers, Fungicides, Pythium debaryanum, Seed treatment, Tobacco.

21908-68

INVESTIGATIONS OF INHIBITING MECHANISMS IN VIRUS-INFECTED PLANTS. 3RD COMMUNICATION. PROBLEMS OF THE

MECHANICAL TRANSMISSION OF FRUIT VIRUS TO HERBACEOUS HOST. (GE)

H Opel H Kegler

Phytopathol Z 63(1):75-95 REF

Sep 1968 464.8 P562

Fruit, Leaves, Plant disease transmission, Proteins, Research, Tables (data), Virus diseases (plants). English summary

21909-68

VIRUS DISEASE SURVEY ON CITRUS IN AEGEAN REGION. (TU)

M O Ozalp T Azeri

Bitki Koruma Bulteni 7(4):167-187 REF

1967 464.8 B542

Citrus, Host indexing (plants), Insect pests, Insect vectors, Plant disease transmission, Research, Surveys, Tables (data), Tree diseases, Virus diseases (plants). English summary

21910-68

DISTRIBUTION OF LOOSE SMUT OF WHEAT (USTILAGO TRITICI (PERS) IN THE YEAR OF 1965 IN TURKEY.

M Ozkan A Esen

Bitki Koruma Bulteni 6(3):77-93

1966 464.8 B542

Plant diseases, Plant injuries, Seedlings, Smut (wheat), Ustilago tritici, Wheat.

21911-68

CONTROL OF RICE BLAST THROUGH FORECASTS AND FUNGICIDES.

S 4 Padmanabhan

Indian Farming 16(3):7-8

Jun 1966 22 IN283

Blast (rice), Fungicides, Rice.

21912-68

SIX POWDERY MILDEWS FROM JAMMU AND KASHMIR STATE.

V R Pandotra J L Kachroo K S M Sastry

Indian Acad Sci Proc Sect B 67(3):119-124

Mar 1968 513 IN250B

Fungus diseases (plants), Mycology, Plants, Powdery mildew (plants).

21913-68

SURVIVAL OF ROOT-INFECTING FUNGI IN SOIL. II. INFLUENCE OF AMENDMENT AND SOIL CARBON-TO-NITROGEN BALANCE ON FUSARIUM ROOT ROT OF BEANS.

G C Papavizas J A Lewis P B Adams

Phytopathology 58(3):365-372 REF

Mar 1968 464.8 P56

Beans, Carbon, Fungus diseases (plants), Fusarium solani phaseoli, Nitrogen compounds, Root rot, Soil amendments, Soil fungi.

21914-68

THE AUTOECIOUS SPECIES OF PUCCINIA ON HELIANTHAE IN NORTH AMERICA.

J A Parmelee

Can J Bot 45(12):2267-2327 REF

Dec 1967 470 C16C

Fungus diseases (plants), Helianthae, Puccinia, Uredinales.

21915-68

SYSTEMATIC BREEDING PROGRAMME TO COMBINE RESISTANCE TO PHYTOPHTHORA AND THE QUALITY OF THE POTATO VARIETY BINTJE.

J A J Poos

Euphytica 16(2):167-170

Sep 1967 450 EU6

Fungus diseases (plants), Phytophthora, Plant breeding, Plant disease resistance, Potatoes.

21916-68

ALTERATIONS IN THE PEACH TREES (CV. RED HAVEN) ATTACKED BY TAPHRINA DEFORMANS WITH PARTICULAR REFERENCE TO THE NITROGEN METABOLISM IN INFECTED AND NON-INFECTED LEAVES.

V Raggi

Can J Bot 45(4):459-477 REF

Apr 1967 470 C16C

Leaves, Metabolism, Nitrogen, Peaches, Plant diseases, Plant physiology, Taphrina deformans, Trees.

21917-68

RESEARCH ON THE NATURAL DIFFUSION OF SOIL-BORNE GRAPE VIRUS DISEASES IN THE ITALIAN ENVIRONMENT. (IT)

E Refatti A Amici E Betto G Belli F Librini

Riv Patol Veg (SER 4)3(1 JAN-MAR):35-45

1967 464.8 R52

Environment, Grapes, Research, Soils, Virus diseases (plants). English summary

21918-68

RADIAL MOSAIC VIRUS OF GRAPEVINES. (IT)

E Refatti

Riv Patol Veg (SER 4)3(1 JAN-MAR):23-34 REF

1967 464.8 R52

Grapes, Host indexing (plants), Necrosis, Virus diseases (plants), Xiphinema index. English summary

21919-68

ERRATUM: REACTIONS OF LODGEPOLE PINE TO ATTACK BY DENDROCTONUS PONDEROSA HOPKINS AND BLUE STAIN FUNGI.

R W Reid H S Whitney J A Watson

Can J Bot 46(4):523

Apr 1968 470 C16C

Blue stain (pinus sylvestris), Dendroctonus ponderosa, Fungus diseases (plants), Pinus, Plant disease resistance.

21920-68

PENETRANCE OF GENE I FOR FUSARIUM RESISTANCE IN THE TOMATO.

N Retig N Kedar J Katan

Euphytica 16(2):252-257

Sep 1967 450 EU6

Fungus diseases (plants), Fusarium, Genetics, Plant disease resistance, Tomatoes.

21921-68

LETTUCE TIPBURN AND NITROGEN METABOLISM. (ABSTRACT).

S K Ries L Baker S Ashkar

Hortscience 3(2,SUMMER):124

1968 SB1.H6

Greenhouses, Lettuce, Metabolism, Nitrogen, Research, Tipburn (lettuce).

21922-68

FUNGICIDES CAN CHECK BLACK BAND OF JUTE.

A K Roy M K Shome

Indian Farming 16(3):16

Jun 1966 22 IN283

Captan, Diplodia, Fungicides, Fungus diseases (plants), Jute.

21923-68

THE INHERITANCE AND NATURE OF ALBINISM, INVOLUCRE SHAPE, AND CHLOROPHYLL DEFICIENCY IN LETTUCE. (ABSTRACT).

E J Ryder

Hortscience 3(2,SUMMER):95

1968 SB1.H6

Albinism, Chlorophylls, Color, Lettuce, Morphology, Plant nutritional deficiencies, Research.

21924-68

THE 'NATA DE COCO'. I. CHARACTERIZATION AND IDENTITY OF THE CAUSAL ORGANISM.

L A Saturnino-Dimaguila

Philippine Agr 51(6):462-474 REF

Nov 1967 25 P542

Acetobacter, Bacteriology, Coconuts.

21925-68

INVESTIGATIONS CONCERNING THE SEROLOGICAL PROOF OF THE NECROTIC RINGSPOT VIRUS OF THE SOUR CHERRY. III. THE SEROLOGICAL VARIABILITY OF THE NECROTIC RINGSPOT VIRUS OF THE SOUR CHERRY. (GE)

C Schade

Phytopathol Z 62(4):334-342 REF

Aug 1968 464.8 P562

Cherries, Necrotic ring spot (cherries), Prunus, Research, Serological tests, Virus diseases (plants). English summary.

21926-68

AFLATOXINS: PRODUCTION OF THE TOXINS IN VITRO IN RELATION TO TEMPERATURE.

H W Schroeder H Hein Jr.

Appl Microbiol 15(2):441-445

Mar 1967 448.3 AP5

Aflatoxin, Aspergillus flavus, Cottonseed, Culture media, Fungus diseases (plants), Peanuts, Rice, Temperature.

21927-68

THE DYNAMICS OF VIRUS-INDUCED CHANGES IN THE RELEASE OF SUBSTANCES FROM LEAVES AND SPROUTS. (GE)

G Schuster

Phytopathol Z 62(4):351-364

Aug 1968 464.8 P562

Leaves, Plant disease control, Plant physiology, Research, Tables (data), Virus diseases (plants). English summary

21928-68

SEROLOGICAL BEHAVIOR OF CUCUMBER MOSAIC VIRUS (STRAIN Y) AND THE VIRUS PROTEIN.

H A Scott

Virology 34(1):79-90 REF

Jan 1968 448.8 V81

Cucumbers, Mosaic (cucumbers), Serological tests, Virus diseases (plants).

21929-68

PETIOLE DISEASE OF COCONUT IN PAPUA.

D E Shaw C Booth

Papua New Guinea Agr J 19(2):89-93

Sep 1967 23 N453

Coconuts, Fungicides, Fungus diseases (plants).

21930-68

EFFECT OF GROWTH-REGULATORS ON TRANSLOCATION AND DISTRIBUTION OF AMINO ACIDS, ORGANIC ACIDS, AND SUGARS IN MUSCAT OF ALEXANDRIA GRAPES. (ABSTRACT).

W W Shindy W M Kliever R J Weaver

Hortscience 3(2,SUMMER):113

1968 SB1.H6

Amino acids, Chemicals, Grapes, Organic compounds, Plant physiology, Plant regulators, Plant translocation, Research, Sugars.

21931-68

MAGNESIUM NUTRITION OF APPLE TREES AS AFFECTED BY A WIDE RANGE OF FERTILIZER MATERIALS. (ABSTRACT).

C B Smith

Hortscience 3(2,SUMMER):106

1968 SB1.H6

Apples, Deficiency diseases, Fertilizers, Leaves, Magnesium, Research, Trees.

21932-68

MORPHOLOGY AND PATHOGENICITY OF SINGLE-SPORE ISOLATES OF ALTERNARIA LONGIPES. (ABSTRACT).

E K Sohers

Phytopathology 58(6):731

Jun 1968 464.8 P56

Alternaria longipes, Brown spot, Fungus diseases (plants), Plant morphology, Spores, Tobacco.

21933-68

CAN TAICHUNG NATIVE-I STAND UP TO BACTERIAL BLIGHT.

D N Srivastava V P Rao J C Durgalal

Indian Farming 16(2):15

May 1966 22 IN283

Bacterial diseases (plants), Crop losses, Plant disease resistance, Rice.

21934-68

NEW APPROACHES IN DISEASE CONTROL.

- D N Srivastava
Indian Farming 16(6):38-39,149
Sep 1966 22 IN283
Bacterial diseases (plants), Chemical control (plant diseases), Cultural control (plant diseases), Rice.
The epidemiology and control of bacterial blight and other rice diseases are given.
- 21935-68**
BIOLOGICAL CHARACTERISTICS OF FOMES FOMENTARIUS FOUND ON SPRUCE AND BIRCH.
P A Suvorov
Can J Bot
Oct 1967 470 C16C
Betula, Biology, Fomes fomentarius, Fungus diseases (plants), Picea, Properties.
- 21936-68**
VITAVAX- A NEW SYSTEMIC FUNGICIDE. (GE)
H D Tate B V Schmeling
Pflanzenschutzberichte 37(12):193-196
Jun 1968 464.9 P48
Biochemistry, Chemical control (plant diseases), Dihydro-5-carboxanilido-6-methyl-1,4-oxathiin,2,3-, Fungicides, Fungus diseases (plants), Rhizoctonia solani, Tilletia caries, Tilletia controversa, Ustilago hordei, Ustilago nuda. English summary given at 6th International Congress for Plant Protection vienna, 1967.
- 21937-68**
PURIFICATION AND PROPERTIES OF BROAD BEAN WILT VIRUS.
R H Taylor P R Smith C Reinganum A J Gibbs
Australian J Biol Sci 21(5):929-935 REF
Oct 1968 442.8 AU72
Broadbeans, Serological tests, Virus diseases (plants), Wilt (broadbeans).
- 21938-68**
NOTES ON THE SMUT GENERA ENTORRHIZA AND SCHROETERIA.
M J Thirumalachar M D Whitehead
Amer J Bot 55(2):183-186 REF
Feb 1968 450 AM36
Catalogs, Taxonomy, Ustilaginales.
- 21939-68**
A STUDY ON THE EPIDEMIOLOGY OF STRIPE RUST, PUCCINIA STRIIFORMIS WEST., IN CALIFORNIA.
H Tollenaar B R Houston
Can J Bot 45(3):291-307 MAP REF
Mar 1967 470 C16C
Epidemiology, Fungus diseases (plants), Puccinia striiformis, Research, Stripe rust (wheat), Wheat.
- 21940-68**
THE USE OF DENSITY GRADIENT CENTRIFUGATION IN A ZONAL CENTRIFUGE ROTOR DURING THE PURIFICATION OF A PEAR VIRUS.
J A Tomlinson S H Smith
J Gen Virol (3,PT 1):153-156
Jul 1968 Q0R360.0A10J6
Centrifugation, Density, Pears, Research, Tables (data), Virus diseases (plants).
- 21941-68**
THE INFLUENCE OF INDUCED SOIL MOISTURE STRESS UPON FOMES ANNOSUS ROOT ROT OF LOBLOLLY PINE.
B Towers W J Stambaugh
Phytopathology 58(3):269-272 REF
Mar 1968 464.8 P56
Fomes annosus, Fungus diseases (plants), Greenhouse culture, Pinus taeda, Root rot, Soil moisture, Temperature.
- 21942-68**
EFFECT OF MAIZE DWARF MOSAIC VIRUS INFECTION ON RESPIRATION AND PHOTOSYNTHESIS OF CORN.
J C Tu R E Ford
Phytopathology 58(3):282-284 REF
Mar 1968 464.8 P56
Corn, Dwarf disease, Mosaic, Photosynthesis, Respiration, Virus diseases (plants).
- 21943-68**
COMPARISONS OF CHLOROPLASTS AND PHOTOSYNTHETIC RATES OF PLANTS INFECTED AND NOT INFECTED BY MAIZE DWARF MOSAIC VIRUS.
J C Tu R E Ford C J Krass
Phytopathology 58(3):285-288 REF
Mar 1968 464.8 P56
Chloroplasts, Corn, Dwarf disease, Mosaic, Photosynthesis, Sorghum, Virus diseases (plants).
- 21944-68**
CONTRIBUTION TO THE PHYSIOLOGICAL STUDY ON THE EFFECT OF THE SUBSTANCE ISOLATED FROM CONIDIA OF THE FUNGUS ERYSIPIHE GRAMINIS F. SP. HORDEI MARCHAL.
G Vizárová A Janitor
Phytopathol Z 62(4):311-318 REF
Aug 1968 464.8 P562
Erysiphe graminis, Fungus diseases (plants), Isooleoic acid, Oats, Plant physiology, Research, Seed germination. German summary
- 21945-68**
SEROLOGICAL STUDIES ON BROMEGRASS MOSAIC VIRUS AND ITS PROTEIN FRAGMENTS.
M B Von Wechmar M H V Van Regenmortel
Virology 34(1):36-45 REF
Jan 1968 448.8 V81
Bromus, Mosaic (bromus), Proteins, Serological tests, Virus diseases (plants).
- 21946-68**
NEW RECORDS OF PLANT DISEASES IN NEW SOUTH WALES.
J Walker
Agr Gaz New S Wales 78(P1):47-51 MAP
Jan 1967 23 N472
Bacterial diseases (plants), Catalogs, Fungus diseases (plants), Plant diseases, Plant nematodes, Zoogeography.
- 21947-68**
ISOLATION, INCIDENCE, AND VIRULENCE OF ASCOCHYTA SPP. OF PEAS FROM THE SOIL.
V R Wallen S I Wong J Jeun
Can J Bot 45(12):2243-2247 REF
Dec 1967 470 C16C
Ascochyta, Fungus diseases (plants), Peas, Soils.
- 21948-68**
FINE STRUCTURE OF INCLUSIONS FORMED BY THE AUCUBA STRAIN OF TOBACCO MOSAIC VIRUS.
H E Warmke
Virology 34(1):149-159 REF
Jan 1968 448.8 V81
Aucuba mosaic (tobacco), Inclusion bodies, Physiology, Tobacco, Virus diseases (plants).
- 21949-68**
SOME SEASONAL ASPECTS OF THE GROWTH OF TUMORS ON THE WHITE SPRUCE, PICEA GLAUCA.
P R White G Tsoumis F Hyland
Can J Bot 45(11):2229-2232
Nov 1967 470 C16C
Picea glauca, Plant diseases, Plant galls, Plant physiology, Seasons.
- 21950-68**
COMPARATIVE SUSCEPTIBILITY OF LARGE AND SMALL SPRUCE ROOTS TO POLYPORUS TOMENTOSUS.
R D Whitney
Can J Bot 45(11):2227-2229
Nov 1967 470 C16C
Fungus diseases (plants), Picea, Plant disease resistance, Polyporus tomentosus, Roots.
- 21951-68**
SOME EFFECTS OF A GROWTH RETARDANT ON SHOOT MERISTEMS OF APPLE. (ABSTRACT).
M Wilde L J Edgerton
Hortscience 3(2,SUMMER):125
1968 SB1.H6
Abnormalities, Apples, Dimethyl amino succinamic acid, N-, Histology, Plant regulators, Research, Seedlings, Spraying.
- 21952-68**
DETERIORATION OF TREATED AND UNTREATED COTTONSEED DURING HUMID STORAGE.
A B Wiles
Phytopathology 58(3):289-293
Mar 1968 464.8 P56
Bacterial diseases (plants), Cottonseed, Fungicides, Fungus diseases (plants), Humidity, Mercury compounds, Seed germination, Storage.
Abstract: Used surface sterilization with alcoholic mercuric chloride, and surface treatment with organic mercury fungicide.
- 21953-68**
EFFECT OF CYTOKININS ON APPLE SHOOT DEVELOPMENT FROM AXILLARY BUDS.
M W Williams E A Stahly
Hortscience 3(2,SUMMER):68-69
1968 SB1.H6
Apples, Chemicals, Mitosis, Morphology, Plant hormones, Research, Trees.
- 21954-68**
FINE STRUCTURE OF PLASMODIOPHORA BRASSICAE IN SPOROGENESIS.
P H Williams S S McNabola
Can J Bot 45(9):1665-1669 REF
Sep 1967 470 C16C
Anatomy, Cells, Fungus diseases (plants), Plant physiology, Plasmodiophora brassicae.
- 21955-68**
THE EFFECT OF SCAB RESISTANCE ON FRUIT LENGTH IN SLICING CUCUMBERS. (ABSTRACT).
J N Wilson H M Munger
Hortscience 3(2,SUMMER):107-110
1968 SB1.H6
Cucumbers, Physiology, Plant diseases, Research, Scab (cucumbers).
- 21956-68**
MICRONUTRIENT EFFECTS ON THE IN VITRO GROWTH AND PATHOGENICITY OF FUSARIUM OXYSPORUM F. SP. LYCOPERSICI.
S S Woltz J P Jones
Phytopathology 58(3):336-338
Mar 1968 464.8 P56
Boron, Copper, Culture media, Fungus diseases (plants), Fusarium oxysporum lycopersici, Iron, Manganese, Micronutrients, Molybdenum, Plant nutritional deficiencies, Plant physiology, Tomatoes, Wilt, Zinc.
- 21957-68**
SELECTIVE RETENTION OF UREDOSPORES BY LEAVES.
C E Yarwood
Phytopathology 58(3):359-361 REF
Mar 1968 464.8 P56
Beans, Fungus diseases (plants), Leaves, Rust, Spore germination, Water.

ARTHROPODS

- 21958-68**
VIRUS DISEASES OF THE ROSE. (GE)
F Afscharpour H Faber
Gesunde Pflanzen 19(11):226.228-231 REF
Nov 1967 464.8 G33

21959-68

Insect control, Insect vectors, Nematodes, Plant quarantine, Rosa, Therapeutics, Virus diseases (plants), Water. Viruses noted were: rose mosaic, rose yellow mosaic, rose streak virus, rose wilt, rose die-back, rose virus 1,2, and 3, apple mosaic, peach mosaic, rose cowl, and rose mottling.

21959-68

CONTROL OF BACHACS.

Agr Soc Trinidad Tobago J 67(1):13-15

Mar 1967 8 T73

Agricultural legislation, Atta, Pest control, Plant protection.

21960-68

CONTROL OF THE BANANA WEEVIL.

Agr Soc Trinidad Tobago J 68(1):23-24

Mar 1968 8 T73

Bananas, Chemical control (insects), Cosmopolites sordidus, Dieldrin, Plant injuries.

21961-68

EFFECTS OF PHENOLS ON THE PLANT.

S Amer E M Ali

Beit Biol Pflanz 44:59-65

1968 450 C66

Crops, Insect control, Insect pests, Phenols, Research, Seed germination, Seed treatment.

21962-68

HELIOTHIS SPECIES LEPIDOPTERA: NOCTUIDAE IN PAPUA AND NEW GUINEA.

J H Barrett

Papua New Guinea Agr J 19(2):61-66 REF

Sep 1967 23 N453

Catalogs, Chemical control (insects), Heliothis, Insect taxonomy.

21963-68

SEVERAL OBSERVATIONS ON THE NATURE OF THE SPRING DEVELOPMENT OF CHERMES TARDUS DREYF. (FR)

R Baurant

Gembloux Inst Agron Etat Bull 3(2):226-233

1968 105.1 G285

Adelges, Aphididae, Chemical control (insects), Insect biology. English, German and Afrikaan abstract

The activities of the Fundatrix-stage of the spruce gall aphid, *Chermes tardus* were observed prior to the budbreak of its host-plant. Chemical sprays were found effective when used before March 9 in the 1967 study.

21964-68

BANANA BEETLE BORER CONTROL INVESTIGATIONS ON THE NORTH COAST OF NEW SOUTH WALES.

B M Braithwaite

Agr Gaz New S Wales 78(PT 6):359-365

Jun 1967 23 N472

Aldrin, Bananas, Chemical control (insects), Cosmopolites sordidus, Dieldrin, Heptachlor.

21965-68

TRANSMISSION OF TRANSITORY YELLOWING VIRUS OF RICE BY TWO LEAFHOPPERS.

R Chiu J Jean M Chen T Lo

Phytopathology 58(6):740-745 REF

Jun 1968 464.8 P56

Insect vectors, Nephotettix cincticeps, Plant disease transmission, Rice, Virus diseases (plants).

21966-68

A CONTRIBUTION TO THE FRUIT FLY RESISTENCE IN CERTAIN LINES OF CORN AND HYBRIDS. (GE)

B Dolinka

Pflanzenschutzberichte 38(8/9):115-122 REF

Jul 1968 464.9 P48

Breeding, Corn, Crop losses, Insect pests, Oscinella frit, Plant injuries, Research. English summary

21967-68

CACAO FLUSH DEFOLIATING CATERPILARS IN PAPUA AND NEW GUINEA.

G S Dun

Papua New Guinea Agr J 19(2):67-71

Sep 1967 23 N453

Cacao, Catalogs, Caterpillars, Insect pests.

21968-68

OBSERVATIONS ON PENETRATION OF LINDBEN BRANCHES BY STYLETS OF THE APHID LONGISTIGMA CARYAE.

R F Evert W Eschrich J T Medler F J Alfieri

Amer J Bot 55(7):860-874 REF

Aug 1968 450 AM36

Aphididae, Food habits, Plant physiology, Saliva, Stylets, *Tilia americana*.

21969-68

SOME OBSERVATIONS ON EGG DIAPAUSE IN THE TRINIDAD SUGAR CANE FROGHOPPER, AENEOLAMIA VARIA SACCHARINA (HOMOPTERA, CERCOPIDAE).

D W Fewkes

Entomol Mon Mag (SER.4) 99(287-8):224-228

Nov 1963 421 EN86

Enneolamia varia saccharina, Crop yields, Environment, Histology, Insect morphology, Reproduction, Research, Sugarcane.

21970-68

SOME FACTORS INFLUENCING CONTROL OF THE TWO-SPOTTED SPIDER MITE TETRANYCHUS URTICAE KOCH (ACARINA: TETRANYCHIDAE), ON GREENHOUSE CUCUMBERS.

W H Foott

Entomol Soc Ontario Proc 95:108-115

1964 420 ON8

Acaricides, Cucumbers, Greenhouses, Insect control, Research, Spraying, *Tetranychus urticae*.

21971-68

INSECTICIDE TREATMENT OF WATER LILY PONDS TO STOP CADDIS FLY DAMAGE.

J G Gellatley

Agr Gaz New S Wales 78(PT 7):421-422

Jul 1967 23 N472

Aquatic plants, Chemical control (insects), Dimethoate, Trichoptera.

21972-68

MITES OF CAMELLIA.

F A Gibson

Agr Gaz New S Wales 78(PT 11):663-664

Nov 1967 23 N472

Camellia, Chemical control (insects), Mites, Sulfur compounds.

Chemical control of three camellia mites in Australia with lime sulfur is discussed.

21973-68

THE SITONA WEEVIL--A PEST OF LUCERNE (SITONA HUMERALIS).

L R Greenup

Agr Gaz New S Wales 78(PT 9):528-529

Sep 1967 23 N472

Alfalfa, Azinphosethyl, Chemical control (insects), DDT, Insect behavior, Sitona.

The life cycle, occurrence, dispersal, and chemical control of the Sitona weevil of alfalfa in Australia is discussed.

21974-68

CICADAS AS PESTS IN NEW SOUTH WALES.

L R Greenup

Agr Gaz New S Wales 78(PT 1):42-46

Jan 1967 23 N472

Cicadidae, Grapes, Plant injuries.

21975-68

THE BLUE OAT MITE PENTHALEUS MAJOR (DUGES) (ACARINA: EUPODIDAE).

L R Greenup

Agr Gaz New S Wales 78(PT 7):410-411

Jul 1967 23 N472

Chemical control (insects), DDT, Grain, Grasses, Penthalcus major.

Chemical control of the blue oat mite, *Penthalcus major*, a grain and pasture crop pest in Australia is discussed.

21976-68

RESULTS OF EFFICIENCY STUDIES ON CARBARYL IN GRANULAR FORM AT 5 PER CENT AND 7.5 PER CENT OF THE ACTIVE INGREDIENT FOR THE CONTROL OF PYRALIDS OF CORN. (FR)

D Hadzistevic

Rev Zool Agr Appl 66(4-6, 2ND

TRIMESTER):44-48

1967 410.9 SO12

Carbaryl, Chemical control (insects), Corn, Insecticides, *Ostrinia nubilalis*, Pyralidae.

Details of the life history of the codling plum moth were confirmed experimentally throughout 1966.

21977-68

PESTS.

P. Israel

Indian Farming 16(6):26,120-121

Sep 1966 22 IN283

Chemical control (insects), Cultural control (insects), Rice.

Chemical and agronomic controls of insect pests of rice in India are discussed

21978-68

CUTTING DOWN CANE LOSSES FROM TERMITES AND SHOOT BORER.

A N Kalra

Indian Farming 16(8):28-29

Nov 1966 22 IN283

Chlordane, Diatraea saccharalis, Dusting, Heptachlor, Insect control, Insecticides, Sugarcane, Telodrin, Termites.

21979-68

COLEOPTERA ATTACKING TREE AND SHRUB PLANTINGS IN THE CITY OF KHARKOV.

Yu P Maksimova

Entomol Rev 46(4.OCT-DEC):471-474

Dec 1967 421 R322AE

Catalogs, Coleoptera, Predaceous insects, Shrubs, Trees, Zoogeography. Russian journal pp. 799-804

21980-68

CHENOPODIUM TEST FOR THE DEMONSTRATION OF THE PRESENCE OF THE LETTUCE MOSAIC VIRUS 1 IN SEEDS. (GE)

J Marrou

Unschau 68(6):185

14 Mar 1968 474 UM7

Aphididae, Chenopodium, Methodology, Mosaic (lettuce), Research, Seeds, Virus diseases (plants).

21981-68

THE USE OF ATTRACTANTS IN PEST CONTROL. (GE)

K Mayer

Gesunde Pflanzen 20(6):120,122,124-126 REF

Jun 1968 464.8 G33

Ammonia, Attractants, Biochemistry, Chemical control (insects), Citrus, Geraniol, Insect eggs, Insect repellents, Oils, Pest control, Pheromones, Population, Sex attractants, Social insects.

21982-68

STUDIES ON BIOLOGY OF BANMALIKA LEAF MINOR (AGROPISTIS LIMATUS, MOTH., COLEOPTERA, HALTICIDAE.) A SERIOUS PEST OF BANMALIKA (JASMINUM AQUESTIFOLIUM, VOHL.) IN RAJASTHAN.

V P Mital

Agra Univ J Res Sci 16(PT 1):89-91

Jan 1967 513 AG8

Chrysomelidae, Jasminum, Leaf miners, Life cycle.

21983-68

CUTWORMS AND ARMYWORMS.

Agr Gaz New S Wales 78(PT 4):230-233

Apr 1967 23 N472

Carbaryl, Chemical control (insects), Cultural control (insects), DDT, Natural control (insects), Noctuidae, Trichlorfon.

Prevention and chemical and cultural controls for

army and cutworms in Australian crops are discussed.

21984-68
THE PEAR AND CHERRY SLUG.

Agr Gaz New S Wales 78(PT 3):182-183
Mar 1967 23 N472

Caliroa cerasi, Chemical control (insects), Cherries, Lead arsenate, Malathion, Mevinphos, Pears.

Chemical control of Caliroa cerasi larvae, a pear and cherry leaf pest is discussed.

21985-68
ON THE TWO MEGASTIGMUS SPECIES (HYM., TORYMIDAE) OF THE JUNIPER SEED (JUNIPERUS COMMUNIS L.). (GE)

M Nuorteva
Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(2):121-124 REF

30 Aug 1967 421 SU7

Hymenoptera, Juniperus, Seeds.

21986-68
SEASONAL AND ZONAL DISTRIBUTION OF ICHNEUMONIDAE (HYM.) ON A SUBARCTIC FELL DURING A CALAMITY OF THE GEOMETRID MOTH OPORINIA AUTUMNATA (BKH.) ON BIRCHES.

P Nuorteva R Jussila
Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(3):155-163 REF

02 Nov 1967 421 SU7

Betula, Geometridae, Ichneumonidae, Seasonal variation, Zoogeography.

21987-68
CARABIDAE AND STAPHYLINIDAE OCCURRING ON SOIL SURFACE IN LUCERNE FIELDS. R Obrtl

Acta Ent Bohemoslov 1(65):5-20 REF
1968 420 C33

Alfalfa, Carabidae, Epidemiology, Field crops, Insect outbreaks, Insect pests, Precipitation, Soil horizons, Staphylinidae, Temperature.

21988-68
HONEY BEES AS POLLINATORS OF RED CLOVER.

T Palmer-Jones
New Zeal J Agr 114(1):34-35
Jan 1967 23 N48J

Apis mellifera, Clover, Pollination.

21989-68
NEW METHODS OF PEST CONTROL.

M D Pathak
Indian Farming 16(6):37,128-131,156
Sep 1966 22 IN283

Biological control (insects), Chemical control (insects), Insecticides, Integrated control (insects), Lindane, Methyl parathion, Rice.

Chemical, biological and integrated control of insect pests of rice in the Philippines are presented.

21990-68
ON THE USE OF ENTOMOPATHOGENIC BACTERIA TOGETHER WITH INSECTICIDES IN THE CONTROL OF INSECT PESTS.

V P Pristavko
Entomol Rev 46(4,OCT-DEC):443-446 REF
Dec 1967 421 R322AE

Bacteria, Entomogenous fungi, Insecticides, Integrated control (insects), Leptinotarsa decemlineata. Russian journal pp. 753-759

21991-68
DD-136 NEMATODE THAT CAN KILL MANY INSECT PESTS.

V P Rao T M Manjunath
Indian Farming 16(2):43-44
May 1966 22 IN283

Bacteria, Biological control (insects), Insect control, Nematodes.

The life cycle, and potential use of a nematode, DD-136, for control of various crop pests is discussed. A partial host list is included.

21992-68
CHANGES IN THE YIELD AND PROTEIN QUANTITY OF OAT CAUSED BY RHOPALOSIPHUM PADI (L.) (HOM., APHIDIDAE).

J Rautapaa
Ann Agr Fenn 7(2):95-104 REF
1968 20 AN7

Crop yields, Oats, Proteins, Rhopalosiphum padi.

21993-68
TESTS FOR INHERITANCE OF DIELDRIN-RESISTANCE IN THE CABBAGE MAGGOT, HYLEMYA BRASSICAE (BOUCHE).

D C Read
Entomol Soc Ontario Proc 95:128-132
1964 420 ON8

Cabbage, Dieltrin, Equipment, Genetics, Hylemya brassicae, Insect rearing, Research.

21994-68
INSECTICIDES, FUNGICIDES AND ANTIBIOTICS.

S Singh
Indian Farming 16(6):51,53,151
Sep 1966 22 IN283

Antibiotics, Chemical control (pests), Chemical control (weeds), Fungicides, Insecticides, Rice.

A discussion of equipment and chemical agents used for the control of rice pests in India is given.

21995-68
THE WESTWARD MOVEMENT OF PINK BOLLWORM.

J F Spears
Entomol Soc Amer Bull 14(2):118-119
Jun 1968 423.9 EN8

Cotton, Insect biology, Insect control, Insect migration, Insect pests, Pectinophora gossypiella, Plant injuries, Population.

21996-68
REACTION OF TOMATO VARIETIES AND BREEDING LINES TO APHIDS.

A K Stoner R E Webb A G Gentile
Hortscience 3(2,SUMMER):77
1968 SB1.H6

Breeding, Macrosiphum euphorbiae, Research, Tomatoes, Weather.

21997-68
SELECTING TOMATOES FOR RESISTANCE TO SPIDER MITES.

A K Stoner
Hortscience 3(2,SUMMER):110
1968 SB1.H6

Insect identification, Leaves, Plant injuries, Research, Tetranychus cinnabarinus, Tomatoes.

21998-68
STUDY OF AN ITONIDID (CONTARINIA MEDICAGINIS KIEFFER) AND OF ITS HOST. (FR)

M G Strebler
Paris Acad Agr France Compt Rend Seances Hebd 54(8):584-586
15 May 1968 14 P215BC

Contarinia, Corn, Crop losses, Life cycle.

21999-68
RESEARCH ON THE CHEMICAL CONTROL OF ACERIA SHELDONI. (TU)

C Tokmakoglu O Z Soyul M Y Celik
Bitki Koruma Bulteni 7(4):155-166
1967 464.8 B542

Acaricides, Aceria sheldoni, Biochemistry, Chemical control (insects), Chemicals, Citrus, Insect migration, Insect pests, Population, Research, Spraying. English summaries. Chemicals used were: chlorobenzilate, chloropropylate and eradex.

22000-68
WAR ON LOCUSTS GOES ON.

M Woodstock
Indian Farming 16(2):20
May 1966 22 IN283

Acerididae, Insect control.

A brief description of the British Ministry of Overseas Development's activity concerning the control of locusts is presented.

22001-68
SUSCEPTIBILITY TO INSECTICIDES OF THE GREEN RICE LEAFHOPPER, NEPHOTETTIX CINCTICEPS UHLER, COLLECTED FROM VARIOUS LOCALITIES. (JA)

K Yoshioka T Iwata
Jap J Appl Entomol Zool 11(4):193-195
Dec 1967 475 J27

Chemical control (insects), Geography, Insecticides, Nephotettix cincticeps, Research, Rice.

NEMATODES

22002-68
TRANSMISSION AND MORPHOLOGICAL STUDIES OF DISEASED H VICTORIAE.

B Anastasiadis
Diss Abstr Sect B 29(5):1540B
Nov 1968 Z5055.U49D53

Culture media, Fungi, Helminthosporium victoriae, Morphology, Nematodes, Research.

22003-68
PROBLEMS OF NEMATODE CONTROL IN BAVARIAN POTATO CULTURES. (GE)

P Behringer
Gesunde Pflanzen 20(10):227,228,230-231
Oct 1968 464.8 G33

Biochemistry, Chemical control (nematodes), Crop rotation, Nematodes, Plant nematode resistance, Potatoes, Research, Soils.

22004-68
EFFICACY OF VORLEX ON MITES AND NEMATODES ON GLADIOLUS CORM DEBRIS IN SANDY SOILS OF FLORIDA. (ABSTRACT).

A W Engelhard A J Overman
Phytopathology 58(6):727
Jun 1968 464.8 P56

Biochemistry, Chlorinated hydrocarbons, Gladiolus, Meloidogyne, Methyl isothiocyanate, Mites, Plant nematodes, Plant pest control, Sandy soils.

Vorlex is a mixture of chlorinated hydrocarbons and methyl isothiocyanate.

22005-68
CONCERNING THE DISTRIBUTION OF FREELY OCCURRING NEMATODES OF THE GENUS PRATYLENCHUS ON AGRICULTURALLY USED AREAS IN WESTPHALIA-LIPPE. (GE)

A Kemper
Gesunde Pflanzen 20(6):127-130
Jun 1968 464.8 G33

Crop rotation, Crops, Ditylenchus dipsaci, Fertilizers, Heterodera avenae, Nematodes, Pratylenchus, Soil hydrogen-ion concentration, Soil testing.

22006-68
RED RING (RADINAPHELENCHUS COCOPHILUS) OF THE COCONUT TREE IN THE ZONE OF TUMACO (NARINO). (SP)

A Sanchez Potes
Agr Trop 23(7):433-449 REF
Jul 1967 26 AG8

Arsenites, Chemical control (insects), Chemical control (nematodes), Curculionidae, Endrin, Insect vectors, Plant disease transmission, Plant nematodes, Red ring (coconuts), Zoogeography.

22007-68
PROBLEMS OF THE CONTROL OF THE CEREAL CYST NEMATODE (HETERODERA AVENAE) IN BAVARIA. (GE)

F Wagner P Behringer
Gesunde Pflanzen 20(10):231-233
Oct 1968 464.8 G33

Crop losses, Grain, *Heterodera avenae*, Nematodes, Pest control, Plant injuries, Plant nematode resistance, Plant protection, Zoogeography.

WEEDS

22008-68

SOME IMPORTANT WEEDS IN THE NORTHERN TERRITORY.

Anonymous

2P

0000 SB613.A8H3

Weeds.

22009-68

CHEMICAL CONTROL OF WEEDS IN DRAINS.

G J Batten

New Zeal J Agr 114(4):26-29

Apr 1967 23 N48J

Aquatic weeds, Chemical control (weeds), Herbicides.

The chemical control of weeds in drains in New Zealand is discussed giving specific directions for control of blackberry, raupo, mercer, and purva grasses, rushes, water milfoil and reed sweetgrass.

22010-68

FLURENOL- A HERBICIDE WITH NEW PROPERTIES. (GE)

J Berker

Gesunde Pflanzen 20(5):102,104-106

May 1968 464.8 G33

Biochemistry, Chemical control (weeds), Grain, Herbicides, Methyl-4-chlorophenoxyacetic acid, 2-Plant physiology, Roots, Soil adsorption.

22011-68

EXPERIMENTAL RESULTS CONCERNING THE CHEMICAL CONTROL OF WEEDS IN YOUNG LUCERNE FIELDS. (RUM)

A Ciorlaus H Bredt M Enica M Guta D Halalau et. al.

Probl Agr 20(9):21-30

1968 21 R862

Alfalfa, Chemical control (weeds), Herbicides. English, Russian and French abstracts

22012-68

TRIFLURALIN-TREATED CLOTH CONTROLS WEEDS IN GERANIUM PLANTINGS. (ABSTRACT).

L L Danielson

Hortscience 3(2,SUMMER):140-141

1968 SB1.H6

Chemical control (weeds), Equipment, Pelargonium hortorum, Planting, Research, Soils, Temperature, Trifluralin.

22013-68

EXPERIMENTS WITH TORDON HERBICIDE IN SMALL GRAINS.

R L Gantz I E Warren

Weed Soc Amer Abstr 1966 MEETING:4

1966 241 W41

Barley, Chemical control (weeds), D, 2,4-, Grain, Herbicides, Picloram, Polygonum convolvulus, Spraying, Wheat.

22014-68

CHANGED METHOD OF NATA USE IN THE CONTROL OF AGROPYRON REPENS ON ARABLE LAND. (GE)

F Herbold

Gesunde Pflanzen 19(11):236-238

Nov 1967 464.8 G33

Agropyron repens, Antitoxins, Biochemistry, Chemical control (weeds), Clay soils, Crop rotation, Methodology, Plant translocation, Tillage, Toxicology, Trichloroacetic acid.

22015-68

EFFICACY OF A STALE SEEDBED APPROACH FOR PROVIDING WEED CONTROL IN PICKLING CUCUMBERS. (ABSTRACT).

F D Hess A R Putnam

Hortscience 3(2,SUMMER):98

1968 SB1.H6

Chemical control (weeds), Cucumbers, Herbicides, Research, Seedbeds.

22016-68

THE FIELD THISTLE (CIRSIMUM ARVENSE SCOP.) IN THE GRASSLANDS. BIOLOGY AND MEANS OF CONTROL. (FR)

P Limbourg

Gembloux Inst Agron Etat Bull 3(2):331-340

REF

1968 105.1 G285

Chemical control (weeds), *Cirsium arvense*, Pastures, Picloram. French abstract

22017-68

THE THREE R'S OF HERBICIDE USE.

M K Mathur

Indian Farming 16(2):18-19

May 1966 22 IN283

Herbicides, Time.

Mathematical calculations for the formulation of various liquid and dry herbicides along with a list of their active ingredients are given. The type, dosage and application times of herbicides for Indian crops are discussed.

22018-68

WEEDICIDES IN SEDGE CONTROL TRIALS.

D M E Merry

New Zeal J Agr 114(4):44-45,47

Apr 1967 23 N48J

Carex, Chemical control (weeds), Herbicides, Weed control.

Herbicides for control of Australian sedge in New Zealand are discussed. Most effective chemicals and application methods are given.

22019-68

CONTROLLING HAIRGRASS (DESCHAMPSIA CAESPITOSA). (GE)

J Meyer H P Hadenfelt

Gesunde Pflanzen 20(4):75-79

Apr 1968 464.8 G33

Biochemistry, Calcium, Chemical control (weeds), *Deschampsia*, Herbicides, Paraquat.

22020-68

AUSTRALIAN SEDGE IN NEW ZEALAND.

B P J Molloy E Edgar

New Zeal J Agr 114(4):41-44

Apr 1967 23 N48J

Carex, Plant ecology, Plant quarantine, Weed control.

The identification and history of Australian sedge in New Zealand is discussed. Plant quarantine stations are analysing ecological studies to combat the weed.

22021-68

CHEMICAL WEED CONTROL IN PICKLING CUCUMBERS. (ABSTRACT).

T J Monaco C H Miller

Hortscience 3(2,SUMMER):94

1968 SB1.H6

Chemical control (weeds), Cucumbers, Herbicides, Research, Weeds.

22022-68

UP TO DATE WEED CONTROL IN HORTICULTURE.

H Neururer

Pflanzenarzt 21(4):51-54

01 Apr 1968 464.9 P482

Biochemistry, Chemical control (weeds), Crop rotation, Crop yields, Herbicides, Photosynthesis, Potassium, Spraying, Tables (data), Weeds.

22023-68

FACTORS AFFECTING THE PERFORMANCE OF PREEMERGENCE AND POSTEMERGENCE HERBICIDES IN PICKLING CUCUMBERS. (ABSTRACT).

A R Putman

Hortscience 3(2,SUMMER):94

1968 SB1.H6

Chemical control (weeds), Cucumbers, Environment, Herbicides, Research, Soil structure.

22024-68

EFFECT OF DICAMBA ON WHEAT AND WILD BUCKWHEAT AT VARIOUS STAGES OF DEVELOPMENT.

P C Quimby J D Nalewaja

Weed Soc Amer Abstr 1966 MEETING:5

1966 241 W41

Chemical control (weeds), Dicamba, Herbicides, Plant physiology, Polygonum convolvulus, Wheat.

22025-68

MECHANICAL CONTROL OF COTTON WEEDS.

P K Rangaiah

Indian Farming 16(2):30-31

May 1966 22 IN283

Cotton, Cultural control (weeds), Weed control.

The author discusses the advantages and techniques of mechanical control of weeds in cotton fields in India.

22026-68

THE HERBICIDAL ACTIVITY OF MSMA AND DSMA ON PURPLE NUTSEDGE.

A B Richards J W Whitworth

Weed Soc Amer Abstr 1966 MEETING:8

1966 241 W41

Arsenic compounds, Chemical control (weeds), *Cyperus rotundus*, Disodium methanearsonate, Dosage, Herbicides, Monosodium acid methanearsonate, Plant physiology.

22027-68

THE RESPONSE OF RICE AND BARNYARD GRASS TO 3,4-DICHLOROPROPIONANILIDE.

J N Sierra M R Vega

Philippine Agr 51(5):438-451

Oct 1967 25 P542

Grasses, Plant metabolism, Propanil, Rice.

22028-68

CONTROLLING BARNYARD GRASS IN RICE.

D J Swain

Agr Gaz New S Wales 78(PT 8):473-475

Aug 1967 23 N472

Chemical control (weeds), *Echinochloa*, Propanil, Rice.

22029-68

WEED CONTROL IN UPLAND RICE AT THE UNIVERSITY OF THE PHILIPPINES COLLEGE OF AGRICULTURE.

M R Vega J D Ona E C Paller

Philippine Agr 51(5):397-411

Oct 1967 25 P542

Chemical control (weeds), Crop yields, Rice.

22030-68

NEW KNOWLEDGE ABOUT THE USE OF HERBICIDES IN PERMANENT GRASSLAND. (GE)

F Wagner

Gesunde Pflanzen 20(10):215-216,218

Oct 1968 464.8 G33

Biochemistry, Chemical control (weeds), Feed, Herbicides, Pastures.

OTHER PESTS

22031-68

RAT BAITS INCORPORATING PARAFFIN WAX.

Papua New Guinea Agr J 19(2):88

Sep 1967 23 N453

Baits, Chemical control (pests), Methodology, Paraffin wax, Rats.

22032-68

THE DISTRIBUTION OF THE MUSK RAT AND ITS CONTROL IN BAVARIA. (GE)

N Mallach

Gesunde Pflanzen 20(10):223-227 MAP

Oct 1968 464.8 G33

Muskrats, Population, Rodents, Zoogeography.

LIVESTOCK PROTECTION

22033-68 STUDIES ON THE MECHANISM OF INTERFERON ACTION.

R J Ash
Diss Abstr Sect B 29(5):1771B
Nov 1968 Z5055.U49D53
Cells, Culture media, Interferon, Mammals, Microbiology, Proteins, Research.

22034-68 AMYLOIDOSIS INDUCED IN MICE BY ESCHERICHIA COLI ENDOTOXIN.

W F Barth J K Gordon J T Willerson
Science 162(3854):694-695
08 Nov 1968 470 SC12
Amyloidosis, Cells, Escherichia coli, Injections, Laboratory animals, Mice, Research, Toxins.

22035-68 STUDIES ON LEPTOSPIRAL LIPASE. I. CHARACTERIZATION OF LIPASES FROM PATHOGENIC AND SAPROPHYTIC STRAINS.

B Chorvath
J Hyg Epidemiol Microbiol Immunol 12(3):349-355 REF
1968 448.8 J826
Enzymes, Hydrogen-ion concentration, Leptospirosis, Lipases, Research, Saprophytes, Temperature, French, German, and Spanish summaries.

22036-68 HERITABLE REPRESSION DUE TO PARAMUTATION IN MAIZE.

E H Coe
Science 162(3856):925
22 Nov 1968 470 SC12
Corn, Deoxyribonucleic acid, Heredity, Mutation, Plant genetics, Research, Ribonucleic acid.

22037-68 VIRUS-LIKE PARTICLES IN THE SPIRAL GANGLION OF THE GUINEA PIG COCHLEA.

J L Craft D A Hilding
Science 162(3861):1485-1487 REF
27 Dec 1968 470 SC12
Cells, Ears, Electron microscopy, Guinea pigs, Nervous system, Research, Virus diseases (animals).

22038-68 STRUCTURE AND ANTIGENIC PROPERTIES OF A STAPHYLOCOCCAL L FORM.

D C Dannis
Diss Abstr Sect B 29(5):1773B
Nov 1968 Z5055.U49D53
Antigens, Culture media, Immunology, Microbiology, Properties, Research, Staphylococcus aureus.

22039-68 CURRENT ACTIVITIES--LASSWADE.

State Vet J 19(57):278
Sep 1964 S0F601.0S8
Chick embryos, Chicks, Culture media, Microscopy, Mycoplasma, Virology, Weather.

22040-68 METHODS OF RESTRAINING CATTLE FOR TUBERCULIN TESTING.

D B Morgan
State Vet J 19(57):256-260
Sep 1964 S0F601.0S8
Cattle, Equipment, Research, Tuberculin test.

22041-68 CALCIUM LOCALIZATION WITHIN LIVE OAT LEAVES USING A SEMICONDUCTOR DETECTOR ASSEMBLY.

A Ringo R V Rechenmann M Melloni R Wilthagen
Planta 81(3):280-286
1968 450 P693

Autoradiography, Biochemistry, Calcium, Foliar application, Leaves, Oats, Plant translocation.

22042-68 THE CLASSIFICATION OF LEPTOSPIRAL STRAINS FROM KAZAKHSTAN.

A A Varfolomeeva S K Kanareykina E P Kozlova
J Hyg Epidemiol Microbiol Immunol 12(3):356-364
1968 448.8 J826
Animal diseases, Biochemistry, Copper, Leptospirosis, Research, Serological tests, French, German, and Spanish summaries.

DISEASES

22043-68 BALANTIDIASIS MAY BE MORE COMMON THAN WE THINK.

S S Ahluwalia
Indian Farming 16(10):41-43
Jan 1967 22 IN283
Balantidiasis, Diagnosis, Epidemiology, Human diseases, Swine.

The life history of *Balantidium coli* and the epidemiology of balantidiosis in swine and man are discussed.

22044-68 POTENTIATION BY SILICA OF THE GROWTH OF MYCOBACTERIUM TUBERCULOSIS IN MACROPHAGE CULTURES.

A C Allison P D'Arcy Hart
Brit J Exp Pathol 49(5):465-476 REF
Oct 1968 448.8 B772
Laboratory animals, Macrophages, Mycobacterium tuberculosis, Physiology, Research, Silica.

22045-68 NATIONAL POULTRY AND TURKEY IMPROVEMENT PLANS AND AUXILIARY PROVISIONS. NOTICE OF PROPOSED RULE MAKING.

R J Anderson
Fed Regist 33(241):18445-18447
12 Dec 1968 L1.451
Animal diseases, Artificial insemination, Blood tests, Meat, Poultry, Research, Turkeys.

22046-68 TEXAS (SPLENETIC) FEVER IN CATTLE. PERMITTED DIPS.

R J Anderson
Fed Regist 33(236):18089
05 Dec 1968 L1.451
Arsenic compounds, Cattle, Coumaphos, Dioxathion, Dipping, Drug therapy, Livestock diseases, Protozoosis, Tissues.

22047-68 ENZOOTIC FOOT ROT CONTROL IN SHEEP. (RUM)

C G Anghel
Rev Zootech Med Vet 17(12):57-63 REF
Dec 1967 49 P943
Chemical control (pests), Copper sulfate, Foot rot (animals), Sheep, French, Russian and English abstracts

22048-68 MOLDY CORN POISONING AS THE MAJOR CAUSE OF AN ENCEPHALOMALACIA SYNDROME IN EGYPTIAN EQUIDAE.

L Badiali M H Abou-Youssef A I Radwan F Hamdy
Amer J Vet Res 29(10):2029-
Oct 1968 41.8 AM3A
Asses, Corn, Encephalomalacia, Molds, Poisoning, Toxicology.

22049-68 NECROTIC ENTERITIS OF CHICKENS.

B S Bains
Australian Vet J 44(1):40
Jan 1968 41.8 AU72

Autopsies, Chickens, Clostridium, Drug therapy, Enteritis, Gastrointestinal diseases, Oxytetracycline.

22050-68 CLINICAL AND PATHOLOGICAL STUDIES OF BORDER LEICESTER RAMS NATURALLY INFECTED WITH ACTINOBACILLUS SEMINIS.

I D Baynes G C Simmons
Australian Vet J 44(8):339-343 REF
Aug 1968 41.8 AU72
Actinobacillus, Animal histology, Epididymitis, Sheep.

22051-68 DISEASES OF PIGS AND THEIR CONTROL. SF971.B4. (ge)

H Behrens K Richter
154P FRANKFURT AM MAIN, DLG VERLAG
1967
Biochemistry, Breeding, Diagnosis, Drug therapy, Feeding, Livestock diseases, Preventive medicine, Swine, Swine houses.

22052-68 THE MORPHOLOGICAL AND BIOLOGICAL EFFECTS OF VARIOUS ANTISERA ON AVIAN INFECTIOUS BRONCHITIS VIRUS.

D M Berry J D Almeida
J Gen Virol (3,PT 1):97-102 REF
Jul 1968 Q0R360.0A10J6
Antibodies, Electron microscopy, Heat, Infectious bronchitis, Morphology, Research, Virus diseases (animals).

22053-68 QUANTITATION OF SUSCEPTIBILITY OF SWINE TO INFECTION WITH PASTEURELLA TULARENSIS.

W S Bivin A L Hogge
Amer J Vet Res 28(126):1619-1621
Sep 1967 41.8 AM3A
Immunity, Pasteurella tularensis, Swine.

22054-68 SURVEY SHOWS WEAKNESS IN MASTITIS CONTROL.

B W Bootes
Agr Gaz New S Wales 78(PT 8):476-478
Aug 1967 23 N472
Cattle, Drug therapy, Hygiene, Mastitis, Streptococcus.

22055-68 MAREK'S DISEASE. (FR)

A. Brion
Rec Med Vet 144(10):911-926 REF
Oct 1968 41.8 R24
Animal physiology, Avian lymphomatosis, Diagnosis, Herpesviruses, Histology, Immunity, Poultry.

The author discusses the history, symptomatology, virus agent, and etiology of Marek's disease, avian lymphomatosis. The selection of resistant lines of fowl is suggested, because no specific method of control is available.

22056-68 NEW ZEALAND VETERINARIANS STUDY ANIMAL DISEASES IN THAILAND.

E O Brookbanks P Gallagher P G Davenport
New Zeal J Agr 114(1):37,39,41,43
Jan 1967 23 N48J
Animal breeding, Animal quarantine, Cattle, Epizootic diseases, Foot-and-mouth disease, Immunization, Livestock diseases.

Animal diseases, particularly foot and mouth disease, which occur in Thailand were studied by New Zealand veterinarians. Disease outbreaks, control measures, quarantine and breeding stations were studied and evaluated.

22057-68 STEPS CAN BE TAKEN TO CURB MASTITIS.

E O Brookbanks
New Zeal J Agr 114(6):62-63,65
Jun 1967 23 N48J

22058-68

Dairy bacteriology, Hygiene, Livestock diseases, Mastitis.

Mastitis control in New Zealand is discussed. Biological tests and hygienic improvements are suggested.

22058-68

COMPARISON OF SELECTED CHARACTERISTICS OF FOUR STRAINS OF INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS.

G M Buening J B Gratzek
Amer J Vet Res 28(126):1257-1267 REF

Sep 1967 41.8 AM3A

Cattle, Diagnosis, Infectious bovine rhinotracheitis virus, Tissue culture.

22059-68

CRADLES MAKE FOOTROT TREATMENT EASIER.

R E Burnell

New Zeal J Agr 114(4):50-51,53

Apr 1967 23 N48J

Diagnosis, Equipment, Foot rot (animals), Methodology, Sheep.

A cradle for easy treatment and inspection for foot rot of sheep in New Zealand is described.

22060-68

EXPERIMENTAL IMMUNITY TO TUBERCULOSIS IN RABBITS IMMUNIZED WITH BCG MICROSOMAL FRACTION.

R M Burns

Diss Abstr Sect B 29(5):1772B

Nov 1968 Z5055.U49D53

Animal diseases, Immunity, Microbiology, Rabbits, Research, Tuberculosis, Tuberculosis vaccines.

22061-68

THE PERSISTENCE OF FOOT-AND-MOUTH DISEASE VIRUS IN SHEEP.

R Burrows

J Hyg 66(4):633-640 REF

Dec 1968 449.8 J82

Epizootic diseases, Foot-and-mouth disease virus, Sheep.

22062-68

POISONING OF CATTLE BY POLYGALA KLOTZCHII, CHODAT, IN THE REGION OF PONTAL (STATE OF SAO PAULO). (POR)

W V A de Camargo W Mengato F Platzech T Morita

Biologico 34(10):221-223

Oct 1968 442.8 B529

Cattle, Guinea pigs, Poisonous plants, Polygala, Toxicology.

22063-68

HOST SPECIFICITY AND SEROLOGIC DISPARITY OF AFRICAN SWINE FEVER VIRUS AND AMPHIBIAN POLYHEDRAL CYTOPLASMIC VIRUSES.

P E Came A H Dardiri

Soc Exp Biol Med Proc 130(1):128-132 REF

Jan 1969 442.9 SO1

African swine fever virus, Amphibians, Host relationships, Serological tests, Swine, Viruses.

22064-68

REGROWTH OF PRIMARY CELL CULTURES AFTER INFECTION WITH FOOT-AND-MOUTH DISEASE VIRUS.

C H Campbell

Amer J Vet Res 28(126):1601-1603

Sep 1967 41.8 AM3A

Cattle, Foot-and-mouth disease virus, Mice, Swine, Tissue culture.

22065-68

AFRICAN SWINE FEVER. APPLICATION OF IMMUNO-FLUORESCENCE TO THE STUDY OF TISSUE CULTURES. (FR)

R Carnero A Lucas F Ruiz B Larenaudic

Rec Med Vet 144(10):937-949 REF

Oct 1968 41.8 R24

African swine fever virus, Biochemistry, Diagnosis, Fluorescent antibody technic, Immunization, Tissue culture.

22066-68

MYCOBACTERIUM AVIUM INFECTION IN CATTLE: A CASE SERIES.

D R Cassidy L G Morehouse H A McDaniel

Amer J Vet Res 29(2):405-410 REF

Feb 1968 41.8 AM3A

Animal histology, Cattle, Mycobacterium avium, Surveys.

22067-68

PROPAGATION OF THE NEWCASTLE DISEASE VIRUS ON TISSUE CULTURES AT DIFFERENT TEMPERATURES. (CZ)

K Cernik E Cernikova

Czech Min Zemed Les Hospod Ustav Vedeckotech Inform Vet Med 13(7):393-402 REF

08 Jul 1968 41.9 C333

Newcastle disease virus, Temperature, Tissue culture. Russian, English and German abstracts

22068-68

ERADICATING AND CONTROLLING BRUCELLOSIS IN SHEEP.

D G Christie

Agr Gaz New S Wales 78(PT 4):221-225

Apr 1967 23 N472

Brucellosis, Complement fixation, Hygiene, Immunization, Sheep, Sterility.

22069-68

THESE PLANTS MIGHT SPELL DEATH TO YOUR CATTLE.

J Christopher

Indian Farming 16(9):43,45-47,49

Dec 1966 22 IN283

Antidotes, Cattle, Poisonous plants.

The identification of and antidotes for poisonous plants which kill cattle in India are listed.

22070-68

CIGUATERA POISONING IN CATS IN BRISBANE.

L Clark G B Whitwell

Australian Vet J 44(2):81

Feb 1968 41.8 AU72

Cats, Fish, Food poisoning, Poisoning, Surveys.

22071-68

UNCOATING OF NEWCASTLE DISEASE VIRUS.

W D Collard

Diss Abstr Sect B 29(5):1772B-1773B

Nov 1968 Z5055.U49D53

Biochemistry, Chickens, Culture media, Newcastle disease virus, Research.

22072-68

IMMUNODIFFUSION REACTIONS BETWEEN HUMAN SERA AND MYCOPLASMA PNEUMONIAE.

R M Conant N L Somerson L B Senterfit

Soc Exp Biol Med Proc 129(2):401-407 REF

Nov 1968 442.9 SO1

Complement fixation, Fluorescent antibody technic, Hemagglutination, Mycoplasma, Serological tests.

22073-68

EQUINE INFLUENZA IN MEXICO. ISOLATION AND STUDY OF THE STRAIN E/EQUI 2/MEXICO/1/66. (SP)

R G Cunha G G Lopez L G Mijares R Delecolle

Rev Latinoamer Microbiol Parasitol 10(4,OCT-DEC):197-204 REF

Dec 1968 448.8 R32

Equine influenza, Horses, Serological tests. English abstract

22074-68

BRITAIN'S EXPERIENCE WITH FOOT AND MOUTH DISEASE.

R M Davidson

New Zeal J Agr 114(6):32

Jun 1967 23 N48J

Epizootic diseases, Foot-and-mouth disease, Virus diseases (animals).

The author discusses the epizootiology and recent outbreaks of foot and mouth disease in England.

22075-68

TOXICITY STUDIES OF LISTERIA MONOCYTOGENES GROWN IN VIVO.

R A DiCapua J W Osebold K R Stone

Amer J Vet Res 29(10):2023-2028 REF

Oct 1968 41.8 AM3A

Bacterial diseases (animals), Biological assay, Listeria monocytogenes, Mice, Toxicology.

22076-68

ANTIBODY TO RHINOVIRUS IN HUMAN SERA. I. STANDARDIZATION OF NEUTRALIZATION TEST.

R G Douglas W F Fleet T R Cate R B Louch

Soc Exp Biol Med Proc 127(2):497-502

Feb 1968 442.9 SO1

Antibodies, Immunodiagnosis, Rhinoviruses.

22077-68

VACCINATION AGAINST JOHNE'S DISEASE AND THE CREATION OF CARRIERS.

T M Doyle

State Vet J 19(57):212-213

Sep 1964 S0F601.0S8

Calves, Immunization, Johne's disease, Laboratories, Microscopy, Milk analysis, Research.

22078-68

THE WORKING PARTY OF FASCIOLIASIS IN WALES.

C M Edwards C B Ollerenshaw

State Vet J 19(57):244-255,MAP

Sep 1964 S0F601.0S8

Epizootic diseases, Fascioliasis, Reports, Research, Trematoda.

22079-68

SEROLOGIC STUDY OF REOVIRUS INFECTION IN DOGS.

G A Fairehild D Cohen

Amer J Vet Res 28(126):1487-1490

Sep 1967 41.8 AM3A

Dogs, Reoviruses, Serodiagnosis.

22080-68

APPLICATION OF STRESSES TO FOOT-AND-MOUTH DISEASE VIRUS.

O N Fellowes

Amer J Vet Res 28(127):1873-1880 REF

Nov 1967 41.8 AM3A

Epizootic diseases, Foot-and-mouth disease virus, Nitrous acid, Ribonucleic acid, Stress, Tissue culture, Ultraviolet rays.

22081-68

ENDOTOXIN PROPERTIES OF LEPTOSPIRA CANICOLA.

D R Finco D G Low

Amer J Vet Res 28(127):1863-1872 REF

Nov 1967 41.8 AM3A

Biological assay, Endotoxins, Escherichia coli, Leptospira canicola, Rabbits.

22082-68

ANTIBODY TO RHINOVIRUS IN HUMAN SERA. II. HETEROTYPIC RESPONSES.

W F Fleet R G Douglas T R Cate R B Couch

Soc Exp Biol Med Proc 127(2):503-509 REF

Feb 1968 442.9 SO1

Antibodies, Immunodiagnosis, Rhinoviruses.

22083-68

THE MECHANISM OF LYMPHOPENIA PRODUCED BY CHRONIC IRRADIATION OF THE RAT SPLEEN.

W L Ford

Brit J Exp Pathol 49(5):502-510 REF

Oct 1968 448.8 B772

Blood, Irradiation, Laboratory animals, Phosphorus isotopes, Rats, Research, Spleen.

- 22084-68**
THE EFFECT OF VIBRIO FETUS VACCINATION ON THE BREEDING EFFICIENCY OF COWS BRED TO VIBRIO FETUS-INFECTED BULLS.
 A H Frank J H Bryner P A O'Berry
Amer J Vet Res 28(126):1237-1242 REF
 Sep 1967 41.8 AM3A
 Animal breeding, Cattle, Immunization, Reproduction, Vibrio.
- 22085-68**
THE COMPLEMENT-FIXATION TEST FOR AVIAN LEUKOSIS.
 I G S Furminger A J Beale
J Gen Virol (3,PT 1):25-34 REF
 Jul 1968 QOR360.0A10J6
 Antibodies, Antigens, Avian leukosis complex, Complement fixation, Hamsters, Neoplasms, Research, Rous sarcoma virus, Virus diseases (animals).
- 22086-68**
ULTRASTRUCTURE OF ANAPLASMA MARGINALE FIXED WITH GLUTARALDEHYDE AND OSMIUM TETROXIDE.
 D W Gates T O Roby T E Amerault D W Anthony
Amer J Vet Res 28(126):1577-1580 REF
 Sep 1967 41.8 AM3A
 Anaplasma, Cattle, Cytology, Electron microscopy.
- 22087-68**
PREVALENCE OF SALMONELLOSIS AND BLACKLEG IN MATERIAL FROM CATTLE EXAMINED DURING THE FIVE-YEAR PERIOD 1963-1967 IN THE STATE OF SAO PAULO. (POR)
 W Giorgi C Troise
Biologico 34(10):229-231
 Oct 1968 442.8 B529
 Bones, Cattle, Clostridium, Livestock diseases, Salmonella, Surveys.
- 22088-68**
ATTEMPTS TO RECOVER MYCOPLASMA SUIPNEUMONIAE FROM EXPERIMENTAL AND NATURAL CASES OF ENZOOTIC PNEUMONIA IN PIGS.
 R F W Goodwin A P Pomeroy P Whittlestone
J Hyg 66(4):595-603 REF
 Dec 1968 449.8 J82
 Epizootic diseases, Mycoplasma suis pneumoniae, Pneumonia, Swine.
- 22089-68**
PRODUCTION OF ENZOOTIC PNEUMONIA IN PIGS WITH MYCOPLASMA SUIPNEUMONIAE GROWN IN EMBRYONATED HEN'S EGGS.
 R F W Goodwin J M W Hurrell P Whittlestone
Brit J Exp Pathol 49(5):431-435
 Oct 1968 448.8 B772
 Eggs, Livestock diseases, Mycoplasma suis pneumoniae, Pneumonia, Research, Swine, Tissue culture.
- 22090-68**
GRASS TETANY IN CATTLE--USING MOLASSES--MAGNESIUM OXIDE MIXTURES TO PREVENT IT.
 J S Healey
Agr Gaz New S Wales 78(PT 7):392-393
 Jul 1967 23 N472
 Animal nutrition, Cattle, Grass tetany, Magnesium oxide, Molasses.
 The prevention of grass tetany in Australian cattle, a nutritional deficiency disease, with molasses and magnesium oxide is discussed.
- 22091-68**
EFFECTS OF TEMPERATURE ON IN VITRO EXCYSTATION OF VARIOUS EIMERIA SPECIES.
 L E Hibbert D M Hammond
Exp Parasitol 23(2):161-170 REF
 Oct 1968 436.8 EX7
 Animal physiology, Asexual reproduction, Carbon dioxide, Cysts, Eimeria, Ovarian cysts, Sporozoa, Temperature.
- 22092-68**
LABORATORY DIFFERENCES BETWEEN THE WS STRAIN OF INFLUENZA A VIRUS AND ITS NEUROTROPIC VARIANTS.
 D Hobson E A Gould H I Flockton M G Gregory
Brit J Exp Pathol 49(5):516-524 REF
 Oct 1968 448.8 B772
 Influenza viruses, Laboratory animals, Mice, Neurotropic viruses, Physiology, Research, Serological tests, Tissue culture, Virus diseases (animals).
- 22093-68**
THE ISOLATION AND RECOGNITION OF VIRUSES.
 R A Huck
State Vet J 19(57):236-243
 Sep 1964 S0F601.0S8
 Chick embryos, Eggs, Histology, Laboratories, Microorganisms, Research, Serological tests, Viruses.
- 22094-68**
BREEDING DISEASE-RESISTANT DOMESTIC ANIMALS.
 F B Hutt
*Agr Sci Rev (THIRD QUARTER)*6(3):11-18 REF
 1968 A31.3 AG893
 Animal breeding, Animal diseases, Animal genetics, Immunity.
- 22095-68**
CONTAGIOUS PLEURO-PNEUMONIA OF GOATS.
 P R K Iyer
Indian Farming 16(2):40-42,44
 May 1966 22 IN283
 Goats, Immunization, Pleuropneumonia, Virucides.
- 22096-68**
INFLUENCE OF EGG ALBUMIN-INDUCED LEUKOPENIA ON EXPERIMENTAL AEROBACTER AEROGENES MASTITIS AND ON NATURAL INFECTION OF MAMMARY GLAND WITH COAGULASE-NEGATIVE STAPHYLOCOCCUS IN A COW.
 N C Jain J Lasmanis O W Schalm
Amer J Vet Res 28(126):1243-1250 REF
 Sep 1967 41.8 AM3A
 Aerobacter aerogenes, Cattle, Immunity, Mastitis, Staphylococcus.
- 22097-68**
ABORTIVE AND TERATOGENIC EFFECTS OF LOCOWEED ON SHEEP AND CATTLE.
 L F James J L Shupe W Binns R F Kecler
Amer J Vet Res 28(126):1379-1388 REF
 Sep 1967 41.8 AM3A
 Abnormalities, Abortion, Astragalus, Cattle, Poisonous plants, Pregnancy, Sheep, Toxicology.
- 22098-68**
ON THE PREPARATION OF IMMUNE GLOBULINS AGAINST DISTEMPER AND INFECTIOUS HEPATITIS OF DOGS. (CZ)
 E Jiran G Petr Z Urbaneck
Czech Min Zemed Les Hospod Ustav Vedeckotech Inform Vet Med 13(7):423-430 REF
 08 Jul 1968 41.9 C333
 Canine distemper, Dogs, Globulins, Immunization, Infectious canine hepatitis, Russian, English and German abstracts
- 22099-68**
GROWTH OF RIFT VALLEY FEVER VIRUS IN TISSUE CULTURE.
 R W Johnson M D Orlando
Amer J Vet Res 29(2):463-471 REF
 Feb 1968 41.8 AM3A
 Rift VALLEY fever virus, Tissue culture, Virus diseases.
- 22100-68**
TESTING OF THE PATHOGENICITY OF VIRUS STRAINS OF THE NEWCASTLE DISEASE IN PIGEONS. (CZ)
 V Kabelik
Czech Min Zemed Les Hospod Ustav Vedeckotech Inform Vet Med 13(7):385-392
 08 Jul 1968 41.9 C333
 Microbiology, Newcastle disease virus, Pigeons, Russian, English and German abstracts
- 22101-68**
COMPARATIVE PATHOLOGICAL ANATOMY OF THE HEPATITIS VIRUS OF MAN AND DOGS. (GE)
 P Kapp
Acta Vet (budapest) 18(2):193-204 REF
 1968 41.8 AC83
 Animal anatomy, Autopsies, Dogs, Virus hepatitis.
- 22102-68**
THE TRANSMISSION OF DERMATOPHILOSIS (MYCOTIC DERMATITIS) IN SHEEP.
 P D Ke Riche
Australian Vet J 44(2):64-67 REF
 Feb 1968 41.8 AU72
 Epidemiology, Livestock diseases, Mycotic dermatitis, Sheep.
- 22103-68**
INFECTIOUS BOVINE RHINOTRACHEITIS-INFECTIOUS PUSTULAR VULVOVAGINITIS VIRUS INFECTION IN PREGNANT COWS.
 J W Kendrick O C Straub
Amer J Vet Res 28(126):1269-1282
 Sep 1967 41.8 AM3A
 Abortion, Cattle, Coital exanthema, Diagnosis, Infectious bovine rhinotracheitis virus, Pregnancy.
- 22104-68**
CYTOLOGIC STUDIES IN POLYOMA VIRUS-INFECTED MOUSE EMBRYO CELLS.
 G P Khare R A Consigli
Amer J Vet Res 28(126):1527-1536 REF
 Sep 1967 41.8 AM3A
 Cytology, Mice, Physiology, Polyoma virus, Tissue culture.
- 22105-68**
ON THE SPECIFIC MECHANISM OF THE TRANSMISSION OF LEPTOSPIRAL INFECTION.
 V S Kiktenko
J Hyg Epidemiol Microbiol Immunol 12(3):341-348 REF
 1968 448.8 J826
 Animal diseases, Epidemiology, Infectious diseases, Kidneys, Leptospirosis, Research, Zoonoses, French, German, and Spanish summaries.
- 22106-68**
UTERINE-AMNIONIC PATHWAY OF INFECTING THE RABBIT FETUS WITH LISTERIA MONOCYTOGENES.
 C D King C Olson
Amer J Vet Res 28(126):1555-1567 REF
 Sep 1967 41.8 AM3A
 Fetus, Fluorescent antibody technic, Histology, Listeria monocytogenes, Rabbits.
- 22107-68**
STUDIES OF LIVE ATTENUATED JAPANESE ENCEPHALITIS VACCINE IN SWINE.
 K Kodama N Sasaki Y K Inoue
J Immunol 100(1):194-200 REF
 Jan 1968 448.8 J8232
 Colostrum, Injections, Japanese b encephalitis, Research, Swine, Vaccines.
- 22108-68**
THE INVESTIGATION OF SCRUB TYPHUS IN THE USSR.
 S M Kulagin I V Tarasevic N I Kudryasova L F Plotnikova
J Hyg Epidemiol Microbiol Immunol 12(3):257-263 REF
 1968 448.8 J826

22109-68

Animal vectors, Epidemiology, Infectious diseases, Insect vectors, Research, Scrub typhus. French, German, and Spanish summaries.

22109-68

SEROLOGIC ANALYSIS OF BOVINE VIBRIOSIS.

K Larson I. Ringen

Amer J Vet Res 28(126):1231-1235 REF

Sep 1967 41.8 AM3A

Cattle, Electrophoresis, Serodiagnosis, Vibrio.

22110-68

EPIZOOTIOLOGIC STUDIES OF Q FEVER IN WASHINGTON DAIRY CATTLE.

D R Lingard

Diss Abstr Sect B 29(5):1539B

Nov 1968 Z5055.U49D53

Dairy cattle, Epizootic diseases, Livestock diseases, Q fever, Research.

22111-68

NEWCASTLE DISEASE IN ENGLAND AND WALES CONTROL BY VACCINATION--THE FIRST YEAR.

J G Loxam

State Vet J 19(57):197-211

Sep 1964 S0F601.0S8

Animal diseases, Immunization, Newcastle disease, Surveys.

22112-68

ELECTROPHORETIC FRACTIONATION OF CLOSTRIDIUM HEMOLYTICUM TOXIC CULTURE FLUIDS.

E A Lozano L D S Smith

Amer J Vet Res 28(126):1569-1576 REF

Sep 1967 41.8 AM3A

Clostridium hemolyticum, Electrophoresis, Erythrocytes, Proteins, Toxins.

22113-68

IN VIVO PRODUCTION OF A TOXIN(S) BY LISTERIA MONOCYTOGENES.

P K Mellwain R W Barnes

Amer J Vet Res 29(2):483-485

Feb 1968 41.8 AM3A

Chinchillas, Listeria monocytogenes, Mortality, Toxicology, Toxins.

22114-68

EVALUATION OF THE FLUORESCENT ANTIBODY-CELL CULTURE TEST FOR HOG CHOLERA DIAGNOSIS.

W L Mengeling J P Torrey

Amer J Vet Res 28(127):1653-1659 REF

Nov 1967 41.8 AM3A

Diagnosis, Fluorescent antibody technic, Hog cholera, Swine.

22115-68

PATHOGENESIS AND PATHOLOGIC FEATURES OF AVIAN ENCEPHALOMYELITIS IN CHICKS.

G C Mohanty J L West

Amer J Vet Res 29(12):2387-2400

Dec 1968 41.8 AM3A

Animal physiology, Avian encephalomyelitis, Central nervous system, Chickens, Hydrocephalus.

22116-68

SEROLOGIC COMPARISON OF NORTH AMERICAN AND JAPANESE PORCINE PICORNAVIRUSES.

T. Morimoto H W Dunne J T Wang

Amer J Vet Res 29(12):2275-2280 REF

Dec 1968 41.8 AM3A

Picornaviruses, Serological tests, Swine.

22117-68

SYNTHESIS AND CYTOPATHOGENESIS OF AFRICAN SWINE FEVER VIRUS IN PORCINE CELL CULTURES.

J Moulton L Coggins

Amer J Vet Res 29(2):219-232 REF

Feb 1968 41.8 AM3A

African swine fever virus. Biochemistry, Cytopathology, Tissue culture.

22118-68

ERADICATION OF VIBRIOSIS FROM A STUD HERD.

D H Mumford

Agr Gaz New S Wales 78(PT 2):98-99

Feb 1967 23 N472

Abortion, Bacterial diseases (animals), Cattle, Vibriosis.

22119-68

EXPERIENCES CONCERNING THE PREPARATION AND APPLICATION OF MYCOPLASMA ANTIGEN.

G Nagy

Acta Vet (budapest) 18(2):173-176

1968 41.8 AC83

Agglutination, Chickens, Hemagglutination, Mycoplasma gallisepticum antigens, Respiratory diseases, Serodiagnosis.

22120-68

THE OCCURRENCE OF FOOT-AND-MOUTH DISEASE IN THE STATE OF SAO PAULO IN 1968. (POR)

L P Netto A A Pinto O Suga O Yida

Biologico 34(10):226-228

Oct 1968 442.8 B529

Foot-and-mouth disease, Livestock diseases, Surveys.

22121-68

THE ROLE OF DIET AND THE RETICULOENDOTHELIAL SYSTEM IN THE RESPONSE OF RATS TO SALMONELLA TYPHIMURIUM INFECTION.

P M Newberne C E Hunt V R Young

Brit J Exp Pathol 49(5):448-457 REF

Oct 1968 448.8 B772

Copper, Deficiency diseases, Diet, Immunity, Proteins, Rats, Research, Reticuloendothelial system, Salmonella typhimurium, Vitamin b complex.

22122-68

STUDIES ON PATHOLOGY OF RESPIRATORY DISEASES OF POULTRY WITH SPECIAL REFERENCE TO VIRAL AND P. P. L. O. INFECTIONS.

S K Nigam

Agra Univ J Res Sci 16(PT 1):183-184

Jan 1967 513 AG8

Histology, Pleuropneumonia-like organisms, Poultry, Respiratory diseases, Virus diseases (animals).

22123-68

INFECTIOUS BOVINE RHINOTRACHEITIS: CORRELATION OF FETAL AND PLACENTAL LESIONS WITH VIRAL ISOLATIONS.

N V Owen T L Chow J A Molello

Amer J Vet Res 29(10):1959-1965

Oct 1968 41.8 AM3A

Animal physiology, Cattle, Cytopathology, Rhinotracheitis, Tissue culture.

22124-68

INFECTIOUS BOVINE RHINOTRACHEITIS: RELATIONSHIP OF LEVEL OF MATERNAL ANTIBODY TITER TO INCIDENCE OF FETAL DEATH AND ABORTION.

N V Owen T L Chow J A Molello

Amer J Vet Res 29(10):1967-1970

Oct 1968 41.8 AM3A

Abortion, Antibodies, Cattle, Rhinotracheitis, Virus diseases (animals).

22125-68

INFECTIOUS LARYNGOTRACHEITIS OF POULTRY. (RUM)

I Patrascu C Surdan V Rusu V Popa V Gogoasa

M Taga

Rev Zootech Med Vet 17(12):31-56 REF

Dec 1967 49 P943

Epizootic diseases, Histology, Infectious laryngotracheitis, Poultry diseases, Serodiagnosis, Virology. French, Russian and English abstracts

22126-68

CHEMICALLY CHARACTERIZED MEDIA FOR STUDY OF FOOT-AND-MOUTH DISEASE VIRUS IN BABY HAMSTER KIDNEY CELLS.

J Polatnick

Appl Microbiol 15(2):228-232

Mar 1967 448.3 AP5

Cells, Culture media, Foot-and-mouth disease virus, Hamsters, Kidneys, Laboratories, Virus diseases (animals).

22127-68

KERATOCONJUNCTIVITIS PRODUCED BY MORAXELLA BOVIS IN LABORATORY ANIMALS.

G W Pugh D E Hughes T J McDonald

Amer J Vet Res 29(10):2057-2061 REF

Oct 1968 41.8 AM3A

Bacterial diseases (animals), Keratoconjunctivitis, Laboratory animals, Moraxella, Sheep.

22128-68

PASSIVE HEMOLYTIC ANTIBODY RESPONSE OF PRIMED, PARTIALLY RESISTANT MICE TO HEAT-KILLED SALMONELLA TYPHIMURIUM VACCINE.

J P Ransom

Soc Exp Biol Med Proc 128(2):419-423 REF

Jun 1968 442.9 SO1

Antibodies, Bacterial vaccines, Immunity, Mice, Salmonella typhimurium.

22129-68

INFLUENCE OF STREPTOCOCCUS EQUISIMILIS ON SITES OF ENDOCHONDRAL OSSIFICATION IN SWINE.

E D Roberts F K Ramsey W P Switzer J M

Layton

Amer J Vet Res 28(127):1677-1686 REF

Nov 1967 41.8 AM3A

Bone diseases, Calcium, Streptococcus, Swine.

22130-68

ISOLATION OF THE GROUP-SPECIFIC POLYSACCHARIDE OF MYCOBACTERIUM TUBERCULOSIS.

B Sandoval S Estrada-Parra

Rev Latinoamer Microbiol Parasitol 10(4,OCT-DEC):171-173 REF

Dec 1968 448.8 R32

Immunization, Mycobacterium tuberculosis, Polysaccharides, Serological tests.

22131-68

BLOOD SERUM FACTORS ASSOCIATED WITH ERYTHROPHAGOCYTOSIS IN CALVES WITH ANAPLASMOSIS.

W F Schroeder M Ristic

Amer J Vet Res 29(10):1991-1995 REF

Oct 1968 41.8 AM3A

Anaplasmosis, Cattle, Erythrocytes, Immunity, Phagocytosis, Serological tests.

22132-68

COMPARISON OF A BOVINE ENTEROVIRUS AND FOOT-AND-MOUTH DISEASE VIRUS.

F W Scott G E Cottral

Amer J Vet Res 28(126):1597-1600 REF

Sep 1967 41.8 AM3A

Bovine enteroviruses, Cattle, Foot-and-mouth disease, Serological tests, Tissue culture.

22133-68

SOME CONSIDERATIONS ON THE NAME BOVINE MALARIA. (FR)

E Sergent

*Nancy Univ Fac Pharm Ass Diplomes Microbiol**Bull* 110(2ND TRIMESTER):2-5

1968 448.2 N152

Cattle, Immunity, Malaria, Nomenclature, Symbiosis, Viruses.

22134-68

PROBLEM OF AVIAN LEUKOSIS IN LAHORE.

S A Sheikh M Ahmad K A Tahir

Pakistan J Sci 19(5-6):212-217 REF

Nov 1967 475 P172

Avian leukosis complex, Avian lymphomatosis, Chickens, Immunization, Pest control, Poultry hatcheries.

A study was made of the high incidence of avian leukosis in Lahore, Pakistan. Heavy economic losses were caused by the lymphomatosis in the first laying season of brooding chickens. Hatcheries and parent stocks are discussed as the source of the infection and a review of previous literature is given.

22135-68
EFFECTS OF LISTERIA MONOCYTOGENES HEMOLYSINS ON THE ISOLATED ILEUM OF RABBIT.

I H Siddique C A Walker
Amer J Vet Res 28(127):1843-1849 REF
Nov 1967 41.8 AM3A
Drug therapy, Hemolysins, *Listeria monocytogenes*, Rabbits.

22136-68
VERVET MONKEY DISEASE: EXPERIMENTAL INFECTION OF GUINEAPIGS AND MONKEYS WITH THE CAUSATIVE AGENT.

D I H Simpson I Zlotnik D A Rutter
Brit J Exp Pathol 49(5):458-464
Oct 1968 448.8 B772
Animal diseases, Guinea pigs, Human diseases, Laboratory animals, Monkeys, Research, Reticuloendothelial system.

22137-68
VACCINATION AGAINST LEPTOSPIROSIS: IMMUNOGENICITY OF VIABLE, AVIRULENT LEPTOSPIRA POMONA IN HAMSTERS, SWINE, AND CATTLE.

O H V Stalheim
Amer J Vet Res 29(2):473-478 REF
Feb 1968 41.8 AM3A
Cattle, Immunization, *Leptospira pomona*, Swine.

22138-68
NEUTRALISING ANTIBODIES FOR AVIAN INFECTIOUS BRONCHITIS VIRUS IN QUEENSLAND POULTRY FLOCKS.

P Stephens G C Simmons
Australian Vet J 44(1):29-30
Jan 1968 41.8 AU72
Antibodies, Chickens, Infectious bronchitis, Serodiagnosis, Virus diseases (animals).

22139-68
VACCINATION OF CONGENITALLY-IMMUNE CHICKS AGAINST NEWCASTLE DISEASE VIRUS.

H D Stone W A Boney
Soc Exp Biol Med Proc 128(2):525-530 REF
Jun 1968 442.9 SO1
Antibodies, Chickens, Immunization, Newcastle disease virus.

22140-68
DIAGNOSIS OF TRICHOMONAS FOETUS INFECTION IN BULLS.

R Todorovic S H McNutt
Amer J Vet Res 28(126):1581-1590 REF
Sep 1967 41.8 AM3A
Cattle, Culture media, Diagnosis, *Trichomonas*, Trichomoniasis.

22141-68
TUMOUR METABOLIC INHIBITION OF SERUM FROM PARTIALLY HEPATECTOMIZED RATS AS A SPECIFIC LACK OF COMPENSATION MECHANISMS IN TUMOUR CELLS.

M Volm H Wrba H Hinderer
Brit J Exp Pathol 49(5):496-501
Oct 1968 448.8 B772
Cells, Culture media, Laboratory animals, Metabolism, Neoplasms, Rats, Research, Serum.

22142-68
SWINE FEVER ERADICATION CAMPAIGN 1963-64.

J Watson
State Vet J 19(57):261-274
Sep 1964 S0F601.0S8

Diagnosis, Histology, Hog cholera, Research, Swine, Vaccines.

22143-68
IMMUNOLOGIC AND HISTOLOGIC STUDIES OF A HAMSTER ADENOVIRUS TUMOR AND A MOUSE MAMMARY TUMOR.

C J Wood
Diss Abstr Sect B 29(5):1561B
Nov 1968 Z5055.U49D53
Adenoviruses, Hamsters, Histology, Immunology, Mammary glands, Mice, Neoplasms, Research, Virus diseases (animals).

22144-68
CARDIOPULMONARY VALUES IN NORMAL AND HEARTWORM-INFECTED DOGS.

D A Yarns R J Tashjian
Amer J Vet Res 28(126):1461-1473 REF
Sep 1967 41.8 AM3A
Blood pressure, *Dirofilaria immitis*, Dogs, Electrocardiograms, Heart failure, Phonocardiograms, Physiology.

22145-68
RELATION OF INTERFERON SYNTHESIS TO ABORTIVE REPLICATION OF NEWCASTLE DISEASE VIRUS IN L CELLS.

J S Youngner A W Scott
J Virology 2(1):81-82
Jan 1968 QR360.J6
Cells, Interferon, Newcastle disease virus, Proteins, Virus diseases (animals).

ARTHROPODS

22146-68
ATTENTION TO CATTLE LICE CAN BE PROFITABLE.

C C Banks
New Zeal J Agr 114(6):24-25
Jun 1967 23 N48J
Anoplura, Cattle, Chemical control (insects), Mallophaga.
Lice of New Zealand cattle and their control are described.

22147-68
EXTERNAL PARASITES OF PIGS.

R E Burnell J C Elliot
New Zeal J Agr 114(1):18-19,21
Jan 1967 23 N48J
Acarina, Anoplura, Chemical control (pests), Swine.

The author discusses New Zealand external parasites of swine, including methods for identifying and controlling infestations of lice and mites.

22148-68
INSECT TORMENTORS OF LIVESTOCK: IV. THE MITES.

R P Chaudhury
Indian Farming 16(5):43-45,49
Aug 1966 22 IN283
Acaricides, Acarina, Benzene hexachloride, Dieldrin, DDT, Host relationships, Livestock diseases.
Life cycles, ecology and chemical control of mites of livestock in India is discussed.

22149-68
INSECT TORMENTORS OF LIVESTOCK: III. FLEAS AND TICKS.

R P Chaudhury
Indian Farming 16(4):11-15
Jul 1966 22 IN283
Argas persicus, Benzene hexachloride, Chemical control (insects), DDT, Insecticides, Ixodidae, Siphonaptera.
Life cycles, including host relationships and chemical control of fleas and ticks attaching livestock in India are discussed.

22150-68
SCALY LEG IN POULTRY--A PARASITIC DISEASE.

J S Healey
Agr Gaz New S Wales 78(PT 10):602-603
Oct 1967 23 N472
Chemical control (insects), Hygiene, Mites, Poultry diseases, Scaly leg.
Chemical control of mites causing scaly leg in poultry of Australia is discussed.

22151-68
NEW DATA ON THE BLOODSUCKING MIDGE (DIPTERA, CERATOPOGONIDAE) OF THE COASTAL ZONE OF THE MARITIME TERRITORY.

K S Ivanov V M Glukhova
Entomol Rev 46(4,OCT-DEC):478-481
Dec 1967 421 R322AE
Catalogs, Ceratopogonid, Insect taxonomy, Insect vectors, Japanese B encephalitis virus. Russian journal pp. 808-813

22152-68
PURINA POULTRY WORMING TABLETS. DRUGS FOR VETERINARY USE; DRUG EFFICACY STUDY IMPLEMENTATION.

H L Ley
Fed Regist 33(240):18409-18410
11 Dec 1968 L1.451
Biochemistry, Chemical control (nematodes), Drug therapy, Nematodes, Poultry, Veterinary medicine.

22153-68
LICE OF POULTRY.

Agr Gaz New S Wales 78(PT 3):178-180
Mar 1967 23 N472
Chemical control (insects), Dipping, Dusting, Fumigants, Mallophaga, Poultry, Spraying.

Methods for the eradication of poultry lice to increase egg production and reduce weight loss in chickens are discussed.

22154-68
THE PASTURE FLY (DIPTERA) FAUNA ASSOCIATED WITH CAMELS IN SOUTH TUVA.

Ye A Pridanseva
Entomol Rev 46(4,OCT-DEC):491-494 REF
Dec 1967 421 R322AE
Camels, Catalogs, Demography, Diptera, Insect vectors. Russian journal pp. 827-834

22155-68
CONTROL OF THE HAMSTER PEST. (GE)

O Schreier
Pflanzenarzt 21(5):69-70
01 May 1968 464.9 P482
Biochemistry, Carbon monoxide, Earthworms, Gases, Hamsters, Hibernation, Insect pests, Phosphorus compounds, Plant injuries, Spraying.

22156-68
HOW TO GET RID OF ECTOPARASITES OF POULTRY.

B P Srivastava V P Sharma
Indian Farming 16(1):20-23
Apr 1966 22 IN283
Acarina, Argas persicus, Chemical control (insects), Lindane, Malathion, Mallophaga, Parasitic insects, Poultry, Siphonaptera.

22157-68
SYNANTHROPIC DIPTERA OF THE GENERA DASYPHORA R. D. AND MORELLIA R. D. (DIPTERA, MUSCIDA) IN SOVIET CENTRAL ASIA.

V I Sychevskaya
Entomol Rev 46(4,OCT-DEC):482-490 REF
Dec 1967 421 R322AE
Catalogs, Insect biology, Insect taxonomy, Insect vectors, Muscidae, Zoogeography. Russian journal pp. 814-826.

22158-68
NEW RESTRICTIONS ON USE OF DDT.

F B Thompson
New Zeal J Agr 114(6):53
Jun 1967 23 N48J

Chemical control (insects), DDT, Insecticide residues, Legislation.

Permits for DDT use in New Zealand are restricted during May, June and July. Specifications for its use around livestock are given.

PARASITES

22159-68

BIOLOGICAL INVESTIGATIONS ON THE CESTODE, RAILLIETINA (R.) LOEWENI BARTEL AND HANSEN, 1964.

M H Bartel M F Hansen

Amer Microscop Soc Trans 86(1):9-15

Jan 1967 440.9 AM33

Biology, Cestoda, Formicidae, Insect vectors, Rabbits, Raillietina.

22160-68

INFLUENCE OF HAEMONCHOSIS ON NUTRITIONALLY INDUCED KETOSIS IN SHEEP.

D G Bennett S D Van Dewark H D Jackson

Amer J Vet Res 29(12):2315-2324

Dec 1968 41.8 AM3A

Animal nutrition, Haemonchosis, Haemonchus contortus, Ketosis, Sheep.

22161-68

DIFFUSION CHAMBERS FOR INDUCING IMMUNITY TO TRICHINELLA SPIRALIS IN MICE.

D D Desponmier B S Wostmann

Exp Parasitol 23(2):228-233 REF

Oct 1968 436.8 EX7

Antigens, Diffusion, Immunization, Metabolism, Mice, Trichinella spiralis.

22162-68

RECOVERY OF PORCINE LIVER FROM DAMAGE CAUSED BY MIGRATING X-RADIATED AND NONRADIATED LARVAE OF ASCARIS SUUM.

D L Ferguson C A Mebus M J Twiehaus

Amer J Vet Res 29(2):233-243

Feb 1968 41.8 AM3A

Ascaris, Larvae, Liver diseases, Swine, X-rays.

22163-68

INTERNAL PARASITES IN SHEEP ON THE NORTHERN TABLELANDS.

A N A Harris

Agr Gaz New S Wales 78(PT 2):80-84

Feb 1967 23 N472

Animal nutrition, Cestoda, Coccidiosis, Drug therapy, Nematodes, Sheep, Trematoda.

22164-68

INFLUENCE OF DIFFERENT FORMS OF MANAGEMENT ON THE INCIDENCE OF HELMINTH PARASITISM IN POULTRY.

M Z Hussain

Pakistan J Sci 19(3):114-117 REF

May 1967 475 P172

Biometry, Cestoda, Nematodes, Poultry farm management. English abstract

22165-68

OPISTHORCHIASIS IN SWINE. (RUM)

A Igritan

Rev Zootech Med Vet 17(12):64-66

Dec 1967 49 P943

Dierocoelium, Opisthorchis, Pancreas, Seminal vesicles, Swine.

22166-68

IMMUNOLOGICAL UNRESPONSIVENESS TO HELMINTH PARASITES: I. THE PATTERN OF NIPPOSTRONGYLUS BRASILIENSIS INFECTION IN YOUNG RATS.

E E E Jarrett W F H Jarrett G M Urquhart

Exp Parasitol 23(2):151-160 REF

Oct 1968 436.8 EX7

Helminthiasis, Immunization, Life cycle, Nippostrongylus brasiliensis, Rats.

22167-68

A NEW NEMATODE PARASITE ANCYLOSTOMA SINDHENSIS (ANCYLOSTOMIDAE: STRONGYLOIDEA) FROM INTESTINE OF THE COMMON STRIPED SQUIRREL, FUNAMBULUS PENNANTI ARGENTESCENS WROUGHTON, FROM LOWER SIND.

Z Khanum

Pakistan J Sci 19(3):105-108

May 1967 475 P172

Ancylostomatidae, Squirrels, Taxonomy.

22168-68

L-LYSINE CARBOXYLYASE IN ASCARIS LUMBRICOIDES AND MONIEZIA EXPANSA.

J Lopez-George M Monteoliva F Mayor

Exp Parasitol 23(2):129-133 REF

Oct 1968 436.8 EX7

Ascaris lumbricoides, Biochemistry, Cestoda, Enzymes, Lysine decarboxylase, Metabolism, Moniezia.

22169-68

SUMMARY OF THE COPROLITIC ANALYSES OF ANIMAL STRONGYLOSIS; RESULTS OBTAINED IN MEUTHE-ET-MOSELLE. (FR)

F Lundy

Nancy Univ Fac Pharm Ass Diplomes Microbiol Bull 110(2ND TRIMESTER):18-24

1968 448.2 N152

Cattle, Epizootic diseases, Sheep, Strongylosis.

22170-68

CARBON TETRACHLORIDE INJECTIONS FOR LIVER FLUKE CONTROL.

W J Perrett

Agr Gaz New S Wales 78(PT 3):158-159

Mar 1967 23 N472

Carbon tetrachloride, Cattle, Fasciola, Injections, Muscles, Sheep.

The effects of carbon tetrachloride injections in cattle and sheep for liver fluke control are discussed.

22171-68

SOME ASPECTS OF NUTRITION IN PARASITES.

C P Read

Amer Zool 8(1):139-149 REF

Feb 1968 410 AM3

Absorption, Digestion, Fasciola, Feeding, Nematodes, Nutrition, Physiology, Trichuris.

The nutrition of nematodes and trematodes as animal parasites is discussed in relation to food getting mechanisms which fall into three adaptive types, mechanical, internal digestive and absorption.

22172-68

OXYGEN CONSUMPTION IN ADULT ECHINOSTOMA REVOLUTUM.

J L Taft B Fried

Exp Parasitol 23(2):183-186

Oct 1968 436.8 EX7

Benzidine test, Chickens, Cyanides, Cytochrome oxidase, Echinostoma, Hemoglobin, Oxygen, Physiology, Trematoda.

22173-68

ELECTRON MICROSCOPE STUDIES OF FASCIOLA HEPATICA. VI. THE ULTRASTRUCTURAL LOCALIZATION OF PHOSPHATASES.

L T Threadgold

Exp Parasitol 23(2):264-276 REF

Oct 1968 436.8 EX7

Enzymes, Fasciola, Gastrointestinal system, Histochemistry, Lysosomes, Phosphatases, Physiology, Plasma membrane.

22174-68

SEASONAL INCIDENCE AND BIONOMICS OF SOME COMMON GASTROINTESTINAL NEMATODE LARVAE OF SHEEP AND GOATS.

J C Tripathi

Agra Univ J Res Sci 16(PT 1):179-181

Jan 1967 513 AG8

Biology, Cooperia, Epizootic diseases, Goats, Nematodes, Oesophagostomum, Sheep, Strongyloides.

22175-68

FURTHER OBSERVATIONS ON CAPILLARIA FELISCATI INFECTIONS IN THE CAT.

A H Waddell

Australian Vet J 44(1):33-34 REF

Jan 1968 41.8 AU72

Animal histology, Autopsies, Capillaria, Cats, Nematodiasis.

22176-68

EPIDEMIOLOGY OF HELMINTH INFESTATION OF BEEF CATTLE IN CENTRAL QUEENSLAND.

R Winks

Australian Vet J 44(8):367-372 REF

Aug 1968 41.8 AU72

Cattle, Epidemiology, Helminthiasis, Livestock diseases, Surveys.

COMMODITY PROTECTION

ARTHROPODS

22177-68

WHOLE GODOWN FUMIGATION IS ECONOMICAL AND SAFE.

G R Ghadiok

Indian Farming 16(8):25-27

Nov 1966 22 IN283

Carbon tetrachloride, Chemical control (insects), Ethylene dichloride, Grain, Insect control, Storage.

22178-68

OBSERVATIONS ON WOOD-DESTROYING INSECTS LIVING IN THE FOOTBRIDGE OVER SIKANEVA BOG.

K Loytyniemi

Suomen Hyonteistieteellinen Aikakauskir Ann Entomol Fenn 33(4):260-264

20 Dec 1967 421 SU7

Catalogs, Insect ecology, Wood-destroying insects.

22179-68

CONTROL OF INSECTICIDE RESIDUES IN PRODUCE.

L J Matthews

New Zeal J Agr 114(4):30-32

Apr 1967 23 N48J

Agricultural products, Chlorinated hydrocarbons, DDT, Insecticide residues, Legislation.

Chlorinated hydrocarbon insecticide residues in farm produce are discussed as well as laws to insure that New Zealand's produce meets overseas standards. Alternative insecticides and their application are described.

MICROBIAL CONTAMINATION

22180-68

THOUGHTS ON THE SALMONELLA PROBLEM. (GE)

J Bisehoff

Arch Lebensmittelhyg 19(4):83

Apr 1968 41.8 L49

Food contamination, Meat inspection, Meat packing industry, Salmonella, Slaughterhouses.

The international problem of Salmonella in slaughter houses is discussed. The organism enters East Germany by imported egg products and fodder. Inspection stations are suggested as well as studies on the chemistry and biology of the organism for better packing and storage of products.

22181-68

ON THE LEGAL CLASSIFICATION OF INSPECTED MEAT FROM SLAUGHTERED

ANIMALS IN WHICH SALMONELLA WAS DETECTED. (GE)

E Martens
Arch Lebensmittelhyg 19(4):80-82 REF
Apr 1968 41.8 L49
Classification, Food contamination, Meat inspection, Salmonella, Slaughterhouses. German abstract

ENVIRONMENTAL CONTAMINATION

22182-68
THE EFFECTS OF AIR POLLUTION ON PLANTS AND SOIL. 53P, REF

1967 S602.A4A3
Air pollution, Fluorides, Plant injuries, Smog, Smoke, Soil contamination, Sulfur dioxide.

22183-68
POISONING OF BEES BY INSECTICIDES.

Agr Soc Trinidad Tobago J 67(2):186
Jun 1967 8 T73
Apis mellifera, Demeton, Disulfoton, Formulations, Oxydemetonmethyl, Phorate, Poisoning, Spraying.

22184-68
COMMONWEALTH OF AUSTRALIA DEPT OF HEALTH PUBLIC HEALTH BRANCH. PESTICIDES REVIEW.

Australia Dep Health Pesticides Quart Suppl 11P
Aug 1968 464.4 AU7
Carbamates, Herbicides, Organic compounds, Pesticides, Phosphorus, Reports, Research, Toxicology.

22185-68
EFFECT OF SOIL TREATMENT WITH DISULFOTON (DISYSTON) GRANULAR UNDER LOW TEMPERATURE CONDITION. (JA)

M Nakata Y Ishino
Jap J Appl Entomol Zool 11(4):187-188
Dec 1967 475 J27
Disulfoton, Research, Soil testing, Temperature.

RESIDUES

22186-68
CONTRIBUTION TO THE KNOWLEDGE OF THE POSSIBLE INFLUENCE OF PESTICIDES ON GAME. (GE)

W Beck J Gebeshuber D Gesswagner E Glofke E Kahl K Lebeda
Pflanzenschutzberichte 38(517):69-96 MAP REF
Jul 1968 464.9 P48
Game animals, Pesticide residues, Pesticides, Research, Tables (data), Toxicology. English summary.

22187-68
THE FATE OF PARAQUAT IN SOILS.

A Calderbank T E Tomlinson
Outlook Agr 5(6):252-257 REF
1968 10 OU8
Herbicide residues, Metabolism, Nitrification, Paraquat, Soil adsorption, Soil microbiology.

22188-68
A RELATIVE STUDY OF THE COMPOSITION AND TENACITY OF THE KARATHANE DEPOSITS ON BEAN LEAVES. (FR)

A Copin
Gembloux Inst Agron Etat Bull 3(2):261-269
1968 105.1 G285
Adhesives, Beans, Dinocap, Humidity, Pesticide residues. English abstract

22189-68
TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. METHOXYCHLOR.

R E Duggan
Fed Regist 33(240):18372
11 Dec 1968 L1.451
Agricultural products, Chemicals, Methoxychlor, Pesticide residues, Pesticides, Potatoes.

22190-68
TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES. DIPHENAMID.

R E Duggan
Fed Regist 33(236):18090
05 Dec 1968 L1.451
Agricultural products, Biochemistry, Diphenamid, Herbicide residues, Meat, Milk, Pesticides, Potatoes.

22191-68
PRODUCTION OF ANTIBODIES AGAINST INSECTICIDE--PROTEIN CONJUGATES.

G J Haas E J Guardia
Soc Exp Biol Med Proc 129(2):546-551
Nov 1968 442.9 SO1
Antibodies, DDT, Malathion, Rabbits, Serological tests.

22192-68
METHOXYCHLOR RESIDUES IN THE MEAT AND MILK OF CATTLE FOLLOWING LIMITED APPLICATIONS OF METHOXYCHLOR FOR THE CONTROL OF BUFFALO FLY (HAEMATOBIA EXIGUA).

I S Hurwood
Australian Vet J 44(8):377-381 REF
Aug 1968 41.8 AU72
Cattle, Insecticide residues, Meat, Methoxychlor, Milk.

22193-68
FACTORS INFLUENCING THE PERSISTENCE OF THE HERBICIDE 2,6-DICHLOROBENZONITRILE IN VARIOUS SOIL TYPES. (IT)

G Petrosini F Tafuri M Businelli
Agrochimica 12(5):422-436 REF
Aug 1968 385 AG84
Chromatography, Dichlobenil, Herbicide residues, Soil series. English, French, German, and Spanish abstracts

22194-68
FOOD ADDITIVES PERMITTED IN FOOD FOR HUMAN CONSUMPTION ARSENIC.

W B Rankin
Fed Regist 33(242):18487
13 Dec 1968 L1.451
Arsenic, Chickens, Eggs, Food additives, Food consumption, Pesticide residues, Tissues, Toxicology, Turkey.

TOXICOLOGY

22195-68
NERVE GAS: DUGWAY ACCIDENT LINKED TO UTAH SHEEP KILL.

P M Boffcy
Science 162(3861):1460-1464
27 Dec 1968 470 SC12
Chemicals, Food contamination, Gases, Mortality, Nervous system, Research, Sheep, Toxicology.

22196-68
GRAZING. CONTROL OF NOXIOUS PLANTS ON LAND UNDER CONTROL OR JURISDICTION OF FEDERAL GOVERNMENT.

O L Freeman
Fed Regist 33(241):18440
12 Dec 1968 L1.451

Animals, Chemical control (weeds), Grazing, Livestock diseases, Poisonous plants, Public lands.

22197-68
PESTICIDES AND WATER. TD427.P38G3. (fr)

M A Gamrasni
15P REF ASSOCIATION FRANCAISE POUR L'ETUDE DES EAUX
Jan 1968
Accident prevention, Aquatic animals, Pesticides, Public health, Toxicology, Water. This article is an extract from the periodical, Water, Dec. 1967- Jan. 1968.

22198-68
PHALARIS CAN BE POISONOUS.

J S Healey
Agr Gaz New S Wales 78(PT 2):91-93
Feb 1967 23 N472
Cobalt, Nervous system, Phalaris tuberosa, Poisonous plants, Sheep, Toxicology.

Weather and soil conditions which cause pasture plants to become toxic to sheep in Australia are discussed and precautions are given.

22199-68
LABORATORY AND FIELD TRIALS WITH A NEW RATICIDE SELECTIVE TOXIC FOR RATS.

E Radova V Rupes M Privora
J Hyg Epidemiol Microbiol Immunol 12(3):365-369
1968 448.8 J826
Baits, Biochemistry, Chemical control (pests), Food, Laboratory animals, Rats, Toxicology. French, German, and Spanish summaries.

22200-68
A PROPOSED METHOD FOR EVALUATION OF WETTING AGENTS ON ORGANIC AMENDMENTS USED IN HORTICULTURE. (ABSTRACT).

R Sheldrake O A Matkin
Hortscience 3(2,SUMMER):104
1968 SB1.H6
Lolium, Organic compounds, Peat, Research, Surface-active agents, Toxicology.

PLANT PHYSIOLOGY & BIOCHEMISTRY

22201-68
ROLE OF TRACE ELEMENTS IN THE GROWTH AND MORPHOLOGY OF FIVE ASCOSPORIC ASPERGILLUS SPECIES.

V P Agnihotri
Can J Bot 45(1):73-79 REF
Jan 1967 470 C16C
Aspergillus, Fungi, Micronutrients, Morphology, Plant physiology.

22202-68
CHEMICAL DISINFECTION OF THE SOIL THROUGH METHYLBROMIDE. (GE)

C V Assche A Vanachter H V D Broeck
Z Pflanzenkrankh (pflanzenpathol) Pflanzenschutz 75(7):394-401
Jul 1968 464.8 Z3
Botrytis cinerea, Chemical control (plant diseases), Chloropicrin, Fungicides, Fusarium oxysporum, Methyl bromide, Soil fumigation, Soil moisture. English and French summaries

22203-68
SOME EFFECTS OF DDT, DIELDRIN, DIMETHOATE AND FENTHION ON GROWTH OF CUCUMBERS.

B R Champ
Queensland J Agr Anim Sci 23(2):333-335
Jun 1966 23 Q37
Cucumbers, Dieldrin, Dimethoate, DDT, Fenthion, Plant physiology.

22204-68

22204-68

TESTS OF THE FLIGHT AGAINST THE 'MELTING OF SEED' OF SUMMER ONIONS IN NORD FINISTERE. (FR)

G Cherblanc

Phytoma 19(193):26-29

Dec 1967 464.8 P563

Botrytis squamosa, Drug therapy, Fungi, Fungicides, Pesticides, Research, Seedlings, Sodium.

22205-68

EFFECT OF PROMETRYNE ON GROWTH OF FUSARIUM OXYSPORUM F. SP. VASINFECTUM IN SOIL CULTURE. (ABSTRACT).

B K Chopra E A Curl R Rodriguez-Kabana

Phytopathology 58(6):72L-727

Jun 1968 464.8 P56

Biochemistry, Fusarium oxysporum vasinfectum, Plant physiology, Prometryne.

22206-68

FUNGAL DETOXICATION-IX. METABOLISM OF 1-NAPHTHALENEACETIC ACID BY ASPERGILLUS NIGER VAN TIEGH.

D K Clifford D Woodecock

Phytochemistry 7(9):1499-1502

Sep 1968 450 P5622

Aspergillus niger, Biochemistry, Chromatography, Fungi, Metabolism, Metabolites, Naphthaleneacetic acid, 1-, Research, Toxicology.

22207-68

GROWTH RESPONSES OF SOME COMMON PEANUT MYCOFLORA TO VARIOUS EXTRACTS FROM PEANUT SEED. (ABSTRACT).

B Douplik D K Bell

Phytopathology 58(6):727

Jun 1968 464.8 P56

Agar, Fungi, Peanuts, Plant extracts, Plant physiology, Sclerotium rolfsii, Seeds.

22208-68

STIMULATION BY 2,4-D AND 2,4-D PLUS FE EDTA OF 32P UPTAKE BY BEAN SEEDLINGS (PHASEOLUS VULGARIS).

H M Etter

Can J Bot 45(4):535-537 REF

Apr 1967 470 C16C

Absorption, Beans, Biochemistry, D, 2,4-, Ethylenediaminetetraacetic acid, Iron, Isotopes, Phosphorus, Plant physiology, Seedlings.

22209-68

UREDOSPORE PRODUCTION OF FIVE RACES OF PUCCINIA RECONDITA ROB. EX DESM. AS AFFECTED BY LIGHT AND TEMPERATURE.

Z Eyal J L Peterson

Can J Bot 45(4):537-540

Apr 1967 470 C16C

Fungi, Light, Plant physiology, Puccinia recondita, Temperature, Uredospores.

22210-68

EJECTION AND DISSEMINATION OF ASCOSPORES OF HYPOXYLON PRUINATUM.

J D Froyd D W French

Can J Bot 45(9):1507-1517 REF

Sep 1967 470 C16C

Ascospores, Hypoxylon pruinatum, Plant physiology, Reproduction, Seed dissemination.

22211-68

THE USE OF POLYACRYLAMIDE GEL DISC ELECTROPHORESIS IN DELIMITING THREE SPECIES OF PHYTOPHTHORA.

H S Gill D Powell

Phytopathol Z 63(1):23-29 REF

Sep 1968 464.8 P562

Acrylamide, Biochemistry, Electrophoresis, Fungi, Gels, Phytophthora, Proteins. German summary.

22212-68

PRODUCTION OF PECTIC AND CELLULYTIC ENZYMES BY PHYTOPHTHORA INFESTANS DE BY. I. CULTURE OF THE FUNGUS IN A NUTRIENT SOLUTION. (GE)

F Grossmann

Phytopathol Z 62(4):371-382 REF

Aug 1968 464.8 P562

Cellulase, Culture media, Enzymes, Fungi, Nutrient solutions (plants), Pectins, Phytophthora infestans, Research. English summary.

22213-68

ESTRADIOL ANNULMENT OF STEROL-INDUCED SEXUAL REPRODUCTION BY PYTHIUM PERIPLICUM. (ABSTRACT).

J W Hendrix

Phytopathology 58(6):728

Jun 1968 464.8 P56

Estradiol, Plant physiology, Plant reproduction, Pythium periplicum, Sterols.

22214-68

ANATOMY OF BEADS ON FLAGELLA OF ZOOSPORES OF PHYTOPHTHORA MEGASPERMA VAR. SOJAE.

H H Ho K Zachariah C J Hickman

Can J Bot 45(9):1765-1766

Sep 1967 470 C16C

Anatomy, Flagella, Fungi, Phytophthora megasperma, Plant physiology, Zoospores.

22215-68

THE EFFECTS OF INDOLEACETIC ACID AND 2,4-DICHLOROPHENOXYACETIC ACID ON INTERMEDIARY METABOLISM OF 14C-LABELLED ORGANIC ACIDS BY PEA ROOT TIPS.

W K Kim R G S Bidwell

Can J Bot 45(10):1789-1796 REF

Oct 1967 470 C16C

Biochemistry, Carbon, D, 2,4-, Indoleacetic acid, Isotopes, Metabolism, Organic compounds, Peas, Plant physiology, Roots.

22216-68

THE EFFECTS OF INDOLEACETIC ACID AND 2,4-DICHLOROPHENOXYACETIC ACID ON THE UPTAKE AND METABOLISM OF 14C-GLUCOSE AND ON THE INCORPORATION OF 14C-LABELLED AMINO ACIDS INTO PROTEIN IN PEA ROOT TIPS.

W K Kim R G S Bidwell

Can J Bot 45(9):1751-1760 REF

Sep 1967 470 C16C

Amino acids, Biochemistry, Carbon, D, 2,4-, Glucose, Indoleacetic acid, Metabolism, Peas, Plant hormones, Plant physiology, Proteins.

22217-68

INTERACTION OF TEMPERATURE AND GIBBERELLIN ON POTATO SEED GERMINATION.

S L Lam

Amer J Bot 55(2):193-198 REF

Feb 1968 450 AM36

Gibberellins, Potato seeds, Seed germination, Temperature.

22218-68

LIGHT AND TEMPERATURE EFFECTS ON GROWTH AND SPOROPORE FORMATION OF LENZITES TRABEA.

C Madhosingh

Can J Bot 45(4):525-530

Apr 1967 470 C16C

Fungi, Lenzites trabea, Light, Plant physiology, Temperature.

22219-68

RESPIRATORY AND ENZYMIC STUDIES WITH VERTICILLIUM ALBOATRUM FROM COTTON.

I Malca D C Erwin J J Sims M Long B Jones

Phytopathology 58(3):348-353

Mar 1968 464.8 P56

Arsenates, Arsenites, Azides, Cotton, Dinitrophenol, 2,4-, Enzymes, Fluorides, Fungus diseases (plants), Iodoacetate, Oxygen, Plant respiration, Verticillium albo-atrum.

22220-68

DEVELOPMENT AND SPORULATION OF POLYPORUS HISPIDUS. (ABSTRACT).

F I McCracken E R Toole

Phytopathology 58(6):730

Jun 1968 464.8 P56

Fungus diseases (plants), Plant physiology, Polyporus hispidus, Quercus phellos, Spores.

22221-68

METABOLISM OF SPORULATION IN FILAMENTOUS FUNGI. I. GLUCOSE AND ACETATE OXIDATION IN SPORULATING AND NONSPORULATING CULTURES OF ENDOTHIA PARASITICA.

L L McDowell A A De Hertogh

Can J Bot 46(4):449-451 REF

Apr 1968 470 C16C

Acetates, Biochemistry, Endothia parasitica, Fungi, Glucose, Metabolism, Reproduction, Research.

22222-68

PERIODICITY IN AECIOSPORE RELEASE IN GYMNOSPORANGIUM JUNIPERI-VIRGINIANAE.

S M Pady C L Kramer R Clary

Phytopathology 58(3):329-331

Mar 1968 464.8 P56

Apples, Diurnal rhythm, Fungus diseases (plants), Gymnosporangium juniperi-virginianae, Plant physiology, Rust.

22223-68

EXPERIMENTS ON THE PRECOCIOS FLOWERING OF WESTERN RED CEDAR AND FOUR SPECIES OF CUPRESSUS WITH GIBBERELLINS A3 AND A4/A7 MIXTURE.

R P Pharis W Morf

Can J Bot 45(9):1519-1524

Sep 1967 470 C16C

Cupressus, Flowers, Gibberellic acid, Gibberellin a4, Gibberellin a7, Plant biochemistry, Plant physiology, Research, Thuja plicata.

22224-68

EFFECT OF TRICHODERMA VIRIDE ON SACCHARASE ACTIVITY AND GROWTH OF SCLEROTIUM ROLFSSII IN MIXED SOIL CULTURE. (ABSTRACT).

R Rodriguez-Kabana E A Curl

Phytopathology 58(6):730-731

Jun 1968 464.8 P56

Culture media, Fungi, Invertase, Plant physiology, Sclerotium rolfsii, Soil-borne plant diseases, Trichoderma viride.

22225-68

THE INTERACTION OF THE SEED COAT AND GIBBERELLIC ACID IN THE GERMINATION OF DATURA FEROX L.

R A Sanchez A Soriano S Slabnik

Can J Bot 45(3):371-376

Mar 1967 470 C16C

Biochemistry, Datura ferox, Gibberellic acid, Plant physiology, Seed coats, Seed germination.

22226-68

EFFECT OF PRETREATMENT OF PINE SEEDS WITH HERBICIDES ON SEED GERMINATION AND GROWTH OF YOUNG SEEDLINGS.

S Sasaki T T Kozlowski J H Torric

Can J Bot 46(3):255-262 REF

Mar 1968 470 C16C

Biochemistry, Herbicides, Pinus resinosa, Plant physiology, Preventive medicine, Seed germination, Seeds.

22227-68

M-N-ETHYLAMINOBENZOIC ACID: ABSENCE OF PHYTOXIC ACTIVITY.

A Stoessl A N Starratt

Can J Bot 45(9):1769-1770

Sep 1967 470 C16C

Biochemistry, Lettuce, Plant physiology, Soils, Toxicology.

22228-68

AN ELECTRON MICROSCOPE STUDY OF INTRAVACUOLAR BODIES IN THE UREDIA OF WHEAT STEM RUST AND IN HYPHAE OF OTHER FUNGI.

P L Thomas P K Isaac

Can J Bot 45(9):1473-1478

Sep 1967 470 C16C

Electron microscopes, Fungi, Hyphae, Plant physiology, Research, Stem rust (wheat), Uredia.

22229-68

THE INFLUENCE OF PHOSPHATE ON THE PHYTOTOXICITY OF 3-AMINO1,2,4-TRIAZOLE.

M R Vega

Philippine Agr 51(5):349-396 REF

Oct 1967 25 P542

Amitrole, Biochemistry, Phosphates, Toxicology.

22230-68

GUIDING EXPERIMENTS CONCERNING THE INFLUENCE OF HERBICIDES ON THE SPICULE DEVELOPMENT OF SPRING BARLEY AFTER APPLICATIONS. (GE)

G Weigand

Gesunde Pflanzen 20(4):69,70,72,74

Apr 1968 464.8 G33

Barley, Biochemistry, Chemical control (weeds), Crop yields, Herbicides, Pesticide application, Plant morphology, Research, Tables (data).

22231-68

NEW DIRECTIONS IN VIRUS CONTROL IN VEGETABLE AND POTATO CULTIVATION. (GE)

H Wenzl

Pflanzenarzt 20(12):149

01 Dec 1967 464.9 P482

Aphis gossypii, Biochemistry, Chemical control (plant diseases), Insect vectors, Mineral oil, Mosaic (cucumbers), Myzus persicae, Potatoes, Spraying, Vegetables, Virus diseases (plants), Virus y (potatoes).

22232-68

CARBON DIOXIDE EFFECTS ON FRUITS. III. THE FIXATION OF C14O2 IN LEMON IN AN ATMOSPHERE ENRICHED WITH CARBON DIOXIDE.

R E Young J B Biale

Planta 81(3):253-263 REF

1968 450 P693

Biochemistry, Carbon dioxide, Citric acid, Fruit, Lemons, Plant physiology.

CHEMISTRY

22233-68

EFFECT OF DEXTROSE IN MEDIUM FOR THE PREPARATION OF MYCOPLASMA GALISEPTICUM PLATE ANTIGENS.

H E Adler A J DaMassa

Appl Microbiol 16(4):558-562

Apr 1968 448.3 AP5

Agglutination, Chemistry, Culture media, Glucose, Microbiology, Mycoplasma gallisepticum.

22234-68

POLAROGRAPHY OF TRACE DOSES OF KARATHANE. (FR)

A Copin

Gembloux Inst Agron Etat Bull 3(2):254-260

1968 105.1 G285

Dinocap, Pesticide residues, Polarography, Vegetables. English abstract

This study demonstrates the possibility of direct extraction of Karathane traces by means of supporting electrolyte Acctone / Acctic Acid buffer recommended for polarographic dosage.

22235-68

ANTIFUNGAL ACTIVITY OF ISOTHIOCYANATES AND RELATED COMPOUNDS III. DERIVATIVES OF DIPHENYL, STILBENE, AZOBENZENE, AND SEVERAL POLYCONDENSED AROMATIC HYDROCARBONS.

L Drobnicia M Zemanova P Nemeck K Antos P

Kristian A Martvon

Appl Microbiol 16(4):582-587 REF

Apr 1968 448.3 AP5

Azobenzene, Chemistry, Diphenyl, Fungicides, Hydrocarbons, Isothiocyanates, Stilbene.

22236-68

THE INFLUENCE OF SOME ELECTROLYTES ON THE ABSORPTION AND RELEASE OF TRIAZINES ON SOME ORGANIC COLLOIDS. (IT)

P Fusi R Corsi

Agrochimica 12(2-3,FEB-APR):109-119 REF

Apr 1968 385 AG84

Absorption, Atrazine, Chemistry, Colloids, Electrolytes, Prometryne, Simazine. English, French, German, and Spanish abstracts

22237-68

STUDIES ON EFFECTIVENESS OF SUSPENSIBILITY WITH PREPARATION TECHNIQUE OF W.P. FORMULATIONS. (TU)

S Ozturk N Simsir

Bitki Koruma Bulteni 7(4):188-192

1967 464.8 B542

Chemistry, Methodology, Research, Water. German summary

22238-68

PARTIAL HYDROLYSIS OF DIELDRIN BY AEROBACTER AEROGENES.

G Wedemeyer

Appl Microbiol 16(4):661-662

Apr 1968 448.3 AP5

Aerobacter aerogenes, Biochemistry, Chromatography, Dieldrin, Hydrolysis.

ENGINEERING

22239-68

MIST SPRAYERS FOR APPLYING INSECTICIDES OF LOW VOLUME. (POR)

P R Almeida L F Fontes

Biologico 34(10):224-225

Oct 1968 442.8 B529

Insecticide application, Pastures, Spraying equipment.

INDUSTRY

22240-68

PROGRAM-ABSTRACTS, 65TH ANNUAL MEETING, AMERICAN SOCIETY FOR HORTICULTURAL SCIENCE.

Hortscience 3(2,SUMMER):79-138

1968 SB1.H6

Agricultural outlook, Histology, Reports, Research.

ECONOMICS

22241-68

PESTICIDES IN WATER. AMITROLE CONCENTRATIONS IN CREEK WATERS DOWNSTREAM FROM AN AERIALY SPRAYED WATERSHED SUB-BASIN.

R B Marston D W Schults T Shiroyama L V

Snyder

Pest Mont J 2(3):123-128

Dec 1968 S0B951.0A10P41

Aerial spraying, Amitrole, Herbicides, Laboratories, Pesticides, Research, Water analysis.

EDUCATION

22242-68

ORGANIZING AGRICULTURAL RESEARCH TO ASSIST DEVELOPING COUNTRIES.

F F Hill

Entomol Soc Amer Bull 14(2):121-124

Jun 1968 423.9 EN8

Agricultural research, Food supply, Laboratories, Supply and demand.



SUBJECT INDEX

- ABDOMEN**
Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- ABNORMALITIES**
Increased reversion of an apple sport following X irradiation and pruning, (Abstract). 21795
Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
Abortive and teratogenic effects of locoweed on sheep and cattle. 22097
- ABORTION**
Abortive and teratogenic effects of locoweed on sheep and cattle. 22097
Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103
Eradication of vibriosis from a stud herd. 22118
Infectious bovine rhinotracheitis: Relationship of level of maternal antibody titer to incidence of fetal death and abortion. 22124
- ABSORPTION**
The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
Some aspects of nutrition in parasites. 22171
Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236
- ACARICIDES**
Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (Acarina: Tetranychidae), on greenhouse cucumbers. 21970
Research on the chemical control of *Aceria sheldoni*. 21999
Insect tormentors of livestock: IV. The mites. 22148
- ACARINA**
External parasites of pigs. 22147
Insect tormentors of livestock: IV. The mites. 22148
How to get rid of ectoparasites of poultry. 22156
- ACCIDENT PREVENTION**
Pesticides and water. TD427.P38G3. 22197
- ACERIA SHELTONI**
Research on the chemical control of *Aceria sheldoni*. 21999
- ACETATES**
Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- ACETOBACTER**
The nata de coco. 2. Chemical nature and properties of nata. 21844
- The 'nata de coco'. 1. Characterization and identity of the causal organism. 21924
- ACHETA DOMESTICUS**
Cricket nutrition: Supplementation of grass by known nutrients. 21700
- ACID PHOSPHATASE**
Acid phosphatase activity in the digestive system of the desert locust *Schistocerca gregaria* (Forsk.). 21713
On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741
- ACIDS**
Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, *Chilo suppressalis* walker (Lepidoptera: Pyralidae). 21745
- ACRIDIDAE**
Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). 21669
War on locusts goes on. 22000
- ACRYLAMIDE**
The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- ACTINOBACILLUS**
Clinical and pathological studies of Border Leicester rams naturally infected with *Actinobacillus seminis*. 22050
- ACYRTHOSIPHON**
A review of twelve aphid species described as new by Edith M. Patch. 21624
- ADELGES**
Several observations on the nature of the spring development of *Chermes tardus* Dreyf. 21963
- ADENOSINE TRIPHOSPHATES**
ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling. 21732
- ADENOVIRUSES**
Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
- ADHESIVES**
A relative study of the composition and tenacity of the Karathane deposits on bean leaves. 22188
- AEDES**
A numerical taxonomic study of the genus *Psorophora* (Diptera: Culicidae). 21607
- AEDES AEGYPTI**
The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development. 21698
- AENEOLAMIA VARIA SACCHARINA**
Some observations on egg diapause in the Trinidad sugar cane frog hopper, *Aeneolamia varia saccharina* (Homoptera, Cercopidae). 21969
- AERIAL SPRAYING**
Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241
- AEROBACTER AEROGENES**
Influence of egg albumin-induced leukopenia on experimental *Aerobacter aerogenes* mastitis and on natural infection of mammary gland with coagulase-negative *Staphylococcus* in a cow. 22096
- Partial hydrolysis of dieldrin by *Aerobacter aerogenes*. 22238
- AFLATOXIN**
Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798
Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807
Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827
Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- AFRICAN SWINE FEVER VIRUS**
Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063
African swine fever. Application of immunofluorescence to the study of tissue cultures. 22065
Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 22117
- AFROMYIA**
Revision of *Sphaerocera*, with description of a new genus *Afromyia* (Diptera: Sphaeroceridae). 21615
- AGAR**
Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207
- AGGLUTINATION**
Experiences concerning the preparation and application of mycoplasma antigen. 22119
Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens. 22233
- AGING**
Milky disease bacteria. 21590
Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea). 21652
Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658
The effects of high temperatures on greenbug, *Schizaphis graminum*, reproduction. 21675
Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (Heteroptera: Pentatomidae). 21693
Distribution and adaptive diversity of trapdoor spiders. 21701
The effect of age, SKF 525-a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* Kill. 21708
- AGRICULTURAL LEGISLATION**
Control of bachaacs. 21959
- AGRICULTURAL OUTLOOK**
Program-abstracts, 65th annual meeting, American Society for Horticultural Science. 22240
- AGRICULTURAL POLICIES**
Project and problems of plant protection in the developing countries. 21810
Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853

SUBJECT INDEX

AGRICULTURAL PRODUCTIVITY

AGRICULTURAL PRODUCTIVITY

The importance of plant protection for the world harvest. 21785

The importance of plant protection for world harvest. 21786

AGRICULTURAL PRODUCTS

Control of insecticide residues in produce. 22179

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190

AGRICULTURAL RESEARCH

Organizing agricultural research to assist developing countries. 22242

AGROBACTERIUM TUMEFACIENS

Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826

Quantitative measurements of interactions between crown-gall tumors and the pinto bean host. 21845

AGROPYRON REPENS

Changed method of nata use in the control of *Agropyron repens* on arable land. 22014

AIR

The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671

AIR POLLUTION

The effects of air pollution on plants and soil. 22182

AIR-BORNE PLANT DISEASES

Loose smut of wheat. 21903

ALBINISM

The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923

ALDRIN

Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593

Banana beetle borer control investigations on the north coast of New South Wales. 21964

ALEYRODIDAE

New and little-known species of aleyrodids (Homoptera, Aleyrodoidea) from Crimea. 21618

ALFALFA

The *Sitona weevil*--a pest of lucerne (*Sitona humeralis*). 21973

Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987

Experimental results concerning the chemical control of weeds in young lucerne fields. 22011

ALKALINE PHOSPHATASE

On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741

ALTERNARIA LONGIPES

Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932

ALTERNARIA SOLANI

Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840

ALUMINUM FOIL

The leaching of auxin from air layers. 21771

AMINES

New knowledge concerning wire stringing in fruit growing. 21767

AMINO ACIDS

Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara ellioti*. 21666

Auxin (plant hormones) production in plants. 21801

Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809

Free amino acids of sunflower hypocotyl tissue during crown gall tumor development. 21824

Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930

The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216

AMITROLE

The influence of phosphate on the phytotoxicity of 3-Amino-1,2,4-triazole. 22229

Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241

AMMONIA

The use of attractants in pest control. 21981

AMPHIBIANS

Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063

AMPHOTERICIN B

Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866

AMYLOIDOSIS

Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034

ANABASINE

Insecticides from plants. 21802

ANAPLASMA

Ultrastructure of *Anaplasma marginale* fixed with glutaraldehyde and osmium tetroxide. 22086

ANAPLASMOSIS

Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131

ANATOMY

Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591

Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera). 21614

On the reinform nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (Tylenchida: Hoplolaimidae). 21712

Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle. 21793

The ultrastructure of *Piricularia oryzae* Cav. 21812

Fine structure of *Plasmodiophora brassicae* in sporogenesis. 21954

Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojace*. 22214

ANCYLOSTOMATIDAE

A new nematode parasite *Ancylostoma sindhensis* (Ancylostomidae: Strongyloidea) from intestine of the common striped squirrel, *Funambulus pennanti argentescens* wroughton, from Lower Sind. 22167

ANIMAL ANATOMY

Comparative pathological anatomy of the hepatitis virus of man and dogs. 22101

ANIMAL BREEDING

New Zealand veterinarians study animal diseases in Thailand. 22056

The effect of *Vibrio fetus* vaccination on the breeding efficiency of cows bred to *Vibrio fetus*-infected bulls. 22084

Breeding disease-resistant domestic animals. 22094

ANIMAL DISEASES

The classification of leptospiral strains from Kazakhstan. 22042

National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045

Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060

Breeding disease-resistant domestic animals. 22094

On the specific mechanism of the transmission of leptospiral infection. 22105

Newcastle disease in England and Wales control by vaccination--the first year. 22111

Vervet monkey disease: Experimental infection of guineapigs and monkeys with the causative agent. 22136

ANIMAL GENETICS

Breeding disease-resistant domestic animals. 22094

ANIMAL HISTOLOGY

Clinical and pathological studies of Border Leicester rams naturally infected with *Actinobacillus seminis*. 22050

Mycobacterium avium infection in cattle: A case series. 22066

Further observations on *Capillaria feliscati* infections in the cat. 22175

ANIMAL NUTRITION

Grass tetany in cattle--using molasses--magnesium oxide mixtures to prevent it. 22090

Influence of Haemonchosis on nutritionally induced ketosis in sheep. 22160

Internal parasites in sheep on the northern tablelands. 22163

ANIMAL PHYSIOLOGY

Marek's disease. 22055

SUBJECT INDEX

ARSENITES

- Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- Pathogenesis and pathologic features of avian encephalomyelitis in chicks. 22115
- Infectious bovine rhinotracheitis: Correlation of fetal and placental lesions with viral isolations. 22123
- ANIMAL QUARANTINE**
New Zealand veterinarians study animal diseases in Thailand. 22056
- ANIMAL VECTORS**
The investigation of scrub typhus in the USSR. 22108
- ANIMALS**
Mimicry in plants and animals. 21644
- Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196
- ANOPLURA**
A method for collecting feather lice (Mallophaga). 21583
- A new species of *Fahrenholzia* (Anoplura: Hoplocluridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626
- Attention to cattle lice can be profitable. 22146
- External parasites of pigs. 22147
- ANTHOCORIDAE**
The bionomics and ecology of *Anthocoris confusus* Reuter in Scotland. 21685
- ANTIBIOTICS**
New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781
- Insecticides, fungicides and antibiotics. 21994
- ANTIBODIES**
Tomato bushy stunt virus from *Prunus avium*. II. Serological typing and the characterization of antibody types and activities. 21816
- The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
- Antibody to rhinovirus in human sera. I. Standardization of neutralization test. 22076
- Antibody to rhinovirus in human sera. II. Heterotypic responses. 22082
- The complement-fixation test for avian leukosis. 22085
- Infectious bovine rhinotracheitis: Relationship of level of maternal antibody titer to incidence of fetal death and abortion. 22124
- Passive hemolytic antibody response of primed, partially resistant mice to heat-killed *Salmonella typhimurium* vaccine. 22128
- Neutralising antibodies for avian infectious bronchitis virus in Queensland poultry flocks. 22138
- Vaccination of congenitally-immune chicks against Newcastle disease virus. 22139
- Production of antibodies against insecticide-protein conjugates. 22191
- ANTIDOTES**
These plants might spell death to your cattle. 22069
- ANTIGENS**
Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
- Structure and antigenic properties of a staphylococcal L form. 22038
- The complement-fixation test for avian leukosis. 22085
- Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161
- ANTITOXINS**
Changed method of neta use in the control of *Agropyron repens* on arable land. 22014
- APHIDIDAE**
Application of scanning microscopy in the study of virus transmission of aphids. 21584
- A faunistic study of Philippine aphids (Aphididae, Homoptera). 21598
- A new genus and species of Aphididae (Homoptera) on *Premna odorata* Blanco. 21599
- A review of twelve aphid species described as new by Edith M. Patch. 21624
- A list of Sinhalese aphids (Hem., Aphididae). 21688
- Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832
- Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
- Preventive measures can control bunchy top. 21892
- Several observations on the nature of the spring development of *Chermes tardus* Dreyf. 21963
- Observations on penetration of linden branches by stylets of the aphid *Longistigma caryac*. 21968
- Chenopodium test for the demonstration of the presence of the lettuce mosaic virus I in seeds. 21980
- APHIS GOSSYPHII**
New directions in virus control in vegetable and potato cultivation. 22231
- APICULTURE**
Introducing queen bees. 21657
- Four important bee diseases. 21674
- Better beekeeping: The summer routine. 21736
- Better bee-keeping: II. Monsoon measures and autumn needs. 21737
- APIDAE**
What is a bee. 21643
- Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653
- APIS DORSATA**
Biology of *Apis dorsata* F. 21723
- APIS MELLIFERA**
Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653
- Four important bee diseases. 21674
- Honey bees as pollinators of red clover. 21988
- Poisoning of bees by insecticides. 22183
- APPLES**
Increased reversion of an apple sport following X irradiation and pruning. (Abstract). 21795
- Concentrate spray-thinning of apples. (Abstract). 21808
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833
- The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
- Wrinkled skin disease of apples. 21842
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931
- Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- Periodicity in aeciospore release in *Gymnosporangium juniperi-virginianac*. 22222
- AQUATIC ANIMALS**
Pesticides and water. TD427.P38G3. 22197
- AQUATIC INSECTS**
Psephenus (Coleoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- The reliability of a method of sampling stream invertebrates. 21670
- AQUATIC PLANTS**
Insecticide treatment of water lily ponds to stop caddis fly damage. 21971
- AQUATIC WEEDS**
Chemical control of weeds in drains. 22009
- ARCTIIDAE**
Evolution and hybridization in the *Utethesia* or-natrix complex (Lepidoptera: Arctiidae). I. Inter- and intrapopulation variation and its relation to hybridization. 21762
- ARGAS PERSICUS**
Insect tormentors of livestock: III. Fleas and ticks. 22149
- How to get rid of ectoparasites of poultry. 22156
- ARSENATES**
Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- ARSENIC**
Food additives permitted in food for human consumption arsenic. 22194
- ARSENIC COMPOUNDS**
The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
- Texas (splenic) fever in cattle. Permitted dips. 22046
- ARSENITES**
Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219

SUBJECT INDEX

ARTHROPODA

ARTHIROPODA

The role of soil arthropods in community energetics. 21678

The arthropod fauna associated with the birch bracket fungus *Polyporus betulinus*, in Eastern Canada. 21722

ARTICHOKES

Influence of gibberellin upon time of bud development in globe artichoke (*Cynara scolymus*). (Abstract). 21804

ARTIFICIAL INSEMINATION

National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045

ARYLSULFATASE

An arylsulfatase in the wood-rotting basidiomycete, *Fomes geotropus*. 21895

ASCARIS

Recovery of porcine liver from damage caused by migrating X-irradiated and nonirradiated larvae of *Ascaris suum*. 22162

ASCARIS LUMBRICOIDES

L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168

ASCOCHYTA

Isolation, incidence, and virulence of *Ascochyta* spp. of peas from the soil. 21947

ASCORBIC ACID

Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809

ASCOSPORES

Ejection and dissemination of ascospores of *Hypoxylon pruinaum*. 22210

ASEXUAL REPRODUCTION

Effects of temperature on *in vitro* excystation of various *Eimeria* species. 22091

ASPERGILLUS

Role of trace elements in the growth and morphology of five ascosporic *Aspergillus* species. 22201

ASPERGILLUS CHEVALIERI

Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827

ASPERGILLUS FLAVUS

Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798

Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807

Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866

Aflatoxins: Production of the toxins *in vitro* in relation to temperature. 21926

ASPERGILLUS FUMIGATUS

Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866

ASPERGILLUS NIGER

Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206

ASPERGILLUS PARASITICUS

Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827

ASSAY

Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860

ASSES

Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048

ASTRAGALUS

Abortive and teratogenic effects of locoweed on sheep and cattle. 22097

ATRAZINE

The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236

ATTA

Control of bachacs. 21959

ATTRACTANTS

Research on biological pest control. 21734

The use of attractants in pest control. 21981

AUCUBA MOSAIC (TOBACCO)

Fine structure of inclusions formed by the aucuba strain of tobacco mosaic virus. 21948

AULOCARA ELLIOTTI

Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara ellioti*. 21666

AUTOPSIES

Studies on the possibilities of using blowflies (Dipt.) as medicolegal indicators in Finland. I. Report of four indoor cases from the city of Helsinki. 21717

Necrotic enteritis of chickens. 22049

Comparative pathological anatomy of the hepatitis virus of man and dogs. 22101

Further observations on *Capillaria feliscati* infections in the cat. 22175

AUTORADIOGRAPHY

Calcium localization within live oat leaves using a semiconductor detector assembly. 22041

AVIAN ENCEPHALOMYELITIS

Pathogenesis and pathologic features of avian encephalomyelitis in chicks. 22115

AVIAN LEUKOSIS COMPLEX

The complement-fixation test for avian leukosis. 22085

Problem of avian leukosis in Lahore. 22134

AVIAN LYMPHOMATOSIS

Marek's disease. 22055

Problem of avian leukosis in Lahore. 22134

AZIDES

Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219

AZINPHOSETHYL

The sitona weevil—a pest of lucerne (*Sitona humeralis*). 21973

AZOBENZENE

Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235

BACILLUS POPILLIAE

Epizootiological research on milky disease caused by *Bacillus popilliae* (*Melolontha*). 21686

BACILLUS THURINGIENSIS

The role of chemicals in the general insect control picture. 21617

Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650

Forest plant protection problems in Bavaria. 21799

BACTERIA

Milky disease bacteria. 21590

Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650

Epizootiological research on milky disease caused by *Bacillus popilliae* (*Melolontha*). 21686

New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781

Auxin (plant hormones) production in plants. 21801

On the use of entomopathogenic bacteria together with insecticides in the control of insect pests. 21990

DD-136 nematode that can kill many insect pests. 21991

BACTERIAL CANKER

Bacterial canker of tomato (*Corynebacterium michiganense*). 21905

BACTERIAL DISEASES (ANIMALS)

Toxicity studies of *Listeria monocytogenes* grown *in vivo*. 22075

Eradication of vibriosis from a stud herd. 22118

Keratoconjunctivitis produced by *Moraxella bovis* in laboratory animals. 22127

BACTERIAL DISEASES (PLANTS)

Taichung Native-1 Vs bacterial blight. 21836

The incidence of crown rot of boxed bananas in relation to microbial populations of the crown tissue. 21886

Can Taichung Native-1 stand up to bacterial blight. 21933

New approaches in disease control. 21934

New records of plant diseases in New South Wales. 21946

Deterioration of treated and untreated cottonseed during humid storage. 21952

BACTERIAL VACCINES

Passive hemolytic antibody response of primed, partially resistant mice to heat-killed *Salmonella typhimurium* vaccine. 22128

BACTERIOLOGY

The 'nata de coco'. I. Characterization and identity of the causal organism. 21924

BACTERIOPHAGES

Characterization of three bacteriophages of *Xanthomonas oryzae* (Uyeda et Ishiyama) Dowson. 21788

BAITS

Rat baits incorporating paraffin wax. 22031

Laboratory and field trials with a new raticide selective toxic for rats. 22199

BALANTIDIASIS

Balantidiasis may be more common than we think. 22043

BANANAS			
Diamond spot of bananas caused by <i>Fusarium roscum</i> 'gibbosum'.	21825		
The incidence of crown rot of boxed bananas in relation to microbial populations of the crown tissue.	21886		
Control of the banana weevil.	21960		
Banana beetle borer control investigations on the north coast of New South Wales.	21964		
BARK			
Some notes on the study of bark fungi.	21778		
BARLEY			
Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves.	21854		
Influence of seed size on the incidence of Loose smut in Funza barley.	21880		
Chlamyospore formation in conidia of <i>Helminthosporium sativum</i> .	21893		
Experiments with Tordon herbicide in small grains.	22013		
Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications.	22230		
BATS			
Warning sounds of moths.	21673		
BEANS			
Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on <i>Chlamyospore</i> germination of <i>Fusarium solani</i> f. sp. <i>phaseoli</i> in soil.	21814		
Factors affecting virulence and pigment production of <i>Xanthomonas phaseoli</i> var. <i>fuscans</i> .	21823		
The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus.	21875		
Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants.	21876		
Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on <i>Fusarium</i> root rot of beans.	21913		
Selective retention of uredospores by leaves.	21957		
A relative study of the composition and tenacity of the Karathane deposits on bean leaves.	22188		
Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (<i>Phaseolus vulgaris</i>).	22208		
BEE BEHAVIOR			
Better beekeeping: The summer routine.	21736		
BEE DISEASES			
Four important bee diseases.	21674		
BEES			
What is a bee .	21643		
Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea).	21652		
Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light.	21653		
The effect of age, SKF 525- a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, <i>Nomia melanderi</i> klll.	21708		
BEETS			
Important plant protection problems in Bavarian agriculture.	21776		
BELGIUM			
Analysis of epidemics of the tobacco (<i>Peronospor tabacina</i> Adam) mildew in the Gembloux area.	21867		
BELOSTOMATIDAE			
Cross-bridges and periods in insect flight muscle.	21726		
ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling.	21732		
BENZENE HEXACHLORIDE			
Insect tormentors of livestock: IV. The mites.	22148		
Insect tormentors of livestock: III. Fleas and ticks.	22149		
BENZIDINE TEST			
Oxygen consumption in adult <i>Echinostoma revolutum</i> .	22172		
BETULA			
The arthropod fauna associated with the birch bracket fungus <i>Polyporus betulinus</i> , in Eastern Canada.	21722		
Biological characteristics of <i>Fomes fomentarius</i> found on spruce and birch.	21935		
Seasonal and zonal distribution of Ichneumonidae (Hym.) on a subarctic fell during a calamity of the geometrid moth <i>Oporinia autumnata</i> (Bkh.) on birches.	21986		
BIBLIOGRAPHY			
Finnish entomological literature published in 1966, including economic entomology and control of insect pests.	21636		
Insect neuromuscular mechanisms.	21748		
BIOCHEMISTRY			
A biochemical look at insect diapause.	21684		
Developmental changes in the late larva of <i>Calliphora stygia</i> . I. Olymph.	21692		
Developmental interactions in the dipteran salivary gland.	21699		
Acid phosphatase activity in the digestive system of the desert locust <i>Schistocerca gregaria</i> (Forsk.).	21713		
The appearance and distribution of epicuticular inframicroscopic formations of three Collemboles.	21719		
ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling.	21732		
On the alkaline and acid phosphatase in the alimentary tract of <i>Periplaneta americana</i> L. (Blattaria: Blattellidae).	21741		
Pharmacology properties of the toxins in the venom of the scorpion (<i>Androctonus australis</i>).	21743		
Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, <i>Chilo suppressalis</i> walker (Lepidoptera: Pyralidae).	21745		
Insect neuromuscular mechanisms.	21748		
The chemical make-up and selective effect of triazine herbicides.	21780		
Plant protection problems in the cultivation of forage plants in Bavaria.	21787		
Insecticides from plants.	21802		
Research and identification of low titre and avirulent viruses or grapevines.	21820		
The nata de coco. 2. Chemical nature and properties of nata.	21844		
Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants.	21876		
Vitavax- a new systemic fungicide.	21936		
The use of attractants in pest control.	21981		
Research on the chemical control of <i>Aceria sheldoni</i> .	21999		
Problems of nematode control in Bavarian potato cultures.	22003		
Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract).	22004		
Flurenol- a herbicide with new properties.	22010		
Changed method of nata use in the control of <i>Agropyron repens</i> on arable land.	22014		
Controlling hairgrass (<i>Deschampsia caespitosa</i>).	22019		
Up to date weed control in horticulture.	22022		
New knowledge about the use of herbicides in permanent grassland.	22030		
Calcium localization within live oat leaves using a semiconductor detector assembly.	22041		
The classification of leptospiral strains from Kazakhstan.	22042		
Diseases of pigs and their control. SF971.B4.	22051		
African swine fever. Application of immunofluorescence to the study of tissue cultures.	22065		
Uncoating of newcastle disease virus.	22071		
Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures.	22117		
Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation.	22152		
Control of the hamster pest.	22155		
L-Lysine carboxylase in <i>Ascaris lumbricoides</i> and <i>Moniezia expansa</i> .	22168		
Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid.	22190		
Laboratory and field trials with a new raticide selective toxic for rats.	22199		
Effect of prometryne on growth of <i>Fusarium oxysporum</i> f. sp. <i>vasinfectum</i> in soil culture. (Abstract).	22205		
Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by <i>Aspergillus niger</i> van Tiegh.	22206		

SUBJECT INDEX

BIOLOGICAL ASSAY

- Stimulation by 2,4-D and 2,4-D plus Fe EDTA of ³²P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
- The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- The interaction of the seed coat and gibberellic acid in the germination of *Datura ferox* L. 22225
- Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226
- M-N-ethylaminobenzoic acid: absence of phytotoxic activity. 22227
- The influence of phosphate on the phytotoxicity of 3-Amino-1,2,4-triazole. 22229
- Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- New directions in virus control in vegetable and potato cultivation. 22231
- Carbon dioxide effects on fruits. III. The fixation of ¹⁴C in lemon in an atmosphere enriched with carbon dioxide. 22232
- Partial hydrolysis of dieldrin by *Aerobacter aerogenes*. 22238
- BIOLOGICAL ASSAY**
Toxicity studies of *Listeria monocytogenes* grown *in vivo*. 22075
- Endotoxin properties of *Leptospira canicola*. 22081
- BIOLOGICAL CONTROL (INSECTS)**
A biochemical look at insect diapause. 21684
- Main currents in research concerning sterilization methods of insects. 21735
- New methods of pest control. 21989
- DD-136 nematode that can kill many insect pests. 21991
- BIOLOGICAL CONTROL (PESTS)**
Research on biological pest control. 21734
- BIOLOGY**
Some notes on the study of bark fungi. 21778
- The effects of integrated plant protection methods. 21797
- Electron microscopic observations on the apparent replication *in vivo* of a plant virus. 21817
- Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
- Biological characteristics of *Fomes fomentarius* found on spruce and birch. 21935
- Biological investigations on the cestode, *Railiellina* (R.) *loeweni* Bartel and Hansen, 1964. 22159
- Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174
- BIOMETRY**
Influence of different forms of management on the incidence of helminth parasitism in poultry. 22164
- BLACK SHANK**
A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849
- BLACK SPOT (ORANGES)**
The effect of several dithiocarbamate fungicides on black spot control and fruit quality in Valencia oranges. 21874
- BLAST (RICE)**
The use of actidione on the control of rice blast. 21813
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865
- Control of rice blast through forecasts and fungicides. 21911
- BLATTELLA GERMANICA**
Cockroach insecticides. How repellent are they. 21589
- Cricket nutrition: Supplementation of grass by known nutrients. 21700
- BLATTIDAE**
Some Orthopteroïd insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594
- BLISSUS**
A revision of the genus *Blissus* (Heteroptera: Lygaeidae) in eastern North America. 21620
- BLISTER RUST (PINUS)**
The relation of growth regulators to the development of symptoms and expression of stem resistance in white pine infected with blister rust. 21831
- BLOOD**
The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- BLOOD PRESSURE**
Cardiopulmonary values in normal and heartworm-infected dogs. 22144
- BLOOD PROTEINS**
Developmental changes in the late larva of *Calliphora stygia*. I. Olymph. 21692
- BLOOD TESTS**
National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045
- BLOSSOM END ROT (TOMATOES)**
Blossom end rot of the tomato. 21843
- BLUE STAIN (PINUS SYLVESTRIS)**
Erratum: Reactions of lodgepole pine to attack by *Dendroctonus ponderosae* Hopkins and blue stain fungi. 21919
- BLUEBERRIES**
Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790
- BOMBINAE**
New species of the sub-family Bombinae of the Palaearctic Region (Hymenoptera, Apoidea). 21744
- BOMBYX MORI**
Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591
- BONE DISEASES**
Influence of *Streptococcus equisimilis* on sites of endochondral ossification in swine. 22129
- BONES**
Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087
- BORDEAUX MIXTURE**
The effect of several dithiocarbamate fungicides on black spot control and fruit quality in Valencia oranges. 21874
- BORON**
Foliar absorption of boron by Bartlett pears. (Abstract). 21775
- Micronutrient effects on the *in vitro* growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- BOTRYTIS**
The occurrence of an ash-colored mold on peanuts in the state of Sao Paulo. 21847
- BOTRYTIS ALLII**
A further look at neck rot in onions. 21882
- BOTRYTIS CINEREA**
Chemical disinfection of the soil through methylbromide. 22202
- BOTRYTIS GLADIOLORUM**
Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896
- BOTRYTIS SQUAMOSA**
Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- BOVICOLA**
Notes on mallophaga on the Asiatic wild ass and bisons. 21595
- BOVINE ENTEROVIRUSES**
Comparison of a bovine enterovirus and foot-and-mouth disease virus. 22132
- BRACON HEBETOR**
The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
- BRACONIDAE**
Notes on *Ecphyllus* Forst. and description of two new species (Ichneumonoidae, Braconidae, Doryctinae). 21606
- The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
- BRAIN**
Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695
- On the existence of cells with vacuoles in the brain of *Musca domestica* L. 21725
- BREEDING**
Breeding insects with artificial food. 21661

SUBJECT INDEX

CATALOGS

- Main currents in research concerning sterilization methods of insects. 21735
- Evolution and hybridization in the *Utetheisa ornatrix* complex (Lepidoptera: Aretidae). I. Inter- and intrapopulation variation and its relation to hybridization. 21762
- Breeding peaches for root-knot nematode resistance. 21800
- Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853
- Breeding glasshouse cucumbers in the Netherlands. 21879
- A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- Reaction of tomato varieties and breeding lines to aphids. 21996
- Diseases of pigs and their control. SF971.B4. 22051
- BROADBEANS**
Purification and properties of broad bean wilt virus. 21937
- BROCCOLI**
Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821
- BROMUS**
Serological studies on brome grass mosaic virus and its protein fragments. 21945
- BROWN ROT**
Orchard sanitation and brown rot control. 21870
- BROWN SPOT**
Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932
- BRUCELLOSIS**
Eradicating and controlling brucellosis in sheep. 22068
- BUNCHY TOP (BANANAS)**
Preventive measures can control bunchy top. 21892
- BUPRESTIS AURULENTA**
Buprestis aurulenta L. (Col., Buprestidae) in Ireland. 21727
- BUSHY STUNT (TOMATOES)**
Tomato bushy stunt virus from *Prunus avium* L. I. Field studies and virus characterization. 21815
Tomato bushy stunt virus from *Prunus avium* L. Serological typing and the characterization of antibody types and activities. 21816
- CABBAGE**
Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821
Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouché). 21993
- CACAO**
Cacao flush defoliating caterpillars in Papua and New Guinea. 21967
- CALCIUM**
The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
Blossom end rot of the tomato. 21843
Controlling hairgrass (*Deschampsia caespitosa*). 22019
Calcium localization within live oat leaves using a semiconductor detector assembly. 22041
- Influence of *Streptococcus equisimilis* on sites of endochondral ossification in swine. 22129
- CALIROA CERASI**
The pear and cherry slug. 21984
- CALLIPHORA STYGIA**
Developmental changes in the late larva of *Calliphora stygia*. I. Olymph. 21692
- CALLIPHORIDAE**
Developmental changes in the late larva of *Calliphora stygia*. I. Olymph. 21692
Studies on the possibilities of using blowflies (Dipt.) as medicolegal indicators in Finland. I. Report of four indoor cases from the city of Helsinki. 21717
- CALVES**
Vaccination against Johne's disease and the creation of carriers. 22077
- CAMELLIA**
Mites of camellia. 21972
- CAMELS**
The pasture fly (Diptera) fauna associated with camels in south Tuva. 22154
- CANINE DISTEMPER**
On the preparation of immune globulins against distemper and infectious hepatitis of dogs. 22098
- CANKER**
Canker of peaches by *Fusicoccum amygdali*. Biology of the parasite and methods of control. 21859
- CANTALOUPE**
Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
Identification of two serotypes in squash mosaic virus strains. 21878
- CAPILLARIA**
Further observations on *Capillaria feliscati* infections in the cat. 22175
- CAPTAN**
Fungicides can check black band of jute. 21922
- CARABIDAE**
New records of Carabidae (Coleoptera) from Northumberland. 21623
Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987
- CARBAMATES**
Effects of two carbamates on several pests of peach. 21829
The effect of several dithiocarbamate fungicides on black spot control and fruit quality in Valencia oranges. 21874
Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- CARBARYL**
Concentrate spray-thinning of apples. (Abstract). 21808
Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
Cutworms and armyworms. 21983
- CARBON**
Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-nitrogen balance on *Fusarium* root rot of beans. 21913
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- CARBON DIOXIDE**
Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
Carbon dioxide effects on fruits. III. The fixation of ¹⁴C in lemon in an atmosphere enriched with carbon dioxide. 22232
- CARBON ISOTOPES**
The leaching of auxin from air layers. 21771
- CARBON MONOXIDE**
Control of the hamster pest. 22155
- CARBON TETRACHLORIDE**
Carbon tetrachloride injections for liver fluke control. 22170
Whole godown fumigation is economical and safe. 22177
- CAREX**
Weedicides in sedge control trials. 22018
Australian sedge in New Zealand. 22020
- CATALOGS**
Some Orthopteroid insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594
Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. I. Orthoptera Grylloidea. 21600
The treehoppers of Wisconsin in relation to the tension zone (Homoptera, Membracidae). 21602
Standard names for common insects. 21603
Coleoptera in southern Nordland. 21610
Catalogue on the Indian Dermaptera. 21612
Catalogue on the Indian Dermaptera. 21613
Data on the caddisfly (Trichoptera) fauna of Siberia and the Far East. 21621
Gall midges of the USSR. 7. New species of non-ccidogenous gall midges of the tribe Oligotrophini (Diptera, Cecidomyiidae). 21625
New Palearctic species of the subfamily Medeterinae (Diptera, Dolichopodidae). 21628
Trombiculid mites (Acariformes, Trombiculidae) from the Crimea. 21633
Tricoptera collected in Sor-Trondelag County. 21634
Finnish entomological literature published in 1966, including economic entomology and control of insect pests. 21636
On the systematic position of ichneumonids of the genera *Odinophora* Forster and *Extastes* Gravenhorst and descriptions of new species (Hymenoptera, Ichneumonidae). 21638
Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLVIII. Hemiptera Pyrrhocoridae. 21639

SUBJECT INDEX

CATERPILLARS

- Examination of African Reduviidae. II. Harpactorinae. Genus *Nagusta* Stal. 21640
- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. descarpentries. LIV. Hemiptera Plataspidae. 21641
- A collection of spiders from Son Norway. 21642
- The larvae and pupae of the British Cylindrotominae and Limoniinae (Diptera, Tipulidae). 21664
- Ants. 21720
- Pests of cultivated plants in Finland in 1967. 21888
- Interceptions in plant quarantine for the year ending 30th June, 1966. 21902
- Notes on the smut genera *Entorrhiza* and *Schroeteria*. 21938
- New records of plant diseases in New South Wales. 21946
- Heliothis* species Lepidoptera: Noctuidae in Papua and New Guinea. 21962
- Cacao flush defoliating caterpillars in Papua and New Guinea. 21967
- Colcoptera attacking tree and shrub plantings in the city of Kharkov. 21979
- New data on the bloodsucking midge (Diptera, Ceratopogonidae) of the coastal zone of the Maritime Territory. 22151
- The pasture fly (Diptera) fauna associated with camels in south Tuva. 22154
- Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morclia* R. D. (Diptera, Muscidae) in Soviet Central Asia. 22157
- Observations on wood-destroying insects living in the footbridge over Siikaneva bog. 22178
- CATERPILLARS**
Cacao flush defoliating caterpillars in Papua and New Guinea. 21967
- CATS**
Ciguatera poisoning in cats in Brisbane. 22070
Further observations on *Capillaria feliscati* infections in the cat. 22175
- CATTLE**
Methods of restraining cattle for tuberculin testing. 22040
Texas (splenic) fever in cattle. Permitted dips. 22046
Survey shows weakness in mastitis control. 22054
New Zealand veterinarians study animal diseases in Thailand. 22056
Comparison of selected characteristics of four strains of infectious bovine rhinotracheitis virus. 22058
Poisoning of cattle by *Polygala klotzchii*, Chodat, in the region of Pontal (State of Sao Paulo). 22062
Regrowth of primary cell cultures after infection with foot-and-mouth disease virus. 22064
Mycobacterium avium infection in cattle: A case series. 22066
These plants might spell death to your cattle. 22069
- The effect of *Vibrio fetus* vaccination on the breeding efficiency of cows bred to *Vibrio fetus*-infected bulls. 22084
- Ultrastructure of *Anaplasma marginale* fixed with glutaraldehyde and osmium tetroxide. 22086
- Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087
- Grass tetany in cattle--using molasses--magnesium oxide mixtures to prevent it. 22090
- Influence of egg albumin-induced leukopenia on experimental *Acrobacter aerogenes* mastitis and on natural infection of mammary gland with coagulase-negative *Staphylococcus* in a cow. 22096
- Abortive and teratogenic effects of locoweed on sheep and cattle. 22097
- Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103
- Serologic analysis of bovine vibriosis. 22109
- Eradication of vibriosis from a stud herd. 22118
- Infectious bovine rhinotracheitis: Correlation of fetal and placental lesions with viral isolations. 22123
- Infectious bovine rhinotracheitis: Relationship of level of maternal antibody titer to incidence of fetal death and abortion. 22124
- Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131
- Comparison of a bovine enterovirus and foot-and-mouth disease virus. 22132
- Some considerations on the name bovine malaria. 22133
- Vaccination against leptospirosis: Immunogenicity of viable, avirulent *Leptospira pomona* in hamsters, swine, and cattle. 22137
- Diagnosis of *Trichomonas foetus* infection in bulls. 22140
- Attention to cattle lice can be profitable. 22146
- Summary of the coprolitic analyses of animal strongylosis; results obtained in Meuthe-et-Moselle. 22169
- Carbon tetrachloride injections for liver fluke control. 22170
- Epidemiology of helminth infestation of beef cattle in central Queensland. 22176
- Methoxychlor residues in the meat and milk of cattle following limited applications of methoxychlor for the control of buffalo fly (*Haematobia exigua*). 22192
- CECIDOMYIIDAE**
Gall midges of the USSR. 7. New species of non-ceedidogenous gall midges of the tribe Oligotrophini (Diptera, Cecidomyiidae). 21625
- CELLS**
Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
A biochemical look at insect diapause. 21684
Ultrastructure of moth alary muscles and their attachment to the heart wall. 21733
- Fine structural characterization of plant microbodies. 21777
- Auxin (plant hormones) production in plants. 21801
- The ultrastructure of *Piricularia oryzae* Cav. 21812
- Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826
- Fine structure of *Plasmodiophora brassicae* in sporogenesis. 21954
- Studies on the mechanism of interferon action. 22033
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
- Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126
- Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141
- Relation of interferon synthesis to abortive replication of Newcastle disease virus in L cells. 22145
- CELLULASE**
Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- CELLULOSE**
Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on Chlamydospore germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814
- CENTRAL NERVOUS SYSTEM**
Pathogenesis and pathologic features of avian encephalomyelitis in chicks. 22115
- CENTRIFUGATION**
The use of density gradient centrifugation in a zonal centrifuge rotor during the purification of a pear virus. 21940
- CERAMBYCIDAE**
The present distribution of *Hylotrupes bajulus* L. (Col., Cerambycidae) in Norway and its abundance in some districts. 21694
- CERATOCYSTIS PARADOXA**
Studies of the host-parasite relationship in the pineapple disease of sugarcane. 21830
- CERATOCYSTIS ULMI**
Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852
- CERATOPOGONIDAE**
New data on the bloodsucking midge (Diptera, Ceratopogonidae) of the coastal zone of the Maritime Territory. 22151
- CESTODA**
Biological investigations on the cestode, *Railletina (R.) loeweni* Bartel and Hansen, 1964. 22159
Internal parasites in sheep on the northern tablelands. 22163
Influence of different forms of management on the incidence of helminth parasitism in poultry. 22164

SUBJECT INDEX

CHEMISTRY

- L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168
- CHALCIDAE**
Psephenus (Coleoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- CHEMICAL CONTROL (INSECTS)**
 Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
 The Australian plague locust *Chortoicetes terminifera*. 21668
 Ants. 21720
 Investigation of sterilizing doses for *Ephesia kunnilla* L. in irradiation in various stages of development. 21755
 Forest plant protection problems in Bavaria. 21799
 Preventive measures can control bunchy top. 21892
 Tomato spotted wilt (tomato spotted wilt virus). 21900
 Control of the banana weevil. 21960
Heliopsis species Lepidoptera: Noctuidae in Papua and New Guinea. 21962
 Several observations on the nature of the spring development of *Chermes tardus* Dreyf. 21963
 Banana beetle borer control investigations on the north coast of New South Wales. 21964
 Insecticide treatment of water lily ponds to stop caddis fly damage. 21971
 Mites of camellia. 21972
 The sitona weevil—a pest of lucerne (*Sitona humeralis*). 21973
 The blue oat mite *Penthaleus major* (Duges) (Acarina: Eupodidae). 21975
 Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
- Pests. 21977
 The use of attractants in pest control. 21981
 Cutworms and armyworms. 21983
 The pear and cherry slug. 21984
 New methods of pest control. 21989
 Research on the chemical control of *Aceria sheldoni*. 21999
 Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities. 22001
 Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
 Attention to cattle lice can be profitable. 22146
 Insect tormentors of livestock: III. Fleas and ticks. 22149
 Scaly leg in poultry—a parasitic disease. 22150
 Lice of poultry. 22153
- How to get rid of ectoparasites of poultry. 22156
 New restrictions on use of DDT. 22158
 Whole godown fumigation is economical and safe. 22177
- CHEMICAL CONTROL (NEMATODES)**
 Problems of nematode control in Bavarian potato cultures. 22003
 Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
 Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation. 22152
- CHEMICAL CONTROL (PESTS)**
 The chemical make-up and selective effect of triazine herbicides. 21780
 Plant protection problems in the cultivation of forage plants in Bavaria. 21787
 Insecticides, fungicides and antibiotics. 21994
 Rat baits incorporating paraffin wax. 22031
 Enzootic foot rot control in sheep. 22047
 External parasites of pigs. 22147
 Laboratory and field trials with a new raticide selective toxic for rats. 22199
- CHEMICAL CONTROL (PLANT DISEASES)**
 Canker of peaches by *Fusicoccum amygdali*. Biology of the parasite and methods of control. 21859
 Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896
 Powdery mildew of the grapevine. 21899
 Rhizoctonia stem rot. 21901
 Sclerotium stem rot. 21904
 Bacterial canker of tomato (*Corynebacterium michiganense*). 21905
 Fertilizer-fungicide combinations for the control of *Pythium* damping-off of tobacco. 21907
 New approaches in disease control. 21934
 Vitavax - a new systemic fungicide. 21936
 Chemical disinfection of the soil through methylbromide. 22202
 New directions in virus control in vegetable and potato cultivation. 22231
- CHEMICAL CONTROL (WEEDS)**
 Insecticides, fungicides and antibiotics. 21994
 Chemical control of weeds in drains. 22009
 Flurenol - a herbicide with new properties. 22010
 Experimental results concerning the chemical control of weeds in young lucerne fields. 22011
 Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012
 Experiments with Tordon herbicide in small grains. 22013
 Changed method of nata use in the control of Agropyron repens on arable land. 22014
- Efficacy of a stale seedbed approach for providing weed control in pickling cucumbers. (Abstract). 22015
 The field thistle (*Cirsium arvense* Scop.) in the grasslands. Biology and means of control. 22016
 Weedicides in sedge control trials. 22018
 Controlling hairgrass (*Deschampsia caespitosa*). 22019
 Chemical weed control in pickling cucumbers. (Abstract). 22021
 Up to date weed control in horticulture. 22022
 Factors affecting the performance of pre-emergence and postemergence herbicides in pickling cucumbers. (Abstract). 22023
 Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024
 The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
 Controlling barnyard grass in rice. 22028
 Weed control in upland rice at the University of the Philippines College of Agriculture. 22029
 New knowledge about the use of herbicides in permanent grassland. 22030
 Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196
 Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- CHEMICALS**
 Resistance pattern in four strains of insecticide-resistant green rice leafhopper, *Nephotettix cincticeps* Uhler, collected in fields. 21588
 The role of chemicals in the general insect control picture. 21617
 Stability of Chilo iridescent virus. 21707
 Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
 Characterization of three bacteriophages of *Xanthomonas oryzae* (Uyeda et Ishiyama) Dowson. 21788
 Growth regulators to control lettuce bolting. (Abstract). 21850
 Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
 Effect of cytokinins on apple shoot development from axillary buds. 21953
 Research on the chemical control of *Aceria sheldoni*. 21999
 Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189
 Nerve gas: Dugway accident linked to Utah sheep kill. 22195
- CHEMISTRY**
 The chemical make-up and selective effect of triazine herbicides. 21780

SUBJECT INDEX

CHEMORECEPTORS

- New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781
- Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809
- Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
- Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens. 22233
- Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235
- The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236
- Studies on effectiveness of suspensibility with preparation technique of W.P. formulations. 22237
- CHEMORECEPTORS**
Studies on the olfactory stimuli guiding the bark beetle *Blastophagus piniperda* L. (Coleoptera, Scolytidae) to its host tree. 21691
- CHEMOSTERILANTS**
The role of chemicals in the general insect control picture. 21617
- Main currents in research concerning sterilization methods of insects. 21735
- The effects of integrated plant protection methods. 21797
- CHENOPODIUM**
Chenopodium test for the demonstration of the presence of the lettuce mosaic virus I in seeds. 21980
- CHENOPODIUM AMARANTICOLOR**
Clonal selection of grapevines in some areas of Italy. 21819
- CHENOPODIUM QUINOA**
Clonal selection of grapevines in some areas of Italy. 21819
- CHERRIES**
Investigations concerning the serological proof of the necrotic ringspot virus of the sour cherry. III. The serological variability of the necrotic ringspot virus of the sour cherry. 21925
- The pear and cherry slug. 21984
- CHICK EMBRYOS**
Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866
- Current activities--Lasswade. 22039
- The isolation and recognition of viruses. 22093
- CHICKENS**
Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
- Necrotic enteritis of chickens. 22049
- Uncoating of newcastle disease virus. 22071

- Pathogenesis and pathologic features of avian encephalomyelitis in chicks. 22115
- Experiences concerning the preparation and application of mycoplasma antigen. 22119
- Problem of avian leukosis in Lahore. 22134
- Neutralising antibodies for avian infectious bronchitis virus in Queensland poultry flocks. 22138
- Vaccination of congenitally-immune chicks against Newcastle disease virus. 22139
- Oxygen consumption in adult *Echinostoma revolutum*. 22172
- Food additives permitted in food for human consumption arsenic. 22194
- CHICKPEAS**
Disease development in guar (*Cyamopsis psoraleoides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890
- CHICKS**
Current activities--Lasswade. 22039
- CHILO**
Stability of Chilo iridescent virus. 21707
- CHILO SUPPRESSALIS**
Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, Chilo suppressalis walker (Lepidoptera: Pyralidae). 21745
- CHINCHILLAS**
In vivo production of a toxin(s) by *Listeria monocytogenes*. 22113
- CHIRONOMIDAE**
Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677
- Developmental interactions in the dipteran salivary gland. 21699
- CHIRONOMUS TENTANS**
Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677
- CHLORDANE**
Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593
- Cutting down cane losses from termites and shoot borer. 21978
- CHLORIDES**
The effect of age, SKF 525-a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* kll. 21708
- CHLORINATED HYDROCARBONS**
Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004
- Control of insecticide residues in produce. 22179
- CHLOROPHYLLS**
The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- CHLOROPICRIN**
Chemical disinfection of the soil through methylbromide. 22202

CHLOROPLASTS

- Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943

CHLOROSIS (PLANTS)

- Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891

CHORTOICETES TERMINIFERA

- The Australian plague locust *Chortoicetes terminifera*. 21668

CHROMATOGRAPHY

- Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara ellipti*. 21666
- Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, Chilo suppressalis walker (Lepidoptera: Pyralidae). 21745
- New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781
- Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807
- Factors influencing the persistence of the herbicide 2,6-dichlorobenzonitrile in various soil types. 22193
- Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206
- Partial hydrolysis of dieldrin by *Aerobacter aerogenes*. 22238

CHROMOSOMES

- Developmental interactions in the dipteran salivary gland. 21699

CHRYSANTHEMUM MORIFOLIUM

- Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789

CHRYSOMELIDAE

- Studies on biology of Banmalika leaf minor (*Agropistis limatus*, Moth, Coleoptera, Halticidae). A serious pest of Banmalika (*Jasminum aequistifolium*, Vohl.) in Rajasthan. 21706
- Studies on biology of banmalika leaf minor (*Agropistis limatus*, Moth., Coleoptera, Halticidae.) A serious pest of banmalika (*Jasminum aequistifolium*, Vohl.) in Rajasthan. 21982

CHRYSOTHAMNUS VISCIDIFLORUS

- Biology of the gall-former *Procecidochares stonci* on a composite. 21742

CICADIDAE

- Cicadas as pests in New South Wales. 21974

CIMICIDAE

- Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645

CIRSIIUM ARVENSE

- The field thistle (*Cirsium arvense* Scop.) in the grasslands. Biology and means of control. 22016

CITRIC ACID

- Carbon dioxide effects on fruits. III. The fixation of C14O2 in lemon in an atmosphere enriched with carbon dioxide. 22232

CITRUS

- Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809

- Citrus fruit virus diseases in the light of the results of the 4th conference of the I.O.C.V. 21835
- Virus disease survey on citrus in Aegean region. 21909
- The use of attractants in pest control. 21981
- Research on the chemical control of *Aceria sheldoni*. 21999
- CLASSIFICATION**
On the legal classification of inspected meat from slaughtered animals in which *Salmonella* was detected. 22181
- CLAY SOILS**
Changed method of neta use in the control of *Agropyron repens* on arable land. 22014
- CLIMATE**
Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea). 21652
- Better bee-keeping: II. Monsoon measures and autumn needs. 21737
- CLONES**
Clonal selection of grapevines in some areas of Italy. 21819
- CLOSTRIDIUM**
Necrotic enteritis of chickens. 22049
- Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087
- CLOSTRIDIUM HEMOLYTICUM**
Electrophoretic fractionation of *Clostridium hemolyticum* toxic culture fluids. 22112
- CLOVER**
Plant protection problems in the cultivation of forage plants in Bavaria. 21787
- Host range of peanut stunt virus in *Trifolium* spp. (Abstract). 21837
- Honey bees as pollinators of red clover. 21988
- COBALT**
Phalaris can be poisonous. 22198
- COCCIDIOSIS**
Internal parasites in sheep on the northern tablelands. 22163
- COCONUTS**
The nata de coco. 2. Chemical nature and properties of nata. 21844
- The 'nata de coco'. 1. Characterization and identity of the causal organism. 21924
- Petiole disease of coconut in Papua. 21929
- COFFEE**
Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- COITAL EXANTHEMA**
Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103
- COLEOPTERA**
Coleoptera in southern Nordland. 21610
- Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera). 21614
- New records of Carabidae (Coleoptera) from Northumberland. 21623
- On preserving beetle larvae. 21629
- Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658
- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLV. Coleoptera Ochodaeidae. 21676
- How flies fly. 21709
- Coleoptera attacking tree and shrub plantings in the city of Kharkov. 21979
- COLLEMBOLA**
The appearance and distribution of epicuticular inframicroscopic formations of three Collemboles. 21719
- COLLOIDS**
The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236
- COLOR**
Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728
- Mimetic versus disruptive coloration in intergrading populations of *Limenitis arthemis* and *astyanax* butterflies. 21763
- The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- COLOSTRUM**
Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
- COMPETITION**
Competition between insect species. 21738
- COMPLEMENT FIXATION**
Eradicating and controlling brucellosis in sheep. 22068
- Immunodiffusion reactions between human sera and *Mycoplasma pneumoniae*. 22072
- The complement-fixation test for avian leukosis. 22085
- CONOPIDAE**
Status of *Zodion zebrinum*, *Z. auricaudatum*, and *Z. albonotatum* (Diptera: Conopidae). 21604
- CONSUMPTION**
Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665
- CONTARINIA**
Study of an Itonidid (*Contarinia medicaginis* Kieffer) and of its host. 21998
- COOPERIA**
Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174
- COPPER**
Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- The classification of leptospiral strains from Kazakhstan. 22042
- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- COPPER SULFATE**
Enzootic foot rot control in sheep. 22047
- CORK SPOT (APPLES)**
Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- CORN**
Plant protection problems in the cultivation of forage plants in Bavaria. 21787
- Gonatobotrys zeae* sp. n. a new pathogen on corn. (Abstract). 21851
- Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
- Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
- Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943
- A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
- Study of an Itonidid (*Contarinia medicaginis* Kieffer) and of its host. 21998
- Heritable repression due to paramutation in maize. 22036
- Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048
- CORYNEBACTERIUM MICHIGANENSE**
Bacterial canker of tomato (*Corynebacterium michiganense*). 21905
- COSMOPOLITES SORDIDUS**
Control of the banana weevil. 21960
- Banana beetle borer control investigations on the north coast of New South Wales. 21964
- COSSIDAE**
Contribution to studies of *Zeuzera 'Zeuzera pyrina' L.* (Lepidoptera Cossidae) in the lower valley of the Rhine: The life cycle and biological characteristics of different stages. 21651
- COTTON**
The westward movement of pink bollworm. 21995
- Mechanical control of cotton weeds. 22025
- Respiratory and enzymatic studies with *Verticillium alboatrum* from cotton. 22219
- COTTONSEED**
Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- Deterioration of treated and untreated cottonseed during humid storage. 21952
- COUMAPHOS**
Texas (splenic) fever in cattle. Permitted dips. 22046

CROP LOSSES

CROP LOSSES

The occurrence of an ash-colored mold on peanuts in the state of Sao Paulo. 21847

Orchard sanitation and brown rot control. 21870

Disease development in guar (*Cyamopsis psoralioides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

Virus diseases of deciduous fruit trees: Apple mosaic. 21898

Bacterial canker of tomato (*Corynebacterium michiganense*). 21905

Can Taichung Native-I stand up to bacterial blight. 21933

A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966

Study of an Itonidid (*Contarinia medicaginis* Kieffer) and of its host. 21998

Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007

CROP ROTATION

Plant protection problems in the cultivation of forage plants in Bavaria. 21787

Problems of nematode control in Bavarian potato cultures. 22003

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

Changed method of neta use in the control of *Agropyron repens* on arable land. 22014

Up to date weed control in horticulture. 22022

CROP YIELDS

Description of the adult *Tetranychus telarius* L. (*Acarina*, *Tetranychidae*). 21740

Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783

The importance of plant protection for world harvest. 21786

Influence of gibberellin upon time of bud development in globe artichoke (*Cynara scolymus*). (Abstract). 21804

The ultrastructure of *Piricularia oryzae* Cav. 21812

The use of actidione on the control of rice blast. 21813

Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821

Taichung Native-IVs bacterial blight. 21836

Pests of cultivated plants in Finland in 1967. 21888

Some observations on egg diapause in the Trinidad sugar cane frog hopper, *Aencolamia varia saccharina* (*Homoptera*, *Cercopidae*). 21969

Changes in the yield and protein quantity of oat caused by *Rhopalosiphum padi* (L.) (*Hom.*, *Aphididae*). 21992

Up to date weed control in horticulture. 22022

Weed control in upland rice at the University of the Philippines College of Agriculture. 22029

Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230

CROPS

Crop pollination and the flower relationships of the wild bees of Ludhiana, India (*Hymenoptera*: *Apoidea*). 21652

On the reinform nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (*Tylenchida*: *Hoplolaimidae*). 21712

The importance of plant protection for the world harvest. 21785

Effects of phenols on the plant. 21961

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

CROWN GALLS

Auxin (plant hormones) production in plants. 21801

Free amino acids of sunflower hypocotyl tissue during crown gall tumor development. 21824

Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826

Quantitative measurements of interactions between crown-gall tumors and the pinto bean host. 21845

CROWN ROT (BANANAS)

The incidence of crown rot of boxed bananas in relation to microbial populations of the crown tissue. 21886

CTENIZIDAE

Distribution and adaptive diversity of trapdoor spiders. 21701

CUCUMBERS

Comparison of staminate flower production on gynoeocious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774

Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783

The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792

Gibberellin A4/A7, for induction of staminate flowers on the gynoeocious cucumber. (Abstract). 21794

Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832

Breeding glasshouse cucumbers in the Netherlands. 21879

Serological behavior of cucumber mosaic virus (strain Y) and the virus protein. 21928

The effect of scab resistance on fruit length in slicing cucumbers. (Abstract). 21955

Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (*Acarina*: *Tetranychidae*), on greenhouse cucumbers. 21970

Efficacy of a stale seedbed approach for providing weed control in pickling cucumbers. (Abstract). 22015

Chemical weed control in pickling cucumbers. (Abstract). 22021

Factors affecting the performance of preemergence and postemergence herbicides in pickling cucumbers. (Abstract). 22023

Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203

CULICIDAE

A numerical taxonomic study of the genus *Psorophora* (*Diptera*: *Culicidae*). 21607

CULTURAL CONTROL (INSECTS)

Pests. 21977

Cutworms and armyworms. 21983

CULTURAL CONTROL (PLANT DISEASES)

Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896

Foot-rot of wheat. 21897

New approaches in disease control. 21934

CULTURAL CONTROL (WEEDS)

Mechanical control of cotton weeds. 22025

CULTURE MEDIA

Milky disease bacteria. 21590

Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591

Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara elliotti*. 21666

Are *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704

Spontaneous variability of single isolates of *Phytophthora infestans*. I. Cultural variation. 21772

New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781

Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798

Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807

A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849

Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926

Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956

Transmission and morphological studies of diseased *H. victoricae*. 22002

Studies on the mechanism of interferon action. 22033

Structure and antigenic properties of a staphylococcal L form. 22038

Current activities--Lasswade. 22039

Uneoating of newcastle disease virus. 22071

Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126

Diagnosis of *Trichomonas foetus* infection in bulls. 22140

- Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141
- Production of pectic and cellulytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224
- Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens. 22233
- CUPRESSUS**
Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- CURCULIONIDAE**
Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera). 21614
- Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
- Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
- CURRENTS**
Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
- CUTICLE**
The appearance and distribution of epicuticular inframicroscopic formations of three Collembolids. 21719
- Description of the adult *Tetranychus telarius* L. (Acarina, Tetranychidae). 21740
- Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle. 21793
- CYANIDES**
Oxygen consumption in adult *Echinostoma revolutum*. 22172
- CYCLOHEXIMIDE**
The use of actidione on the control of rice blast. 21813
- CYLINDROCLADIUM**
Cylindrocladium root rot of black walnut. (Abstract). 21848
- CYPERUS ROTUNDUS**
The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
- CYSTS**
Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- CYTOCHROME OXIDASE**
Oxygen consumption in adult *Echinostoma revolutum*. 22172
- CYTOLOGY**
A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- On the existence of cells with vacuoles in the brain of *Musca domestica* L. 21725
- Ultrastructure of *Anaplasma marginale* fixed with glutaraldehyde and osmium tetroxide. 22086
- Cytologic studies in polyoma virus-infected mouse embryo cells. 22104
- CYTOPATHOLOGY**
Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 22117
- Infectious bovine rhinotracheitis: Occurrence of fetal and placental lesions with viral isolations. 22123
- CYTOPLASM**
Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591
- The ultrastructure of *Piricularia oryzae* Cav. 21812
- CYTOSPORA**
Three-year effects of systemic fungicides applied for the control of *Cytospora* in Italian prune trees. 21862
- D, 2,4-**
American cotton is allergic to 2,4-D. 21818
- Experiments with Tordon herbicide in small grains. 22013
- Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of 14C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of 14C-labelled amino acids into protein in pea root tips. 22216
- DACTYNOTUS**
A review of twelve aphid species described as new by Edith M. Patch. 21624
- DACUS**
The frequency of interbreeding between two sibling species of *Dacus* (Diptera) in wild populations. 21758
- DAIRY BACTERIOLOGY**
Steps can be taken to curb mastitis. 22057
- DAIRY CATTLE**
Epizootiologic studies of Q fever in Washington dairy cattle. 22110
- DATURA FEROX**
The interaction of the seed coat and gibberellin acid in the germination of *Datura ferox* L. 22225
- DDT**
Tomato spotted wilt (tomato spotted wilt virus). 21900
- The sitona weevil—a pest of lucerne (*Sitona humeralis*). 21973
- The blue oat mite *Pentaleus major* (Duges) (Acarina: Eupodidae). 21975
- Cutworms and armyworms. 21983
- Insect tormentors of livestock: IV. The mites. 22148
- Insect tormentors of livestock: III. Fleas and ticks. 22149
- New restrictions on use of DDT. 22158
- Control of insecticide residues in produce. 22179
- Production of antibodies against insecticide-protein conjugates. 22191
- Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203
- DEATH**
Studies on the possibilities of using blowflies (Dipt.) as medicolegal indicators in Finland. I. Report of four indoor cases from the city of Helsinki. 21717
- DEFICIENCY DISEASES**
The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
- Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931
- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- DEMETON**
Poisoning of bees by insecticides. 22183
- DEMOGRAPHY**
The bionomics and ecology of *Anthoecoris confusus* Reuter in Scotland. 21685
- The present distribution of *Hylotrupes bajulus* L. (Col., Cerambycidae) in Norway and its abundance in some districts. 21694
- Mating choice in crosses between geographic populations of *Drosophila pseudoobscura*. 21756
- Genotype frequency and mating success in the williston: species group of *Drosophila*. 21757
- The frequency of interbreeding between two sibling species of *Dacus* (Diptera) in wild populations. 21758
- Evolution and hybridization in the *Utetheisa ornatrix* complex (Lepidoptera: Arctiidae). I. Inter- and intrapopulation variation and its relation to hybridization. 21762
- Mimetic versus disruptive coloration in intergrading populations of *Limenitis arthemis* and *astyanax* butterflies. 21763
- The pasture fly (Diptera) fauna associated with camels in south Tuva. 22154
- DENDROCTONUS PONDEROSAE**
Erratum: Reactions of lodgepole pine to attack by *Dendroctonus ponderosae* Hopkins and blue stain fungi. 21919
- DENSITY**
The use of density gradient centrifugation in a zonal centrifuge rotor during the purification of a pear virus. 21940
- DEOXYRIBONUCLEIC ACID**
Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826
- Heritable repression due to paramutation in maize. 22036
- DERMAPTERA**
Some Orthopteroïd insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594
- Catalogue on the Indian Dermaptera. 21612
- Catalogue on the Indian Dermaptera. 21613

SUBJECT INDEX

DESCHAMPSIA

Genera and species of the Dermaptera. 8 Eudohrninae, Neolobophorinae, Ancistrogastriinae, Diaperasticinae and Anechurinae (Forficulidae). 21630

DESCHAMPSIA

Controlling hairgrass (*Deschampsia caespitosa*). 22019

DIAGNOSIS

A problem in the diagnosis of head lice. 21696

Wrinkled skin disease of apples. 21842

Blossom end rot of the tomato. 21843

Balantidiasis may be more common than we think. 22043

Diseases of pigs and their control. SF971.B4. 22051

Marek's disease. 22055

Comparison of selected characteristics of four strains of infectious bovine rhinotracheitis virus. 22058

Cradles make footrot treatment easier. 22059

African swine fever. Application of immunofluorescence to the study of tissue cultures. 22065

Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103

Evaluation of the fluorescent antibody-cell culture test for hog cholera diagnosis. 22114

Diagnosis of *Trichomonas foetus* infection in bulls. 22140

Swine fever eradication campaign 1963-64. 22142

DIANTHUS CARYOPHYLLUS

Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. 21769

DIAPAUSE

Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655

Observations on the hibernation of *Psila rosae* F. 21660

DIATRAEA SACCHARALIS

Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714

Cutting down cane losses from termites and shoot borer. 21978

DICAMBA

Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024

DICHLOBENIL

Factors influencing the persistence of the herbicide 2,6-dichlorobenzonitrile in various soil types. 22193

DICROCOELIUM

Opisthorchiasis in swine. 22165

DIELDRIN

Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593

Control of the banana weevil. 21960

Banana beetle borer control investigations on the north coast of New South Wales. 21964

Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993

Insect tormentors of livestock: IV. The mites. 22148

Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203

Partial hydrolysis of dieldrin by *Aerobacter aerogenes*. 22238

DIET

Cricket nutrition: Supplementation of grass by known nutrients. 21700

Are *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704

The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121

DIFFUSION

Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161

DIGESTION

The rate of passage of food and the effect of temperature in two noctuid caterpillars. 21702

On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741

Some aspects of nutrition in parasites. 22171

DIHYDRO-5-CARBOXANILIDO-6-METHYL-1,4-OXATHIIN,2,3-

Vitavax--a new systemic fungicide. 21936

DI METHOATE

Tomato spotted wilt (tomato spotted wilt virus). 21900

Insecticide treatment of water lily ponds to stop caddis fly damage. 21971

Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203

DI METHYL AMINO SUCCINAMIC ACID, N

Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951

DINITROPHENOL, 2,4-

Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219

DINOCAP

A relative study of the composition and tenacity of the Karathane deposits on bean leaves. 22188

Polarography of trace doses of Karathane. 22234

DIOXATHION

Texas (splenetic) fever in cattle. Permitted dips. 22046

DIPHENAMID

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190

DIPHENYL

Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235

DIPLODIA

Fungicides can check black band of jute. 21922

DIPLOPODA

Influence of soil humidity on the location in depth of the galley beet worm during a favorable season. 21659

DIPPING

Texas (splenetic) fever in cattle. Permitted dips. 22046

Lice of poultry. 22153

DIPTERA

Status of *Zodion zebrinum*, *Z. auricaudatum*, and *Z. albonotatum* (Diptera: Conopidae). 21604

Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont. Contribution no. 19 Insect collections in tubes of water. 21681

How flies fly. 21709

On the habitats of some *Lonchaea* species in fenoscandia (Dipt., Lonchaeidae). 21716

The pasture fly (Diptera) fauna associated with camels in south Tuva. 22154

DIROFILARIA IMMITIS

Cardiopulmonary values in normal and heart-worm-infected dogs. 22144

DISODIUM METHANEARSONATE

The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026

DISULFOTON

Poisoning of bees by insecticides. 22183

Effect of soil treatment with disulfoton (Dyston) granular under low temperature condition. 22185

DIPTYLENCHUS DIPSACI

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

DIURNAL RHYTHM

The method of action of the dark and light phases on the production of winged gymnosporangia of *Dysaphis plantaginea* Pass. (Homoptera, Aphididae). 21662

Periodicity in aeciospore release in *Gymnosporangium juniperi-virginianae*. 22222

DOGS

Serologic study of reovirus infection in dogs. 22079

On the preparation of immune globulins against distemper and infectious hepatitis of dogs. 22098

Comparative pathological anatomy of the hepatitis virus of man and dogs. 22101

Cardiopulmonary values in normal and heart-worm-infected dogs. 22144

DOLICHOPODIDAE

New Palearctic species of the subfamily Medeterinae (Diptera, Dolichopodidae). 21628

DORSAL VESSEL

Ultrastructure of moth alary muscles and their attachment to the heart wall. 21733

DOSAGE

The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026

DROSOPHILA

Transdetermination in the layout of the organs of the *Drosophila* fly. 21753

Genotype frequency and mating success in the williston: species group of *Drosophila*. 21757

DROSOPHILA MELANOGASTER

Ring gland transplantations and body weight in *Drosophila*. 21739

- The temperature-sensitive period in the development of rolled hemizygotes of *Drosophila melanogaster*. 21759
- Genetical control of penetrance and evolution of dominance in *Drosophila*. 21765
- DROSOPHILA PSEUDOOBSCURA**
Mating choice in crosses between geographic populations of *Drosophila pseudoobscura*. 21756
- DRUG PLANTS**
Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784
- DRUG THERAPY**
Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784
Texas (splenic) fever in cattle. Permitted dips. 22046
Necrotic enteritis of chickens. 22049
Diseases of pigs and their control. SF971. B4. 22051
Survey shows weakness in mastitis control. 22054
Effects of *Listeria monocytogenes* hemolysins on the isolated ileum of rabbit. 22135
Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation. 22152
Internal parasites in sheep on the northern tablelands. 22163
Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- DUSTING**
Cutting down cane losses from termites and shoot borer. 21978
Lice of poultry. 22153
- DWARF DISEASE**
Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943
- DYSAPHIS PLANTAGINEA**
The method of action of the dark and light phases on the production of winged gymnosporous of *Dysaphis plantaginea* Pass. (Homoptera, Aphididae). 21662
- EARS**
Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
- EARTHWORMS**
Control of the hamster pest. 22155
- ECHINOCHLOA**
Controlling barnyard grass in rice. 22028
- ECHINOSTOMA**
Oxygen consumption in adult *Echinostoma revolutum*. 22172
- ECOLOGY**
The reliability of a method of sampling stream invertebrates. 21670
Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714
The effects of integrated plant protection methods. 21797
- Research on *Fusarium* diseases. II. Ecology and pathology of *Fusarium oxysporum*. 21894
- ECONOMIC ENTOMOLOGY**
Finnish entomological literature published in 1966, including economic entomology and control of insect pests. 21636
What is a bee. 21643
- EGGS**
Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterms flavicollis* Fabr. (Isoptera). 21747
Production of enzootic pneumonia in pigs with *Mycoplasma suis* pneumoniae grown in embryonated hen's eggs. 22089
The isolation and recognition of viruses. 22093
Food additives permitted in food for human consumption arsenic. 22194
- EIMERIA**
Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- ELECTROCARDIOGRAMS**
Cardiopulmonary values in normal and heartworm-infected dogs. 22144
- ELECTRODES**
Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
- ELECTROLYTES**
The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236
- ELECTRON MICROSCOPES**
Electron microscopic observations on the apparent replication in vivo of a plant virus. 21817
An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- ELECTRON MICROSCOPY**
The organization of the sarcoplasmic reticulum and T system in the femoral muscle of the housefly, *Musca domestica*. 21721
Cross-bridges and periods in insect flight muscle. 21726
Fine structural characterization of plant microbodies. 21777
Characterization of three bacteriophages of *Xanthomonas oryzae* (Uyeda et Ishiyama) Dowson. 21788
Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
Ultrastructure of *Anaplasma marginale* fixed with glutaraldehyde and osmium tetroxide. 22086
- ELECTROPHORESIS**
Identification of two serotypes in squash mosaic virus strains. 21878
Serologic analysis of bovine vibriosis. 22109
Electrophoretic fractionation of *Clostridium hemolyticum* toxic culture fluids. 22112
The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- EMBRYOLOGY**
Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterms flavicollis* Fabr. (Isoptera). 21747
- EMPIDIIDAE**
A new empidid, *Platypalpus caucasicus*, sp. n. (Diptera, Empidiidae), from north Caucasus. 21619
- ENCEPHALOMALACIA**
Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048
- ENDOTHIA PARASITICA**
Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- ENDOTOXINS**
Endotoxin properties of *Leptospira canicola*. 22081
- ENDRIN**
Aldrin, dieldrin, endrin, and chlordane persistence—a 3-year study. 21593
Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
- ENTERITIS**
Necrotic enteritis of chickens. 22049
- ENTOMOGENOUS FUNGI**
On the use of entomopathogenic bacteria together with insecticides in the control of insect pests. 21990
- ENTOMOLOGY**
Finnish entomological literature published in 1966, including economic entomology and control of insect pests. 21636
Geometridae, new for Turkey, discovered in 1939-42 by J. Romicux. 21646
Competition between insect species. 21738
New species of the sub-family Bombinae of the Palearctic Region (Hymenoptera, Apoidea). 21744
- ENVIRONMENT**
Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655
Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663
Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper. 21711
Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
Research on the natural diffusion of soil-borne grape virus diseases in the Italian environment. 21917
Some observations on egg diapause in the Trinidad sugar cane frog hopper, *Aenolamia varia saccharina* (Homoptera, Cercopidae). 21969
Factors affecting the performance of premergence and postmergence herbicides in pickling cucumbers. (Abstract). 22023
- ENZYMES**
Cuticular esterase in the sternal gland of *Kaloterms flavicollis* F. (Isoptera, Termitidae). 21724

SUBJECT INDEX

EPHESTIA

- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035
- L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- EPHESTIA**
- Investigation of sterilizing doses for *Ephestia kuniellia* L. in irradiation in various stages of development. 21755
- EPIDEMIOLOGY**
- A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939
- Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987
- Balanitidiasis may be more common than we think. 22043
- The transmission of Dermatophilosis (mycotic dermatitis) in sheep. 22102
- On the specific mechanism of the transmission of leptospiral infection. 22105
- The investigation of scrub typhus in the USSR. 22108
- Epidemiology of helminth infestation of beef cattle in central Queensland. 22176
- EPIDIDYMITIS**
- Clinical and pathological studies of Border Leicester rams naturally infected with *Actinobacillus seminis*. 22050
- EPITHELIUM**
- Sex pheromone specificity tests in the Tortricidae—an introductory report. 21729
- EPIZOOTIC DISEASES**
- New Zealand veterinarians study animal diseases in Thailand. 22056
- The persistence of foot-and-mouth disease virus in sheep. 22061
- Britain's experience with foot and mouth disease. 22074
- The working party of fascioliasis in Wales. 22078
- Application of stresses to foot-and-mouth disease virus. 22080
- Attempts to recover *Mycoplasma suis* pneumoniae from experimental and natural cases of enzootic pneumonia in pigs. 22088
- Epizootiologic studies of Q fever in Washington dairy cattle. 22110
- Infectious laryngotracheitis of poultry. 22125
- Summary of the coprologic analyses of animal strongylosis; results obtained in Meuthe-et-Moselle. 22169

- Seasonal incidence and hionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174
- EQUINE INFLUENZA**
- Equine influenza in Mexico. Isolation and study of the strain E/Equi 2/Mexico/1/66. 22073
- EQUIPMENT**
- A stroboscopic device for the study of flight in very small insects. 21632
- Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. 21769
- The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792
- Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). 21811
- Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993
- Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012
- Methods of restraining cattle for tuberculin testing. 22040
- Cradles make footrot treatment easier. 22059
- ERYSIPHE GRAMINIS**
- Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
- ERYSIPHE POLYGONI**
- Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881
- ERYTHROCYTES**
- Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
- Electrophoretic fractionation of *Clostridium hemolyticum* toxic culture fluids. 22112
- Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131
- ESCHERICHIA COLI**
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Endotoxin properties of *Leptospira canicola*. 22081
- ESTERASES**
- Cuticular esterase in the sternal gland of *Calotermes flavicollis* F. (Isoptera, Termitidae). 21724
- ESTRADIOL**
- Estradiol annulment of sterol-induced sexual reproduction by *Pythium periplocum*. (Abstract). 22213
- ETHYL ACETATE**
- A method for collecting feather lice (Mallophaga). 21583
- ETHYLENE DICHLORIDE**
- Whole godown fumigation is economical and safe. 22177
- ETHYLENEDIAMINETETRAACETIC ACID**
- Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208

- EULOPHIDAE**
- Psephenus* (Coleoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- EXPERIMENTAL INSECTS**
- Cricket nutrition: Supplementation of grass by known nutrients. 21700
- Ring gland transplantations and body weight in *Drosophila*. 21739
- EXTENSION WORK**
- Project and problems of plant protection in the developing countries. 21810
- EXTRACTS**
- The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
- FAHRENHOLZIA**
- A new species of *Fahrenholzia* (Anoplura: Hoplopleuridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626
- FASCIOLA**
- Carbon tetrachloride injections for liver fluke control. 22170
- Some aspects of nutrition in parasites. 22171
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- FASCIOLIASIS**
- The working party of fascioliasis in Wales. 22078
- FAT BODY**
- A cytological study of changes in the fat body of *Trogloderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- FATTY ACIDS**
- Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789
- FEED**
- New knowledge about the use of herbicides in permanent grassland. 22030
- FEEDING**
- Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper. 21711
- Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728
- Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., Agromyzidae). 21746
- Diseases of pigs and their control. SF971.B4. 22051
- Some aspects of nutrition in parasites. 22171
- FENTHION**
- Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203
- FERMENTATION**
- Comparison of staminate flower production on gynococious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774

SUBJECT INDEX

FUNGI

- Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. **21807**
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). **21833**
- FERTILITY**
A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). **21682**
- FERTILIZERS**
A further look at neck rot in onions. **21882**
- Fertilizer-fungicide combinations for the control of *Pythium damping-off* of tobacco. **21907**
- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). **21931**
- Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. **22005**
- FETUS**
Uterine-amnionic pathway of infecting the rabbit fetus with *Listeria monocytogenes*. **22106**
- FIELD CROPS**
Carabidae and Staphylinidae occurring on soil surface in lucerne fields. **21987**
- FISH**
Ciguatera poisoning in cats in Brisbane. **22070**
- FLAGELLA**
Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojae*. **22214**
- FLOWERS**
Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. **22223**
- FLUORESCENT ANTIBODY TECHNIC**
African swine fever. Application of immunofluorescence to the study of tissue cultures. **22065**
- Immunodiffusion reactions between human sera and *Mycoplasma pneumoniae*. **22072**
- Uterine-amnionic pathway of infecting the rabbit fetus with *Listeria monocytogenes*. **22106**
- Evaluation of the fluorescent antibody-cell culture test for hog cholera diagnosis. **22114**
- FLUORESCENT LAMPS**
Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. **21769**
- Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). **21811**
- FLUORIDES**
The effects of air pollution on plants and soil. **22182**
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. **22219**
- FOLIAR APPLICATION**
Foliar absorption of boron by Bartlett pears. (Abstract). **21775**
- Foliar penetration of naphthaleneacetic acid. (Abstract). **21779**
- Calcium localization within live oat leaves using a semiconductor detector assembly. **22041**
- FOMES ANNOSUS**
The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. **21941**
- FOMES FOMENTARIUS**
Biological characteristics of *Fomes fomentarius* found on spruce and birch. **21935**
- FOMES GEOTROPUS**
An arylsulfatase in the wood-rotting basidiomycete, *Fomes geotropus*. **21895**
- FOOD**
Termites- roasted or as a soup. **21592**
- Breeding insects with artificial food. **21661**
- Laboratory and field trials with a new raticide selective toxic for rats. **22199**
- FOOD ADDITIVES**
Cricket nutrition: Supplementation of grass by known nutrients. **21700**
- Food additives permitted in food for human consumption arsenic. **22194**
- FOOD CONSUMPTION**
Food additives permitted in food for human consumption arsenic. **22194**
- FOOD CONTAMINATION**
Thoughts on the Salmonella problem. **22180**
- On the legal classification of inspected meat from slaughtered animals in which *Salmonella* was detected. **22181**
- Nerve gas: Dugway accident linked to Utah sheep kill. **22195**
- FOOD HABITS**
Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). **21669**
- The rate of passage of food and the effect of temperature in two noctuid caterpillars. **21702**
- Observations on penetration of linden branches by stylets of the aphid *Longistigma caryae*. **21968**
- FOOD PLANTS**
Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., Agromyzidae). **21746**
- FOOD POISONING**
Ciguatera poisoning in cats in Brisbane. **22070**
- FOOD SUPPLY**
The need for international testing centers for crop pests and pathogens. **21806**
- Organizing agricultural research to assist developing countries. **22242**
- FOOT ROT (ANIMALS)**
Enzootic foot rot control in sheep. **22047**
- Cradles make footrot treatment easier. **22059**
- FOOT-AND-MOUTH DISEASE**
New Zealand veterinarians study animal diseases in Thailand. **22056**
- Britain's experience with foot and mouth disease. **22074**
- The occurrence of foot-and-mouth disease in the state of Sao Paulo in 1968. **22120**
- Comparison of a bovine enterovirus and foot-and-mouth disease virus. **22132**
- FOOT-AND-MOUTH DISEASE VIRUS**
The persistence of foot-and-mouth disease virus in sheep. **22061**
- Regrowth of primary cell cultures after infection with foot-and-mouth disease virus. **22064**
- Application of stresses to foot-and-mouth disease virus. **22080**
- Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. **22126**
- FORAGE PLANTS**
Plant protection problems in the cultivation of forage plants in Bavaria. **21787**
- Clonal selection of grapevines in some areas of Italy. **21819**
- Research and identification of low titre and avirulent viruses on grapevines. **21820**
- FORESTS**
Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont. Contribution no. 19 Insect collections in tubes of water. **21681**
- Forest plant protection problems in Bavaria. **21799**
- FORMALDEHYDE**
Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. **21766**
- FORMICIDAE**
Ants. **21720**
- Laboratory studies on interspecies trail following and trail preference of army ants (*Dorylinae*). **21751**
- Biological investigations on the cestode, *Railictina* (R.) *loeweni* Bartel and Hansen, 1964. **22159**
- FORMULATIONS**
Poisoning of bees by insecticides. **22183**
- FOULBROOD**
Four important bee diseases. **21674**
- FROST**
New knowledge concerning wire stringing in fruit growing. **21767**
- FRUIT**
New knowledge concerning wire stringing in fruit growing. **21767**
- The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. **21791**
- Citrus fruit virus diseases in the light of the results of the 4th conference of the I.O.C.V. **21835**
- Orchard sanitation and brown rot control. **21870**
- Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. **21908**
- Carbon dioxide effects on fruits. III. The fixation of C14O2 in lemon in an atmosphere enriched with carbon dioxide. **22232**
- FUMIGANTS**
A method for collecting feather lice (*Mallophaga*). **21583**
- Lice of poultry. **22153**
- FUNGI**
Adaptive significance of mycophagy in stored-product Arthropoda. **21764**

SUBJECT INDEX

FUNGICIDES

- Some notes on the study of bark fungi. 21778
- Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798
- Auxin (plant hormones) production in plants. 21801
- Transmission and morphological studies of diseased *H. victoricae*. 22002
- Role of trace elements in the growth and morphology of five ascospore *Aspergillus* species. 22201
- Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206
- Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207
- Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209
- The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- Production of pectic and cellulytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojae*. 22214
- Light and temperature effects on growth and sporophore formation of *Lenzites trabea*. 22218
- Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224
- An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- FUNGICIDES**
- Important plant protection problems in Bavarian agriculture. 21776
- The chemical make-up and selective effect of triazine herbicides. 21780
- Three-year effects of systemic fungicides applied for the control of *Cytospora* in Italian prune trees. 21862
- A further look at neck rot in onions. 21882
- Field test of laboratory results in selecting seed dressing fungicides against seed-borne diseases of jute (*Corchorus capsularis* L.). 21887
- Fertilizer-fungicide combinations for the control of *Pythium damping-off* of tobacco. 21907
- Control of rice blast through forecasts and fungicides. 21911
- Fungicides can check black band of jute. 21922
- Petiole disease of coconut in Papua. 21929
- Vitavax- a new systemic fungicide. 21936

- Deterioration of treated and untreated cottonseed during humid storage. 21952
- Insecticides, fungicides and antibiotics. 21994
- Chemical disinfection of the soil through methylbromide. 22202
- Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235

FUNGUS DISEASES (PLANTS)

- The arthropod fauna associated with the birch bracket fungus *Polyporus betulinus*, in Eastern Canada. 21722
- Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydo*spore germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814
- Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822
- Factors affecting virulence and pigment production of *Xanthomonas phaseoli* var. *fuscans*. 21823
- Diamond spot of bananas caused by *Fusarium roseum* 'gibbosum'. 21825
- Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827
- Studies of the host-parasite relationship in the pineapple disease of sugarcane. 21830
- Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
- Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838
- Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840
- The occurrence of an ash-colored mold on peanuts in the state of Sao Paulo. 21847
- Cylindrocladium* root rot of black walnut. (Abstract). 21848
- A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849
- Gonatobotrys zcae* sp. n. a new pathogen on corn. (Abstract). 21851
- Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852
- Verticillium Wilt of tomatoes. Tests with resistant lines. 21857
- Relative quantities of antifungal metabolites produced in resistant and susceptible soybean plants inoculated with *Phytophthora megasperma* var. *sojae* and closely related nonpathogenic fungi. 21858
- Canker of peaches by *Fusicoccum amygdali*. Biology of the parasite and methods of control. 21859
- Infection and development of *Helminthosporium sorokinianum* in *Agrostis palustris*. 21861
- A distinction between *Pucciniastrum goeppertianum* and *P. epilobii* with clarification of status of *Peridermium holwayi* and *Per. ornamentale*. 21863
- Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864
- The mode of seedling infection of grain sorghum with *Sclerospora sorghi*. (Abstract). 21869
- Virulence of *Rhizoctonia solani* as influenced by age of inoculum in soil. 21872
- Non-random segregation of gene I for *Fusarium* resistance in the tomato. 21873
- Breeding glasshouse cucumbers in the Netherlands. 21879
- Influence of seed size on the incidence of Loose smut in *Funza* barley. 21880
- Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881
- Major and minor genes in wheat for resistance to *Puccinia striiformis* and their responses to temperature changes. 21883
- Ozone damage and semimature-tissue needle blight of eastern white pine. 21884
- Field test of laboratory results in selecting seed dressing fungicides against seed-borne diseases of jute (*Corchorus capsularis* L.). 21887
- Thermal stability of stem rust resistance in oat seedlings. 21889
- Chlamydo*spore formation in conidia of *Helminthosporium sativum*. 21893
- Research on *Fusarium* diseases. II. Ecology and pathology of *Fusarium oxysporum*. 21894
- Foot-rot of wheat. 21897
- Powdery mildew of the grapevine. 21899
- Rhizoctonia* stem rot. 21901
- Interceptions in plant quarantine for the year ending 30th June, 1966. 21902
- Sclerotium* stem rot. 21904
- Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- Six powdery mildews from Jammu and Kashmir state. 21912
- Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium* root rot of beans. 21913
- The autoecious species of *Puccinia* on *Heliantheae* in North America. 21914
- Systematic breeding programme to combine resistance to *Phytophthora* and the quality of the potato variety Bintje. 21915
- Erratum: Reactions of lodgepole pine to attack by *Dendroctonus ponderosae* Hopkins and blue stain fungi. 21919
- Penetrance of gene I for *Fusarium* resistance in the tomato. 21920

SUBJECT INDEX

GIBBERELLINS

- Fungicides can check black band of jute. 21922
- Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- Petiole disease of coconut in Papua. 21929
- Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932
- Biological characteristics of *Fomes fomentarius* found on spruce and birch. 21935
- Vitavax-a new systemic fungicide. 21936
- A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939
- The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. 21941
- Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
- New records of plant diseases in New South Wales. 21946
- Isolation, incidence, and virulence of *Asochyta* spp. of peas from the soil. 21947
- Comparative susceptibility of large and small spruce roots to *Polyporus tomentosus*. 21950
- Deterioration of treated and untreated cottonseed during humid storage. 21952
- Fine structure of *Plasmiodiophora brassicae* in sporogenesis. 21954
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- Selective retention of uredospores by leaves. 21957
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- Development and sporulation of *Polyporus hispidus*. (Abstract). 22220
- Periodicity in ascospore release in *Gymnosporangium juniperi-virginianae*. 22222
- FUSARIUM**
- Non-random segregation of gene I for *Fusarium* resistance in the tomato. 21873
- Research on *Fusarium* diseases. II. Ecology and pathology of *Fusarium oxysporum*. 21894
- Penetration of gene I for *Fusarium* resistance in the tomato. 21920
- FUSARIUM OXYSPORUM**
- Research on *Fusarium* diseases. II. Ecology and pathology of *Fusarium oxysporum*. 21894
- Chemical disinfection of the soil through methylbromide. 22202
- FUSARIUM OXYSPORUM LYCOPERSICI**
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- FUSARIUM OXYSPORUM VASINFECTUM**
- Effect of prometryne on growth of *Fusarium oxysporum* f. sp. *vasinfectum* in soil culture. (Abstract). 22205
- FUSARIUM ROSEUM**
- Diamond spot of bananas caused by *Fusarium roseum* 'gibbosum.'. 21825
- Relative significance of parasitism versus saprophytism in colonization of wheat straw by *Fusarium roseum* Culmorum in the field. 21839
- FUSARIUM SOLANI PHASEOLI**
- Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on Chlamydo-spore germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814
- Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium* root rot of beans. 21913
- FUSICOCUM AMYGDALI**
- Canker of peaches by *Fusicocum amygdali*. Biology of the parasite and methods of control. 21859
- GALL-MAKING INSECTS**
- Biology of the gall-former *Procecidochares stonci* on a composite. 21742
- GAME ANIMALS**
- Contribution to the knowledge of the possible influence of pesticides on game. 22186
- GAMMA RAYS**
- The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
- A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busek) (Lepidoptera: Tortricidae). 21682
- GASES**
- Control of the hamster pest. 22155
- Nerve gas: Dugway accident linked to Utah sheep kill. 22195
- GASTROINTESTINAL DISEASES**
- Necrotic enteritis of chickens. 22049
- GASTROINTESTINAL SYSTEM**
- The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
- Acid phosphatase activity in the digestive system of the desert locust *Schistocerca gregaria* (Forsk.). 21713
- On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741
- A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- GELS**
- The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- GENETICS**
- An experimental and genetic analysis of dispersal behavior in *Tribolium*. 21761
- Non-random segregation of gene I for *Fusarium* resistance in the tomato. 21873
- Major and minor genes in wheat for resistance to *Puccinia striiformis* and their responses to temperature changes. 21883
- Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- Penetration of gene I for *Fusarium* resistance in the tomato. 21920
- Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993
- GEOGRAPHY**
- Milky disease bacteria. 21590
- Description of the adult *Tetranychus telarius* L. (Acarina, Tetranychidae). 21740
- The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750
- Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities. 22001
- GEOMETRIDAE**
- Geometridae, new for Turkey, discovered in 1939-42 by J. Romieux. 21646
- Seasonal and zonal distribution of Ichneumonidae (Hym.) on a subarctic fell during a calamity of the geometrid moth *Oporinia autumnata* (Bkh.) on birches. 21986
- GERANIOL**
- The use of attractants in pest control. 21981
- GERM-FREE LIFE**
- Virus diseases of deciduous fruit trees: Apple mosaic. 21898
- GIBBERELLA FUJIKUROI**
- Comparison of staminate flower production on gynococious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774
- GIBBERELLIC ACID**
- Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- The interaction of the seed coat and gibberellic acid in the germination of *Datura ferox* L. 22225
- GIBBERELLIN A4**
- Gibberellin A4/A7, for induction of staminate flowers on the gynococious cucumber. (Abstract). 21794
- Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- GIBBERELLIN A7**
- Gibberellin A4/A7, for induction of staminate flowers on the gynococious cucumber. (Abstract). 21794
- Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- GIBBERELLINS**
- Comparison of staminate flower production on gynococious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774
- Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
- Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790

SUBJECT INDEX

GLADIOLUS

- Influence of gibberellin upon time of bud development in globe artichoke (*Cynara scolymus*). (Abstract). 21804
- Interaction of temperature and gibberellin on potato seed germination. 22217

GLADIOLUS

- Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896
- Efficacy of Vorlex on mites and nematodes on *gladiolus* corm debris in sandy soils of Florida. (Abstract). 22004

GLANDS (INSECTS)

- Cuticular esterase in the sternal gland of *Calotermes flavicollis* F. (Isoptera, Termitidae). 21724
- Sex pheromone specificity tests in the Tortricidae--an introductory report. 21729
- Ring gland transplantations and body weight in *Drosophila*. 21739

GLOBULINS

- On the preparation of immune globulins against distemper and infectious hepatitis of dogs. 22098

GLUCOSE

- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221

- Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens. 22233

GLUCOSE COMPOUNDS

- Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695

GOATS

- Contagious pleuro-pneumonia of goats. 22095
- Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174

GOLF COURSES

- Infection and development of *Helminthosporium sorokinianum* in *Agrostis palustris*. 21861

GOMPHRENA GLOBOSA

- Clonal selection of grapevines in some areas of Italy. 21819

GONATOBOTRYS ZEAE

- Gonatobotrys zeae* sp. n. a new pathogen on corn. (Abstract). 21851

GRAIN

- Important plant protection problems in Bavarian agriculture. 21776
- The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. 21791
- Rate of movement of harley yellow dwarf virus out of inoculated cereal leaves. 21854
- The blue oat mite *Penthaleus major* (Duges) (Acarina: Eupodidae). 21975
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007

- Flurenol--a herbicide with new properties. 22010
- Experiments with Tordon herbicide in small grains. 22013
- Whole godown fumigation is economical and safe. 22177

GRAPES

- Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728
- Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- Clonal selection of grapevines in some areas of Italy. 21819
- Research and identification of low titre and avirulent viruses or grapevines. 21820
- Transmission of tobacco mosaic virus in grape seeds. 21855
- Research on the natural diffusion of soil-borne grape virus diseases in the Italian environment. 21917
- Radial mosaic virus of grapevines. 21918
- Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- Cicadas as pests in New South Wales. 21974

GRAPHOLITHA MOLESTA

- A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
- Effects of two carbamates on several pests of peach. 21829

GRASS TETANY

- Grass tetany in cattle--using molasses--magnesium oxide mixtures to prevent it. 22090

GRASSES

- Cricket nutrition: Supplementation of grass by known nutrients. 21700
- The blue oat mite *Penthaleus major* (Duges) (Acarina: Eupodidae). 21975
- The response of rice and barnyard grass to 3,4-dichloropropionanilide. 22027

GRASSHOPPERS

- How flies fly. 21709

GRAZING

- Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196

GREENHOUSE CULTURE

- The use of actidione on the control of rice blast. 21813
- Studies of the host-parasite relationship in the pineapple disease of sugarcane. 21830
- Growth regulators to control lettuce bolting. (Abstract). 21850
- Breeding glasshouse cucumbers in the Netherlands. 21879
- The influence of induced soil moisture stress upon *Fomes annosus* root rot of lolcholly pine. 21941

GREENHOUSES

- Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
- Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
- Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars. (Abstract). 21796
- Tobacco mosaic virus strains in greenhouse tomatoes. 21868
- Lettuce tipburn and nitrogen metabolism. (Abstract). 21921
- Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (Acarina: Tetranychidae), on greenhouse cucumbers. 21970

GRYLLIDAE

- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. L. Orthoptera Gryllodea. 21600

GUAR

- Disease development in guar (*Cyamopsis psoraloides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

GUIGNARDIA

- The effect of several dithiocarbamate fungicides on black spot control and fruit quality in Valencia oranges. 21874

GUINEA PIGS

- Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
- Poisoning of cattle by *Polygala klotzchii*, Chodat, in the region of Pontal (State of Sao Paulo). 22062
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136

GYMNOSPORANGIUM JUNIPERI-VIRGINIANAE

- Periodicity in ascospore release in *Gymnosporangium juniperi-virginianae*. 22222

HABITATS

- Distribution and adaptive diversity of trapdoor spiders. 21701
- Field observations on the roosting behavior of the African migratory locust (*Locusta migratoria migratorioides* R. and F.) in the solitary phase. 21715
- On the habitats of some *Lonchaea* species in Fennoscandia (Dipt., Lonchacidae). 21716
- The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750

HAEMONCHOSIS

- Influence of Haemonchosis on nutritionally induced ketosis in sheep. 22160

HAEMONCHUS CONTORTUS

- Influence of Haemonchosis on nutritionally induced ketosis in sheep. 22160

HAMSTERS

- The complement-fixation test for avian leukosis. 22085
- Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126

SUBJECT INDEX

HISTOLOGY

- Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
- Control of the hamster pest. 22155
- HARVESTING**
Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770
- Foliar absorption of boron by Bartlett pears. (Abstract). 21775
- Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
- The importance of plant protection for the world harvest. 21785
- Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789
- Increased reversion of an apple sport following X irradiation and pruning. (Abstract). 21795
- Concentrate spray-thinning of apples. (Abstract). 21808
- HEAD**
Contribution to the development of the anterior head and the mouth region of *Periplaneta americana*. 21730
- HEART FAILURE**
Cardiopulmonary values in normal and heart-worm-infected dogs. 22144
- HEAT**
The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
- HELIANTHEAE**
The autoecious species of *Puccinia* on *Heliantheae* in North America. 21914
- HELIOTHIS**
Heliopsis species Lepidoptera: Noctuidae in Papua and New Guinea. 21962
- HELIOTHIS ZEA**
The role of chemicals in the general insect control picture. 21617
- Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770
- HELMINTHIASIS**
Immunological unresponsiveness to helminth parasites: I. The pattern of *Nippostrongylus brasiliensis* infection in young rats. 22166
- Epidemiology of helminth infestation of beef cattle in central Queensland. 22176
- HELMINTHOSPORIUM SATIVUM**
Chlamydospore formation in conidia of *Helminthosporium sativum*. 21893
- HELMINTHOSPORIUM SOROKINIANUM**
Infection and development of *Helminthosporium sorokinianum* in *Agrostis palustris*. 21861
- HELMINTHOSPORIUM VICTORIAE**
Transmission and morphological studies of diseased *H. victoriae*. 22002
- HEMAGGLUTINATION**
Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
- Immunodiffusion reactions between human sera and *Mycoplasma pneumoniae*. 22072
- Experiences concerning the preparation and application of mycoplasma antigen. 22119
- HEMILEIA VASTATRIX**
Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- HEMOGLOBIN**
Oxygen consumption in adult *Echinostoma revolutum*. 22172
- HEMOLYMPH**
Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665
- HEMOLYSINS**
Effects of *Listeria monocytogenes* hemolysins on the isolated ileum of rabbit. 22135
- HEPTACHLOR**
Banana beetle borer control investigations on the north coast of New South Wales. 21964
- Cutting down cane losses from termites and shoot borer. 21978
- HERBICIDE RESIDUES**
The fate of paraquat in soils. 22187
- Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190
- Factors influencing the persistence of the herbicide 2,6-dichlorobenzonitrile in various soil types. 22193
- HERBICIDES**
Important plant protection problems in Bavarian agriculture. 21776
- The chemical make-up and selective effect of triazine herbicides. 21780
- Chemical control of weeds in drains. 22009
- Flurenol-a herbicide with new properties. 22010
- Experimental results concerning the chemical control of weeds in young lucerne fields. 22011
- Experiments with Tordon herbicide in small grains. 22013
- Efficacy of a stale seedbed approach for providing weed control in pickling cucumbers. (Abstract). 22015
- The three R's of herbicide use. 22017
- Weedicides in sedge control trials. 22018
- Controlling hairgrass (*Deschampsia caespitosa*). 22019
- Chemical weed control in pickling cucumbers. (Abstract). 22021
- Up to date weed control in horticulture. 22022
- Factors affecting the performance of pre-emergence and post-emergence herbicides in pickling cucumbers. (Abstract). 22023
- Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024
- The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
- New knowledge about the use of herbicides in permanent grassland. 22030
- Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226
- Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241
- HEREDITY**
Heritable repression due to paramutation in maize. 22036
- HERPESVIRUSES**
Marek's disease. 22055
- HETERODERA AVENAE**
Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
- HETEROPTERA**
A revision of the genus *Blissus* (Heteroptera: Lygaeidae) in eastern North America. 21620
- Medocostidae--a new family of Cimicomorphan Heteroptera based on a new genus and two new species from tropical Africa. I. Descriptive Part. 21635
- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. descarpentries. LIV. Hemiptera Plataspidae. 21641
- Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
- HIBERNATION**
Control of the hamster pest. 22155
- HISTOCHEMISTRY**
The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development. 21698
- Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- HISTOLOGY**
Histological studies of symptoms in semimature-tissue needle blight of eastern white pine. 21885
- Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
- Some observations on egg diapause in the Trinidad sugar cane frog hopper, *Aenolamia varia saccharina* (Homoptera, Cercopidae). 21969
- Marek's disease. 22055
- The isolation and recognition of viruses. 22093
- Uterine-ammionic pathway of infecting the rabbit fetus with *Listeria monocytogenes*. 22106

SUBJECT INDEX

HOG CHOLERA

- Studies on pathology of respiratory diseases of poultry with special reference to viral and P. P. L. O. infections. 22122
- Infectious laryngotracheitis of poultry. 22125
- Swine fever eradication campaign 1963-64. 22142
- Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
- Program-abstracts, 65th annual meeting, American Society for Horticultural Science. 22240

HOG CHOLERA

- Evaluation of the fluorescent antibody-cell culture test for hog cholera diagnosis. 22114
- Swine fever eradication campaign 1963-64. 22142

HOPLOPLEURIDAE

- A new species of *Fahrenholzia* (Anoplura: Hoplopleuridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626

HORMONES

- The method of action of the dark and light phases on the production of winged gymnosporous of *Dysaphis plantaginea* Pass. (Homoptera, Aphididae). 21662
- Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695
- Sex pheromone specificity tests in the Tortricidae--an introductory report. 21729
- Ring gland transplantations and body weight in *Drosophila*. 21739

HORSES

- Equine influenza in Mexico. Isolation and study of the strain E/Equi 2/Mexico/1/66. 22073

HOST INDEXING (PLANTS)

- Clonal selection of grapevines in some areas of Italy. 21819
- Research and identification of low titre and avirulent viruses of grapevines. 21820
- Host range of peanut stunt virus in *Trifolium* spp. (Abstract). 21837
- Virus disease survey on citrus in Aegean region. 21909
- Radial mosaic virus of grapevines. 21918

HOST RELATIONSHIPS

- Quantitative relationships between fleas and rodents in a Hawaiian cane field. 21683
- Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063
- Insect tormentors of livestock: IV. The mites. 22148

HOT WATER TREATMENT (PLANTS)

- Loose smut of wheat. 21903

HUMAN DISEASES

- Balantidiasis may be more common than we think. 22043
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136

HUMANS

- Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784

HUMIDITY

- Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
- Analysis of epidemics of the tobacco (*Peronospora tabacina* Adam) mildew in the Gembloux area. 21867
- Deterioration of treated and untreated cottonseed during humid storage. 21952
- A relative study of the composition and tenacity of the Karathane deposits on bean leaves. 22188

HYALOPHORA CECROPIA

- Ultrastructure of moth alary muscles and their attachment to the heart wall. 21733

HYDROCARBONS

- Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235

HYDROCEPHALUS

- Pathogenesis and pathologic features of avian encephalomyelitis in chicks. 22115

HYDROGEN

- The effect of age, SKF 525- a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* ckl. 21708

HYDROGEN-ION CONCENTRATION

- On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741
- Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809
- Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035

HYDROLYSIS

- Partial hydrolysis of dieldrin by *Aerobacter aerogenes*. 22238

HYGIENE

- Survey shows weakness in mastitis control. 22054
- Steps can be taken to curb mastitis. 22057
- Eradicating and controlling brucellosis in sheep. 22068
- Scaly leg in poultry--a parasitic disease. 22150

HYLEMYA BRASSICAE

- Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993

HYLEMYA CILICRURA

- Are *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704

HYLEMYA LITURATA

- Arc *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704

HYMENOPTERA

- What is a bee. 21643
- Hymenoptera associated with elm bark beetles in Wytham Wood, Berks. 21654
- Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont. Contribution no. 19 Insect collections in tubes of water. 21681

- On my acquaintance with middle and northern European Species of the genus *Psenulus* Kohl (Hym., Sphecoidea). 21705

- On the two *Megastigmus* species (Hym., Torymidae) of the juniper seed (*Juniperus communis* L.). 21985

HYPHAE

- An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228

HYPHANTRIA CUNEA

- The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750

HYPOXANTHINE

- Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838

HYPOXYLON PRUINATUM

- Ejection and dissemination of ascospores of *Hypoxylon pruinatum*. 22210

ICHNEUMONIDAE

- Hadroctylus branderi* sp. n. (Hym., Ichneumonidae) from Finland. 21611
- On the systematic position of ichneumonids of the genera *Odinophora* Forster and *Exetastes* Gravenhorst and descriptions of new species (Hymenoptera, Ichneumonidae). 21638

- Ichneumonological (Hym.) reports from Finland I. 21689

- Seasonal and zonal distribution of Ichneumonidae (Hym.) on a subarctic fell during a calamity of the geometrid moth *Oporinia autumnata* (Bkh.) on birches. 21986

IMMUNITY

- Quantitation of susceptibility of swine to infection with *Pasteurella tularensis*. 22053
- Marek's disease. 22055
- Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- Breeding disease-resistant domestic animals. 22094

- Influence of egg albumin-induced leukopenia on experimental *Aerobacter aerogenes* mastitis and on natural infection of mammary gland with coagulase-negative *Staphylococcus* in a cow. 22096

- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121

- Passive hemolytic antibody response of primed, partially resistant mice to heat-killed *Salmonella typhimurium* vaccine. 22128

- Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131

- Some considerations on the name bovine malaria 22133

IMMUNIZATION

- Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784

- Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854

- New Zealand veterinarians study animal diseases in Thailand. 22056

- African swine fever. Application of immunofluorescence to the study of tissue cultures. 22065
- Eradicating and controlling brucellosis in sheep. 22068
- Vaccination against Johne's disease and the creation of carriers. 22077
- The effect of *Vibrio fetus* vaccination on the breeding efficiency of cows bred to *Vibrio fetus*-infected bulls. 22084
- Contagious pleuro-pneumonia of goats. 22095
- On the preparation of immune globulins against distemper and infectious hepatitis of dogs. 22098
- Newcastle disease in England and Wales control by vaccination--the first year. 22111
- Isolation of the group-specific polysaccharide of *Mycobacterium tuberculosis*. 22130
- Probelm of avian leukosis in Lahore. 22134
- Vaccination against leptospirosis: Immunogenicity of viable, avirulent *Leptospira pomona* in hamsters, swine, and cattle. 22137
- Vaccination of congenitally-immune chicks against Newcastle disease virus. 22139
- Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161
- Immunological unresponsiveness to helminth parasites: I. The pattern of *Nippostrongylus brasiliensis* infection in young rats. 22166
- IMMUNODIAGNOSIS**
- Antibody to rhinovirus in human sera. I. Standardization of neutralization test. 22076
- Antibody to rhinovirus in human sera. II. Heterotypic responses. 22082
- IMMUNOLOGY**
- Structure and antigenic properties of a staphylococcal L form. 22038
- Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
- INCLUSION BODIES**
- Fine structure of inclusions formed by the acuba strain of tobacco mosaic virus. 21948
- INDOLEACETIC ACID**
- The leaching of auxin from air layers. 21771
- Auxin (plant hormones) production in plants. 21801
- Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- INFECTIOUS BOVINE RHINOTRACHEITIS VIRUS**
- Comparison of selected characteristics of four strains of infectious bovine rhinotracheitis virus. 22058
- Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103
- INFECTIOUS BRONCHITIS**
- The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
- Neutralising antibodies for avian infectious bronchitis virus in Queensland poultry flocks. 22138
- INFECTIOUS CANINE HEPATITIS**
- On the preparation of immune globulins against distemper and infectious hepatitis of dogs. 22098
- INFECTIOUS DISEASES**
- On the specific mechanism of the transmission of leptospiral infection. 22105
- The investigation of scrub typhus in the USSR. 22108
- INFECTIOUS LARYNGOTRACHEITIS**
- Infectious laryngotracheitis of poultry. 22125
- INFLUENZA VIRUSES**
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- INJECTIONS**
- Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591
- Ring gland transplantations and body weight in *Drosophila*. 21739
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Pyricularia oryzae*. 21865
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
- Carbon tetrachloride injections for liver fluke control. 22170
- INSECT ADAPTATION**
- Adaptive significance of mycophagy in stored-product Arthropoda. 21764
- INSECT ANATOMY**
- How flies fly. 21709
- Ultrastructure of moth alary muscles and their attachment to the heart wall. 21733
- INSECT BEHAVIOR**
- Fleas found on rabbits and other mammals from a pasture. 21586
- Termites- roasted or as a soup. 21592
- Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea). 21652
- Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). 21669
- The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
- Warning sounds of moths. 21673
- Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- Distribution and adaptive diversity of trapdoor spiders. 21701
- Territorial behavior of bark-beetle males. 21703
- How flies fly. 21709
- Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper. 21711
- Field observations on the roosting behavior of the African migratory locust (*Locusta migratoria migratorioides* R. and F.) in the solitary phase. 21715
- The arthropod fauna associated with the birch bracket fungus *Polyporus betulinus*, in Eastern Canada. 21722
- Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731
- The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750
- Laboratory studies on interspecies trail following and trail preference of army ants (Dorylinae). 21751
- Australian dragonflies. 21752
- An experimental and genetic analysis of dispersal behavior in *Tribolium*. 21761
- The sitona weevil--a pest of lucerne (*Sitona humeralis*). 21973
- INSECT BIOCHEMISTRY**
- Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterms flavicollis* Fabr. (Isoptera). 21747
- INSECT BIOLOGY**
- Contribution to studies of *Zeuzera 'Zeuzera pyrina' L.* (Lepidoptera Cossidae) in the lower valley of the Rhine: The life cycle and biological characteristics of different stages. 21651
- Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655
- Studies on the olfactory stimuli guiding the bark beetle *Blastophagus piniperda* L. (Coleoptera, Scolytidae) to its host tree. 21691
- Studies on biology of Banmalika leaf minor (*Agropistis limatus*, Moth, Coleoptera, Halictidae). A serious pest of Banmalike (*Jasminum aequistifolium*, Vohl.) in Rajasthan. 21706
- Biology of *Apis dorsata* F. 21723
- Biology of the gall-former *Procecidochares stonci* on a composite. 21742
- Several observations on the nature of the spring development of *Chermes tardus* Dreyf. 21963
- The westward movement of pink bollworm. 21995
- Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morellia* R. D. (Diptera, Muscidae) in Soviet Central Asia. 22157
- INSECT CAGES**
- A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
- Are *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704
- INSECT COLLECTING EQUIPMENT**
- A flight trap for collecting living insects. 21587
- Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont.

SUBJECT INDEX

INSECT CONTROL

- Contribution no. 19 Insect collections in tubes of water. 21681
- INSECT CONTROL**
- Resistance pattern in four strains of insecticide-resistant green rice leafhopper, *Nephotettix cincticeps* Uhler, collected in fields. 21588
- Cockroach insecticides. How repellent are they. 21589
- The role of chemicals in the general insect control picture. 21617
- Finnish entomological literature published in 1966, including economic entomology and control of insect pests. 21636
- Virus diseases of the rose. 21958
- Effects of phenols on the plant. 21961
- Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (Acarina: Tetranychidae), on greenhouse cucumbers. 21970
- Cutting down cane losses from termites and shoot borer. 21978
- DD-136 nematode that can kill many insect pests. 21991
- The westward movement of pink bollworm. 21995
- War on locusts goes on. 22000
- Whole godown fumigation is economical and safe. 22177
- INSECT DISEASES**
- Epizootiological research on milky disease caused by *Bacillus popilliae* (Melolontha). 21686
- INSECT DISSEMINATION**
- Distribution and adaptive diversity of trapdoor spiders. 21701
- How flies fly. 21709
- INSECT ECOLOGY**
- The trechoppers of Wisconsin in relation to the tension zone (Homoptera, Membracidae). 21602
- A collection of spiders from Son Norway. 21642
- What is a bee. 21643
- Weather conditions and daily activity of dragonflies (Odonata). 21656
- Influence of soil humidity on the location in depth of the gallec beetle worm during a favorable season. 21659
- The larvae and pupae of the British *Cylindrotominae* and *Limonini* (Diptera, Tipulidae). 21664
- Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). 21669
- The role of soil arthropods in community energetics. 21678
- Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont. Contribution no. 19 Insect collections in tubes of water. 21681
- The bionomics and ecology of *Anthocoris confusus* Reuter in Scotland. 21685

- Synanthedon flaviventris* Stgr. (Lep., Aegeriidae) found in Suomesta. 21690
- The present distribution of *Hylotrupes bajulus* L. (Col., Cerambycidae) in Norway and its abundance in some districts. 21694
- On the habitats of some *Lonchaca* species in fenoscandia (Dipt., Lonchaeidae). 21716
- Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731
- Observations on wood-destroying insects living in the footbridge over Siikaneva bog. 22178
- INSECT EGGS**
- Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara cilioti*. 21666
- A biochemical look at insect diapause. 21684
- Effects of parental age on the life cycle of the southern green stink bug, *Nyszara viridula* L. (Heteroptera: Pentatomidae). 21693
- The use of attractants in pest control. 21981
- INSECT EVOLUTION**
- On *Stenus* (*Parastenus*) *alpicola* Fauvel and other divergently evolved Palearctic *Parastenus*-species (Col., Staphylinidae). 44. Contribution to the knowledge of the Stenids. 21631
- Mating choice in crosses between geographic populations of *Drosophila pseudoobscura*. 21756
- Genetic variability in *Ischnuran* damselflies. 21760
- Evolution and hybridization in the *Utetheisa* ornatrix complex (Lepidoptera: Arctiidae). I. Inter- and intrapopulation variation and its relation to hybridization. 21762
- Adaptive significance of mycophagy in stored-product Arthropoda. 21764
- Genetical control of penetrance and evolution of dominance in *Drosophila*. 21765
- INSECT FLIGHT**
- A flight trap for collecting living insects. 21587
- A stroboscopic device for the study of flight in very small insects. 21632
- Weather conditions and daily activity of dragonflies (Odonata). 21656
- How flies fly. 21709
- ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling. 21732
- INSECT GENETICS**
- Main currents in research concerning sterilization methods of insects. 21735
- Mating choice in crosses between geographic populations of *Drosophila pseudoobscura*. 21756
- Genotype frequency and mating success in the williston: species group of *Drosophila*. 21757
- The frequency of interbreeding between two sibling species of *Dacus* (Diptera) in wild populations. 21758
- The temperature-sensitive period in the development of rolled hemizygotes of *Drosophila melanogaster*. 21759

- Genetic variability in *Ischnuran* damselflies. 21760
- Mimetic versus disruptive coloration in intergrading populations of *Limnitis arthemis* and *astyanax* butterflies. 21763
- Genetical control of penetrance and evolution of dominance in *Drosophila*. 21765
- INSECT HISTOLOGY**
- Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
- Developmental interactions in the dipteran salivary gland. 21699
- The appearance and distribution of epicuticular inframicroscopic formations of three Collembolids. 21719
- The organization of the sarcoplasmic reticulum and T system in the femoral muscle of the housefly, *Musca domestica* L. 21721
- Cuticular esterase in the sternal gland of *Caloterme flavicollis* F. (Isoptera, Termitidae). 21724
- On the existence of cells with vacuoles in the brain of *Musca domestica* L. 21725
- Sex pheromone specificity tests in the Tortricidae--an introductory report. 21729
- Contribution to the development of the anterior head and the mouth region of *Periplaneta americana*. 21730
- Results of the transplantation of the ovaries of imagos of *Locusta migratoria* (L.). 21749
- A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754
- INSECT IDENTIFICATION**
- A faunistic study of Philippine aphids (Aphididae, Homoptera). 21598
- An undescribed *Phytoseius* from Florida and Mexico. (Acarina: Phytoseiidae). 21601
- Revision of *Sphaerocera*, with description of a new genus *Afromyia* (Diptera: Sphaeroceridae). 21615
- Six new species and one new name of some Dipterous families from Japan. 21627
- What is a bee. 21643
- Geometridae, new for Turkey, discovered in 1939-42 by J. Romieux. 21646
- Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea). 21652
- A problem in the diagnosis of head lice. 21696
- On the reinform nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (Tylenchida: Haplolaimidae). 21712
- Buprestis aurulenta* L. (Col., Buprestidae) in Ireland. 21727
- Description of the adult *Tetranychus telarius* L. (Acarina, Tetranychidae). 21740
- New species of the sub-family Bombinae of the Palearctic Region (Hymenoptera, Apoidea). 21744

- Laboratory studies on interspecies trail following and trail preference of army ants (*Dorylinae*). 21751
- Australian dragonflies. 21752
- Selecting tomatoes for resistance to spider mites. 21997
- INSECT METABOLISM**
Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- INSECT MIGRATION**
The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (*Lepidoptera: Arctiidae*). 21750
- Australian dragonflies. 21752
- The westward movement of pink bollworm. 21995
- Research on the chemical control of *Aceria sheldoni*. 21999
- INSECT MORPHOLOGY**
A review of twelve aphid species described as new by Edith M. Patch. 21624
- Morphology of the male pink sugarcane mealybug, *Saccharicoccus sacchari* Ckll. (*Pseudococcidae: Homoptera*)--Part II. Apterous form. 21647
- The larvae and pupae of the British *Cylindrotominae* and *Limoniinae* (*Diptera, Tipulidae*). 21664
- Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
- A biochemical look at insect diapause. 21684
- Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (*Heteroptera: Pentatomidae*). 21693
- Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (*Lepidoptera: Saturniidae*). 21695
- A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- Contribution to the development of the anterior head and the mouth region of *Periplaneta americana*. 21730
- Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, *Chilo suppressalis* walker (*Lepidoptera: Pyralidae*). 21745
- Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterms flavicollis* Fabr. (*Isoptera*). 21747
- Results of the transplantation of the ovaries of imago to *Locusta migratoria* (L.). 21749
- A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (*Homoptera Pseudococcidae*). 21754
- Some observations on egg diapause in the Trinidad sugar cane froghopper, *Aencolamia varia saccharina* (*Homoptera, Cercopidae*). 21969
- INSECT NAMES**
Milky disease bacteria. 21590
- Standard names for common insects. 21603
- A list of Sinhalese aphids (*Hem., Aphididae*). 21688
- On the reinform nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (*Tylenchida: Haplolaimidae*). 21712
- INSECT NUTRITION**
Cricket nutrition: Supplementation of grass by known nutrients. 21700
- INSECT OUTBREAK FORECASTING**
The Australian plague locust *Chortoicetes terminifera*. 21668
- INSECT OUTBREAKS**
Carabidae and *Staphylinidae* occurring on soil surface in lucerne fields. 21987
- INSECT PESTS**
The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585
- Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593
- Breeding insects with artificial food. 21661
- The effects of integrated plant protection methods. 21797
- Forest plant protection problems in Bavaria. 21799
- Effects of two carbamates on several pests of peach. 21829
- Pests of cultivated plants in Finland in 1967. 21888
- Virus disease survey on citrus in Aegean region. 21909
- Effects of phenols on the plant. 21961
- A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- Cacao flush defoliating caterpillars in Papua and New Guinea. 21967
- Carabidae* and *Staphylinidae* occurring on soil surface in lucerne fields. 21987
- The westward movement of pink bollworm. 21995
- Research on the chemical control of *Aceria sheldoni*. 21999
- Control of the hamster pest. 22155
- INSECT PHYSIOLOGY**
Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653
- The method of action of the dark and light phases on the production of winged gymnosporous of *Dysaphis plantaginea* Pass. (*Homoptera, Aphididae*). 21662
- Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665
- Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
- Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (*Orthoptera Eumastacidae*). 21669
- Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
- Sexual reproduction of 'green peach aphid' *Myzus persicae* (Sulz) in Mendoza (Argentina). 21679
- Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
- Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (*Heteroptera: Pentatomidae*). 21693
- Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (*Lepidoptera: Saturniidae*). 21695
- The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development. 21698
- Developmental interactions in the dipteran salivary gland. 21699
- Cricket nutrition: Supplementation of grass by known nutrients. 21700
- The rate of passage of food and the effect of temperature in two noctuid caterpillars. 21702
- A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- Acid phosphatase activity in the digestive system of the desert locust *Schistocerca gregaria* (Forsk.). 21713
- Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714
- Studies on the possibilities of using blowflies (*Dipt.*) as medicolegal indicators in Finland. I. Report of four indoor cases from the city of Helsinki. 21717
- Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- Cross-bridges and periods in insect flight muscle. 21726
- ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling. 21732
- Ultrastructure of moth alary muscles and their attachment to the heart wall. 21733
- Ring gland transplantations and body weight in *Drosophila*. 21739
- On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (*Blattaria: Blattidae*). 21741
- Insect neuromuscular mechanisms. 21748
- Results of the transplantation of the ovaries of imago to *Locusta migratoria* (L.). 21749
- Transdetermination in the layout of the organs of the *Drosophila* fly. 21753
- The temperature-sensitive period in the development of rolled hemizygotes of *Drosophila melanogaster*. 21759
- INSECT PRESERVATION**
On preserving beetle larvae. 21629
- INSECT REARING**
Breeding insects with artificial food. 21661
- Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara elliotti*. 21666

SUBJECT INDEX

INSECT REPELLENTS

- Biology of the black widow spider, *Latrodectus hasselti* Thorell (Araneida: Theridiidae). 21697
- On the habitats of some *Lonchaea* species in fenoscandia (Dipt., Lonchaeidae). 21716
- Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728
- Main currents in research concerning sterilization methods of insects. 21735
- Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993

INSECT REPELLENTS

- The use of attractants in pest control. 21981

INSECT REPRODUCTION

- Investigation of sterilizing doses for *Ephestia kuniella* L. in irradiation in various stages of development. 21755

INSECT RESPIRATION

- Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718

INSECT TAXONOMY

- Some Orthopteroid insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594

- Notes on mallophaga on the Asiatic wild ass and bison. 21595

- A new species of black fly of the genus *Gymnopsis* (Diptera, Simuliidae) from the Altay. 21596

- Psephenus* (Colcoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597

- A faunistic study of Philippine aphids (Aphididae, Homoptera). 21598

- A new genus and species of Aphididae (Homoptera) on *Premna odorata* Blanco. 21599

- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. L. Orthoptera Grylloidea. 21600

- An undescribed Phytoseius from Florida and Mexico. (Acarina: Phytoseiidae). 21601

- Status of *Zodion zebrinum*, *Z. auricaudatum*, and *Z. albonotatum* (Diptera: Conopidae). 21604

- Wesmaelius balticus* Tjeder, 1931 (Neuroptera, Planipennin) new to Norway. 21605

- Notes on *Ephylus* Forst. and description of two new species (Ichneumonidae, Braconidae, Doryctinae). 21606

- A numerical taxonomic study of the genus *Psorophora* (Diptera: Culicidae). 21607

- The male of *Neosciasia petsamoensis* Kanervo (Dipt., Syrphidae) with remarks on the females and the distribution of the species. 21608

- A redescription of *Neosciasia aenea* Meig. (Dipt., Syrphidae). 21609

- Coleoptera in southern Nordland. 21610

- Hadrodactylus branderi* sp. n. (Hym., Ichneumonidae) from Finland. 21611

- Catalogue on the Indian Dermaptera. 21612

- Catalogue on the Indian Dermaptera. 21613

- Revision of *Sphaeroecera*, with description of a new genus *Afromyia* (Diptera: Sphaerooceridae). 21615

- Two new species of noctuid moths of the genus *Palluperina* Hmps. (Lepidoptera, Noctuidae). 21616

- New and little-known species of aleyrodids (Homoptera, Aleyrodoidea) from Crimea. 21618

- A new empidid, *Platypalpus caucasicus*, sp. n. (Diptera, Empiidae), from north Caucasus. 21619

- A revision of the genus *Blissus* (Heteroptera: Lygaeidae) in eastern North America. 21620

- Data on the caddisfly (Trichoptera) fauna of Siberia and the Far East. 21621

- Three new species of African *Gabrius* (Col. Staphylinidae Philonthini). 21622

- A review of twelve aphid species described as new by Edith M. Patch. 21624

- Gall midges of the USSR. 7. New species of non-cicadogenous gall midges of the tribe Oligotrophini (Diptera, Cecidomyiidae). 21625

- A new species of *Fahrenheitia* (Anoplura: Hoplopleuridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626

- Six new species and one new name of some Dipterous families from Japan. 21627

- New Palearctic species of the subfamily Medeterinae (Diptera, Dolichopodidae). 21628

- On *Stenus* (*Parastenus*) *alpicola* Fauvel and other divergently evolved Palearctic *Parastenus*-species (Col., Staphylinidae). 44. Contribution to the knowledge of the *Stenids*. 21631

- Trombiculid mites (Acariformes, Trombiculidae) from the Crimea. 21633

- Tricoptera collected in Sor-Trondelag County. 21634

- Medocostidae--a new family of Cimicomorphan Heteroptera based on a new genus and two new species from tropical Africa. I. Descriptive Part. 21635

- Endophytus anemones* (Hering) in Finland (Hym., Tenthredinidae). 21637

- On the systematic position of ichneumonids of the genera *Odinophora* Forster and *Exetastes* Gravenhorst and descriptions of new species (Hymenoptera, Ichneumonidae). 21638

- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLVIII. Hemiptera Pyrrhocoridae. 21639

- Examination of African Reduviidae. II Harpaetorinae. Genus *Nagusta* Stal. 21640

- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. LIV. Hemiptera Plataspidae. 21641

- A collection of spiders from Son Norway. 21642

- Geometridae, new for Turkey, discovered in 1939-42 by J. Romieux. 21646

- A new genus and three new species of stoneflies (Plecoptera) from Caucasus and Crimea. 21648

- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XI.V. Coleoptera Ochodaeidae. 21676

- A list of Sinhalese aphids (Hem., Aphididae). 21688

- Ichneumonological (Hym.) reports from Finland I. 21689

- On my acquaintance with middle and northern European Species of the genus *Psenulus* Kohl (Hym., Sphecoidea). 21705

- New species of the sub-family Bombinae of the Palearctic Region (Hymenoptera, Apoidea). 21744

- Heliopsis* species Lepidoptera, Noctuidae in Papua and New Guinea. 21962

- New data on the bloodsucking midge (Diptera, Ceratopogonidae) of the coastal zone of the Maritime Territory. 22151

- Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morellia* R. D. (Diptera, Muscidae) in Soviet Central Asia. 22157

INSECT TRAPS

- A flight trap for collecting living insects. 21587

- Termites- roasted or as a soup. 21592

INSECT VECTORS

- Application of scanning microscopy in the study of virus transmission of aphids. 21584

- Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854

- Preventive measures can control bunchy top. 21892

- Tomato spotted wilt (tomato spotted wilt virus). 21900

- Virus disease survey on citrus in Aegean region. 21909

- Virus diseases of the rose. 21958

- Transmission of transitory yellowing virus of rice by two leafhoppers. 21965

- Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006

- The investigation of scrub typhus in the USSR. 22108

- New data on the bloodsucking midge (Diptera, Ceratopogonidae) of the coastal zone of the Maritime Territory. 22151

- The pasture fly (Diptera) fauna associated with camels in south Tuva. 22154

- Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morellia* R. D. (Diptera, Muscidae) in Soviet Central Asia. 22157

- Biological investigations on the cestode, *Railletina* (R.) *loeweni* Bartel and Hansen, 1964. 22159

- New directions in virus control in vegetable and potato cultivation. 22231

INSECTICIDE APPLICATION

- Mist sprayers for applying insecticides of low volume. 22239

INSECTICIDE RESIDUES

- New restrictions on use of DDT. 22158

- Control of insecticide residues in produce. 22179

- Methoxychlor residues in the meat and milk of cattle following limited applications of methoxychlor. 22179

- ychlor for the control of buffalo fly (*Haematobia cxiqua*). 22192
- INSECTICIDE RESISTANT INSECTS**
Resistance pattern in four strains of insecticide-resistant green rice leafhopper, *Nephotettix cincticeps* Uhler, collected in fields. 21588
- INSECTICIDES**
Resistance pattern in four strains of insecticide-resistant green rice leafhopper, *Nephotettix cincticeps* Uhler, collected in fields. 21588
Cockroach insecticides. How repellent are they. 21589
The role of chemicals in the general insect control picture. 21617
A biochemical look at insect diapause. 21684
The effects of integrated plant protection methods. 21797
Insecticides from plants. 21802
Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
Cutting down cane losses from termites and shoot borer. 21978
New methods of pest control. 21989
On the use of entomopathogenic bacteria together with insecticides in the control of insect pests. 21990
Insecticides, fungicides and antibiotics. 21994
Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities. 22001
Insect tormentors of livestock: III. Fleas and ticks. 22149
- INSECTS**
A stroboscopic device for the study of flight in very small insects. 21632
Mimicry in plants and animals. 21644
Research on biological pest control. 21734
Competition between insect species. 21738
- INTEGRATED CONTROL (INSECTS)**
Research on biological pest control. 21734
The effects of integrated plant protection methods. 21797
New methods of pest control. 21989
On the use of entomopathogenic bacteria together with insecticides in the control of insect pests. 21990
- INTERFERON**
Studies on the mechanism of interferon action. 22033
Relation of interferon synthesis to abortive replication of Newcastle disease virus in L cells. 22145
- INTERNATIONAL COOPERATION**
The need for international testing centers for crop pests and pathogens. 21806
- INVERTASE**
Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rofsii* in mixed soil culture. (Abstract). 22224
- INVERTEBRATES**
The reliability of a method of sampling stream invertebrates. 21670
- IODOACETATE**
Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- IRIDESCENT VIRUS**
Stability of Chilo iridescent virus. 21707
- IRON**
Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
- IRRADIATION**
Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterme flavicollis* Fabr. (Isoptera). 21747
Investigation of sterilizing doses for *Ephestia kunniella* L. in irradiation in various stages of development. 21755
Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
Increased reversion of an apple sport following X irradiation and pruning. (Abstract). 21795
The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- ISOPTERA**
Nuclear and spindle damage during embryonic segmentation, processes, yolk absorption, serosa and blastoderm nucleus in total X-ray irradiated eggs of *Kaloterme flavicollis* Fabr. (Isoptera). 21747
- ISOTHIOCYANATES**
Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbene, azobenzene, and several polycondensed aromatic hydrocarbons. 22235
- ISOTOPES**
Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of 14C-labelled organic acids by pea root tips. 22215
- IXODES RICINUS**
Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655
- IXODIDAE**
Insect tormentors of livestock: III. Fleas and ticks. 22149
- JAPANESE B ENCEPHALITIS**
Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
- JAPANESE B ENCEPHALITIS VIRUS**
New data on the bloodsucking midge (Diptera, Ceratopogonidae) of the coastal zone of the Maritime Territory. 22151
- JASMINUM**
Studies on biology of banmalika leaf minor (*Agropistis limatus*, Moth., Coleoptera, Halictidae.) A serious pest of banmalika (*Jasminum aquestifolium*, Vohl.) in Rajasthan. 21982
- JOHNE'S DISEASE**
Vaccination against John's disease and the creation of carriers. 22077
- JOINTS**
Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
- JUGLANS NIGRA**
Cylindrocladium root rot of black walnut. (Abstract). 21848
- JUNIPERUS**
On the two *Megastigmus* species (Hym., Torymidae) of the juniper seed (*Juniperus communis* L.). 21985
- JUTE**
Field test of laboratory results in selecting seed dressing fungicides against seed-borne diseases of jute (*Corchorus capsularis* L.). 21887
Fungicides can check black band of jute. 21922
- KALE**
Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821
- KERATOCONJUNCTIVITIS**
Keratoconjunctivitis produced by *Moraxella bovis* in laboratory animals. 22127
- KETOSIS**
Influence of Haemonchosis on nutritionally induced ketosis in sheep. 22160
- KIDNEY BEANS**
Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
Quantitative measurements of interactions between crown-gall tumors and the pinto bean host. 21845
- KIDNEYS**
On the specific mechanism of the transmission of leptospiral infection. 22105
Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126
- KINETIN**
The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803
- LABORATORIES**
Cockroach insecticides. How repellent are they. 21589
The effects of high temperatures on greenbug, *Schizaphis graminum*, reproduction. 21675
A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
Are *Hylemya ciliicrura* and *Hylemya liturata* two separate species. 21704
Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper. 21711

SUBJECT INDEX

LABORATORY ANIMALS

- Laboratory studies on interspecies trail following and trail preference of army ants (*Dorylinae*). 21751
- The need for international testing centers for crop pests and pathogens. 21806
- Vaccination against Johne's disease and the creation of carriers. 22077
- The isolation and recognition of viruses. 22093
- Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126
- Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241
- Organizing agricultural research to assist developing countries. 22242
- LABORATORY ANIMALS**
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Potentiality by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures. 22044
- The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- Keratoconjunctivitis produced by *Moraxella bovis* in laboratory animals. 22127
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136
- Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141
- Laboratory and field trials with a new raticide selective toxic for rats. 22199
- LARVAE**
- On preserving beetle larvae. 21629
- Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650
- Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655
- Observations on the hibernation of *Psila rosae* F. 21660
- Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663
- The larvae and pupae of the British *Cylindrotominae* and *Limoniinae* (Diptera, Tipulidae). 21664
- Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
- Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677
- Developmental changes in the late larva of *Caliphora stygia*. I. Olymph. 21692
- Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., Agromyzidae). 21746

- Transdetermination in the layout of the organs of the *Drosophila* fly. 21753
- Recovery of porcine liver from damage caused by migrating X-irradiated and nonirradiated larvae of *Ascaris suum*. 22162
- LATRODECTUS**
- Biology of the black widow spider, *Latrodectus hasselti* Thorell (Araneida: Theridiidae). 21697
- LEAD ARSENATE**
- The pear and cherry slug. 21984
- LEAF MINERS**
- Endophytus anemones (Hering) in Finland (Hym., Tenthredinidae). 21637
- Studies on biology of Banmalika leaf minor (*Agropistis limatus*, Moth, Coleoptera, Hali-tidae.). A serious pest of Banmalika (*Jasminum aquestifolium*, Vohl.) in Rajasthan. 21706
- Studies on biology of banmalika leaf minor (*Agropistis limatus*, Moth., Coleoptera, Hali-tidae.) A serious pest of banmalika (*Jasminum aquestifolium*, Vohl.) in Rajasthan. 21982
- LEAF RUST (COFFEE)**
- Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- LEAVES**
- Breeding insects with artificial food. 21661
- Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
- Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). 21811
- Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838
- Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840
- The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
- Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865
- The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus. 21875
- Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881
- Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908
- Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916
- The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927

- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931
- Selective retention of uredospores by leaves. 21957
- Selecting tomatoes for resistance to spider mites. 21997
- Calcium localization within live oat leaves using a semiconductor detector assembly. 22041
- LEGISLATION**
- New restrictions on use of DDT. 22158
- Control of insecticide residues in produce. 22179
- LEGS**
- Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672
- LEMONS**
- Carbon dioxide effects on fruits. III. The fixation of C14O2 in lemon in an atmosphere enriched with carbon dioxide. 22232
- LENZITES TRABEA**
- Light and temperature effects on growth and sporophore formation of *Lenzites trabea*. 22218
- LEPIDOPTERA**
- Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650
- Sex pheromone specificity tests in the *Tortricidae*—an introductory report. 21729
- LEPTINOTARSA DECEMLINEATA**
- On the use of entomopathogenic bacteria together with insecticides in the control of insect pests. 21990
- LEPTOSPIRA CANICOLA**
- Endotoxin properties of *Leptospira canicola*. 22081
- LEPTOSPIRA POMONA**
- Vaccination against leptospirosis: Immunogenicity of viable, avirulent *Leptospira pomona* in hamsters, swine, and cattle. 22137
- LEPTOSPIROSIS**
- Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035
- The classification of leptospiral strains from Kazakhstan. 22042
- On the specific mechanism of the transmission of leptospiral infection. 22105
- LETTUCE**
- Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
- The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803
- Growth regulators to control lettuce bolting. (Abstract). 21850
- Lettuce tipburn and nitrogen metabolism. (Abstract). 21921
- The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- M-N-ethylaminobenzoic acid: absence of phytotoxic activity. 22227

LEUCOPHAEA MADERAE

Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680

LIFE CYCLE

Contribution to studies of *Zeuzera* 'Zeuzera pyrina' L. (Lepidoptera Cossidae) in the lower valley of the Rhine: The life cycle and biological characteristics of different stages. 21651

The Australian plague locust *Chortoicetes terminifera*. 21668

Ecology of *Gomphomastax clauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). 21669

Biology of the black widow spider, *Latrodectus hasselti* Thorell (Arancida: Theridiidae). 21697

Studies on biology of banmalika leaf minor (*Agropistis limatus*, Moth., Coleoptera, Hali-ticidae.) A serious pest of banmalika (*Jasminum aquestifolium*, Vohl.) in Rajasthan. 21982

Study of an *Itonidid* (*Contarinia medicaginis* Kieffer) and of its host. 21998

Immunological unresponsiveness to helminth parasites: I. The pattern of *Nippostrongylus brasiliensis* infection in young rats. 22166

LIGHT

Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653

Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768

Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209

Light and temperature effects on growth and sporophore formation of *Lenzites trabea*. 22218

LIGNIN

Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852

LINDANE

The Australian plague locust *Chortoicetes terminifera*. 21668

New methods of pest control. 21989

How to get rid of ectoparasites of poultry. 22156

LINYPHIA TRIANGULARIS

Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731

LIPASES

Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035

LISTERIA MONOCYTOGENES

Toxicity studies of *Listeria monocytogenes* grown in vivo. 22075

Uterine-amnionic pathway of infecting the rabbit fetus with *Listeria monocytogenes*. 22106

In vivo production of a toxin(s) by *Listeria monocytogenes*. 22113

Effects of *Listeria monocytogenes* hemolysins on the isolated ileum of rabbit. 22135

LITERATURE

Finnish entomological literature published in 1966, including economic entomology and control of insect pests. 21636

LIVER DISEASES

Recovery of porcine liver from damage caused by migrating X-irradiated and nonirradiated larvae of *Ascaris suum*. 22162

LIVESTOCK DISEASES

Texas (splenic) fever in cattle. Permitted dips. 22046

Diseases of pigs and their control. SF971.B4. 22051

New Zealand veterinarians study animal diseases in Thailand. 22056

Steps can be taken to curb mastitis. 22057

Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087

Production of enzootic pneumonia in pigs with *Mycoplasma suis* pneumoniae grown in embryonated hen's eggs. 22089

The transmission of Dermatophilosis (mycotic dermatitis) in sheep. 22102

Epizootologic studies of Q fever in Washington dairy cattle. 22110

The occurrence of foot-and-mouth disease in the state of Sao Paulo in 1968. 22120

Insect tormentors of livestock: IV. The mites. 22148

Epidemiology of helminth infestation of beef cattle in central Queensland. 22176

Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196

LOCOMOTION

Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672

LOCUSTA MIGRATORIA

Results of the transplantation of the ovaries of imago to *Locusta migratoria* (L.). 21749

LOCUSTA MIGRATORIA MIGRATORIOIDES

Field observations on the roosting behavior of the African migratory locust (*Locusta migratoria migratorioides* R. and F.) in the solitary phase. 21715

LOLIUM

A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200

LONGEVITY

The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671

Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853

LOOSE SMUT (BARLEY)

Influence of seed size on the incidence of Loose smut in Funza barley. 21880

LUCILIA CUPRINA

Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665

LYGAEIDAE

A revision of the genus *Blissus* (Heteroptera: Lygaeidae) in eastern North America. 21620

LYSINE DECARBOXYLASE

L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168

LYSOSOMES

Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173

MACROPHAGES

Potentiation by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures. 22044

MACROSIPHUM

A review of twelve aphid species described as new by Edith M. Patch. 21624

MACROSIPHUM EUPHORBIAE

Reaction of tomato varieties and breeding lines to aphids. 21996

MAGNESIUM

The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841

Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931

MAGNESIUM OXIDE

Grass tetany in cattle--using molasses--magnesium oxide mixtures to prevent it. 22090

MALARIA

Some considerations on the name bovine malaria. 22133

MALATHION

The pear and cherry slug. 21984

How to get rid of ectoparasites of poultry. 22156

Production of antibodies against insecticide--protein conjugates. 22191

MALLOPHAGA

Attention to cattle lice can be profitable. 22146

Lice of poultry. 22153

How to get rid of ectoparasites of poultry. 22156

MALPIGHIAN TUBES

A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saencharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754

MAMMALS

Fleas found on rabbits and other mammals from a pasture. 21586

Studies on the mechanism of interferon action. 22033

MAMMARY GLANDS

Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143

MANGANESE

Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. lycopersici. 21956

MASTITIS

Survey shows weakness in mastitis control. 22054

Steps can be taken to curb mastitis. 22057

Influence of egg albumin-induced leukopenia on experimental *Aerobacter aerogenes* mastitis and on natural infection of mammary gland with coagulase-negative *Staphylococcus* in a cow. 22096

SUBJECT INDEX

MATHEMATICAL ANALYSIS

MATHEMATICAL ANALYSIS

mathematical models for infectivity dilution curves of plant viruses. 21877

MATHEMATICS

mathematical models for infectivity dilution curves of plant viruses. 21877

MAZZARD CHERRIES

Tomato bushy stunt virus from *Prunus avium* L. I. Field studies and virus characterization. 21815

Tomato bushy stunt virus from *Prunus avium* L. II. Serological typing and the characterization of antibody types and activities. 21816

MEAT

National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190

Methoxychlor residues in the meat and milk of cattle following limited applications of methoxychlor for the control of buffalo fly (*Haematobia exigua*). 22192

MEAT INSPECTION

Thoughts on the Salmonella problem. 22180

On the legal classification of inspected meat from slaughtered animals in which Salmonella was detected. 22181

MEAT PACKING INDUSTRY

Thoughts on the Salmonella problem. 22180

MECHANIZATION

How flies fly. 21709

MEDICAL ENTOMOLOGY

Studies on the possibilities of using blowflies (Dipt.) as medicolegal indicators in Finland. I. Report of four indoor cases from the city of Helsinki. 21717

MELOIDOLOGY

Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004

MELOIDOLOGY INCOGNITA

Breeding peaches for root-knot nematode resistance. 21800

MELOIDOLOGY JAVANICA

Breeding peaches for root-knot nematode resistance. 21800

MEMBRACIDAE

The trechoppers of Wisconsin in relation to the tension zone (Homoptera, Membracidae). 21602

MERCURY COMPOUNDS

Deterioration of treated and untreated cottonseed during humid storage. 21952

METABOLISM

Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara ciliotti*. 21666

A biochemical look at insect diapause. 21684

Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695

Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876

Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916

Lettuce tipburn and nitrogen metabolism. (Abstract). 21921

Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141

Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161

L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168

The fate of paraquat in soils. 22187

Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206

The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215

The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216

Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221

METABOLITES

Relative quantities of antifungal metabolites produced in resistant and susceptible soybean plants inoculated with *Phytophthora megasperma* var. *sojace* and closely related nonpathogenic fungi. 21858

Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206

METAMORPHOSIS

Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655

Observations on the hibernation of *Psila rosae* F. 21660

Developmental changes in the late larva of *Calliphora stygia*. I. Olymph. 21692

Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (Heteroptera: Pentatomidae). 21693

The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development. 21698

A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710

Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, *Chilo suppressalis* walker (Lepidoptera: Pyralidae). 21745

Transdetermination in the layout of the organs of the *Drosophila* fly. 21753

METHODOLOGY

On preserving beetle larvae. 21629

Introducing queen bees. 21657

Breeding insects with artificial food. 21661

The reliability of a method of sampling stream invertebrates. 21670

The effects of integrated plant protection methods. 21797

Chenopodium test for the demonstration of the presence of the lettuce mosaic virus 1 in seeds. 21980

Changed method of nata use in the control of *Agropyron repens* on arable land. 22014

Rat baits incorporating paraffin wax. 22031

Cradles make footrot treatment easier. 22059

Studies on effectiveness of suspensibility with preparation technique of W.P. formulations. 22237

METHOXYCHLOR

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189

Methoxychlor residues in the meat and milk of cattle following limited applications of methoxychlor for the control of buffalo fly (*Haematobia exigua*). 22192

METHYL BROMIDE

Chemical disinfection of the soil through methylbromide. 22202

METHYL ISOTHIOCYANATE

Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004

METHYL PARATHION

New methods of pest control. 21989

METHYL-4-CHLOROPHOXYACETIC ACID, 2-
Flurenol-a herbicide with new properties. 22010

MEVINPHOS
The pear and cherry slug. 21984

MICE
Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034

Regrowth of primary cell cultures after infection with foot-and-mouth disease virus. 22064

Toxicity studies of *Listeria monocytogenes* grown in vivo. 22075

Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092

Cytologic studies in polyoma virus-infected mouse embryo cells. 22104

Passive hemolytic antibody response of primed, partially resistant mice to heat-killed *Salmonella typhimurium* vaccine. 22128

Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143

Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161

MICROBIOLOGY

New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781

Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798

SUBJECT INDEX

MOTHS

- The incidence of crown rot of boxed bananas in relation to microbial populations of the crown tissue. 21886
- Studies on the mechanism of interferon action. 22033
- Structure and antigenic properties of a staphylococcal L form. 22038
- Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- Testing of the pathogenicity of virus strains of the Newcastle disease in pigeons. 22100
- Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens. 22233
- MICRONUTRIENTS**
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- Role of trace elements in the growth and morphology of five ascospore *Aspergillus* species. 22201
- MICROORGANISMS**
- The isolation and recognition of viruses. 22093
- MICROSCOPY**
- The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
- Current activities--Lasswade. 22039
- Vaccination against Johne's disease and the creation of carriers. 22077
- MILK**
- Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190
- Methoxychlor residues in the meat and milk of cattle following limited applications of methoxychlor for the control of buffalo fly (*Haematobia exigua*). 22192
- MILK ANALYSIS**
- Vaccination against Johne's disease and the creation of carriers. 22077
- MILKY DISEASE**
- Milky disease bacteria. 21590
- Epizootiological research on milky disease caused by *Bacillus popilliae* (*Melolontha*). 21686
- MILLET**
- Important plant protection problems in Bavarian agriculture. 21776
- MIMICRY**
- Mimicry in plants and animals. 21644
- MINERAL OIL**
- New directions in virus control in vegetable and potato cultivation. 22231
- MIRIDAE**
- Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
- MITES**
- Adaptive significance of mycophagy in stored-product Arthropoda. 21764
- Mites of camellia. 21972
- Efficacy of Vorlex on mites and nematodes on *Gладиолус* corm debris in sandy soils of Florida. (Abstract). 22004
- Scaly leg in poultry--a parasitic disease. 22150
- MITOCHONDRIA**
- The fine structure of the gastric caeca of *Aedes aegypti* larvae. 21687
- MITOSIS**
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- MOLASSES**
- Grass tetany in cattle--using molasses--magnesium oxide mixtures to prevent it. 22090
- MOLDS**
- Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048
- MOLYBDENUM**
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- MONIEZIA**
- L-Lysine carboxylase in *Ascaris lumbricoides* and *Moniezia expansa*. 22168
- MONKEYS**
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136
- MONOSODIUM ACID METHANEARSONATE**
- The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
- MORAXELLA**
- Keratoconjunctivitis produced by *Moraxella bovis* in laboratory animals. 22127
- MORPHOLOGY**
- Application of scanning microscopy in the study of virus transmission of aphids. 21584
- A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
- Description of the adult *Tetranychus telarius* L. (*Acarina*, *Tetranychidae*). 21740
- Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., *Agromyzidae*). 21746
- Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
- Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790
- Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- Transmission and morphological studies of diseased *H. victorica*. 22002
- The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
- Role of trace elements in the growth and morphology of five ascospore *Aspergillus* species. 22201
- MORTALITY**
- Cockroach insecticides. How repellent are they. 21589
- Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650
- Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
- Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714
- Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784
- In vivo production of a toxin(s) by *Listeria monocytogenes*. 22113
- Nerve gas: Dugway accident linked to Utah sheep kill. 22195
- MOSAIC**
- Transmission of tobacco mosaic virus in grape seeds. 21855
- Identification of two serotypes in squash mosaic virus strains. 21878
- Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
- Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943
- MOSAIC (APPLES)**
- Virus diseases of deciduous fruit trees: Apple mosaic. 21898
- MOSAIC (BROMUS)**
- Serological studies on bromegrass mosaic virus and its protein fragments. 21945
- MOSAIC (CUCUMBERS)**
- Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832
- Serological behavior of cucumber mosaic virus (strain Y) and the virus protein. 21928
- New directions in virus control in vegetable and potato cultivation. 22231
- MOSAIC (LETTUCE)**
- Chenopodium test for the demonstration of the presence of the lettuce mosaic virus I in seeds. 21980
- MOSAIC (SUGARCANE)**
- Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
- MOSAIC (TOBACCO)**
- Transmission of tobacco mosaic virus in grape seeds. 21855
- Tobacco mosaic virus strains in greenhouse tomatoes. 21868
- Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
- Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876
- MOSAIC (WATERMELONS)**
- Identification of two serotypes in squash mosaic virus strains. 21878
- MOTHS**
- Warning sounds of moths. 21673

SUBJECT INDEX

MOUTH PARTS

MOUTH PARTS

Contribution to the development of the anterior head and the mouth region of *Periplaneta americana*.

21730

MUSCA DOMESTICA

The organization of the sarcoplasmic reticulum and T system in the femoral muscle of the housefly, *Musca domestica*.

21721

On the existence of cells with vacuoles in the brain of *Musca domestica* L.

21725

MUSCI

The leaching of auxin from air layers.

21771

MUSCIDAE

Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morellia* R. D. (Diptera, Muscidae) in Soviet Central Asia.

22157

MUSCLES

The fine structure of the gastric caeca of *Aedes aegypti* larvae.

21687

How flies fly.

21709

The organization of the sarcoplasmic reticulum and T system in the femoral muscle of the housefly, *Musca domestica*.

21721

Cross-bridges and periods in insect flight muscle.

21726

ATP-DRIVEN oscillation of glycerol-extracted insect fibrillar muscle: Mechano-chemical coupling.

21732

Ultrastructure of moth alary muscles and their attachment to the heart wall.

21733

Insect neuromuscular mechanisms.

21748

Carbon tetrachloride injections for liver fluke control.

22170

MUSKRATS

The distribution of the musk rat and its control in Bavaria.

22032

MUTATION

Heritable repression due to paramutation in maize.

22036

MYCOBACTERIUM AVIUM

Mycobacterium avium infection in cattle: A case series.

22066

MYCOBACTERIUM TUBERCULOSIS

Potentiality by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures.

22044

Isolation of the group-specific polysaccharide of *Mycobacterium tuberculosis*.

22130

MYCOLOGY

Six powdery mildews from Jammu and Kashmir state.

21912

MYCOPLASMA

Current activities--Lasswade.

22039

Immunodiffusion reactions between human sera and *Mycoplasma pneumoniae*.

22072

MYCOPLASMA GALLISEPTICUM

Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies.

21766

Effect of dextrose in medium for the preparation of *Mycoplasma gallisepticum* plate antigens.

22233

MYCOPLASMA GALLISEPTICUM ANTIGENS

Experiences concerning the preparation and application of *mycoplasma* antigen.

22119

MYCOPLASMA SUIPNEUMONIAE

Attempts to recover *Mycoplasma suipneumoniae* from experimental and natural cases of enzootic pneumonia in pigs.

22088

Production of enzootic pneumonia in pigs with *Mycoplasma suipneumoniae* grown in embryonated hen's eggs.

22089

MYCOTIC DERMATITIS

The transmission of Dermatophilosis (mycotic dermatitis) in sheep.

22102

MYOSINS

Cross-bridges and periods in insect flight muscle.

21726

MYZUS PERSICAE

Sexual reproduction of 'green peach aphid' *Myzus persicae* (Sulz) in Mendoza (Argentina).

21679

A list of Sinhalese aphids (Hem., Aphididae).

21688

New directions in virus control in vegetable and potato cultivation.

22231

NAPHTHALENEACETIC ACID

Foliar penetration of naphthaleneacetic acid. (Abstract).

21779

Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle.

21793

NAPHTHALENEACETIC ACID, 1-

Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh.

22206

NATURAL CONTROL (INSECTS)

Cutworms and armyworms.

21983

NAUPHOETA CINEREA

Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches.

21680

NECK ROT (ONIONS)

A further look at neck rot in onions.

21882

NECROSIS

The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus.

21875

Radial mosaic virus of grapevines.

21918

NECROTIC RING SPOT (CHERRIES)

Investigations concerning the serological proof of the necrotic ring spot virus of the sour cherry. III. The serological variability of the necrotic ring spot virus of the sour cherry.

21925

NEEDLE BLIGHT (PINUS)

Ozone damage and semimature-tissue needle blight of eastern white pine.

21884

Histological studies of symptoms in semimature-tissue needle blight of eastern white pine.

21885

NEMATODES

Breeding peaches for root-knot nematode resistance.

21800

Pests of cultivated plants in Finland in 1967.

21888

Virus diseases of the rose.

21958

DD-136 nematode that can kill many insect pests.

21991

Transmission and morphological studies of diseased *H. victoriac*.

22002

Problems of nematode control in Bavarian potato cultures.

22003

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe.

22005

Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria.

22007

Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation.

22152

Internal parasites in sheep on the northern tablelands.

22163

Influence of different forms of management on the incidence of helminth parasitism in poultry.

22164

Some aspects of nutrition in parasites.

22171

Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats.

22174

NEMATODIASIS

Further observations on *Capillaria feliscati* infections in the cat.

22175

NEOCORYLOBIUM

A review of twelve aphid species described as new by Edith M. Patch.

21624

NEOPLASMS

The complement-fixation test for avian leukosis.

22085

Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells.

22141

Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor.

22143

NEPHOTETTIX CINCTICEPS

Resistance pattern in four strains of insecticide-resistant green rice leafhopper, *Nephotettix cincticeps* Uhler, collected in fields.

21588

Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper.

21711

Transmission of transitory yellowing virus of rice by two leafhoppers.

21965

Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities.

22001

NERVOUS SYSTEM

The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development.

21698

How flies fly.

21709

Virus-like particles in the spiral ganglion of the guinea pig cochlea.

22037

Nerve gas: Dugway accident linked to Utah sheep kill.

22195

Phalaris can be poisonous.

22198

NEUROLOGY

Insect neuromuscular mechanisms.

21748

NEUROPTERA

Wesmaclius balticus Tjeder, 1931 (Neuroptera, Planipennin) new to Norway.

21605

SUBJECT INDEX

OXYDEMETONMETHYL

- NEUROTROPIC VIRUSES**
Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- NEWCASTLE DISEASE**
Newcastle disease in England and Wales control by vaccination--the first year. 22111
- NEWCASTLE DISEASE VIRUS**
Propagation of the Newcastle disease virus on tissue cultures at different temperatures. 22067
Uncoating of newcastle disease virus. 22071
Testing of the pathogenicity of virus strains of the Newcastle disease in pigeons. 22100
Vaccination of congenitally-immune chicks against Newcastle disease virus. 22139
Relation of interferon synthesis to abortive replication of Newcastle disease virus in L cells. 22145
- NEZARA VIRIDULA**
Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (Heteroptera: Pentatomidae). 21693
- NICOTINE**
Insecticides from plants. 21802
- NIPPOSTRONGYLUS BRASILIENSIS**
Immunological unresponsiveness to helminth parasites: I. The pattern of *Nippostrongylus brasiliensis* infection in young rats. 22166
- NITRIFICATION**
The fate of paraquat in soils. 22187
- NITROGEN**
The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916
Lettuce tipburn and nitrogen metabolism. (Abstract). 21921
- NITROGEN COMPOUNDS**
Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium root rot* of beans. 21913
- NITROUS ACID**
Application of stresses to foot-and-mouth disease virus. 22080
- NOCTUIDAE**
Two new species of noctuid moths of the genus *Palluperina* Hmps. (Lepidoptera, Noctuidae). 21616
Porphyria purpurina Hb. (Lep., Noctuidae), new for Finland. 21649
The rate of passage of food and the effect of temperature in two noctuid caterpillars. 21702
Cutworms and armyworms. 21983
- NOMENCLATURE**
Some considerations on the name bovine malaria. 22133
- NOMIA MELANDERI**
The effect of age, SKF 525- a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* Kll. 21708
- NORNICOTINE**
Insecticides from plants. 21802
- NORTH CAROLINA**
Burley tobacco naturally infected with peanut stunt virus in North Carolina. (abstract). 21856
- NOSEMA DISEASE**
Four important bee diseases. 21674
- NUCLEIC ACIDS**
Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- NUCLEOTIDES**
Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, *Chilo suppressalis* walker (Lepidoptera: Pyralidae). 21745
- NUTRIENT SOLUTIONS (PLANTS)**
Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- NUTRITION**
Some aspects of nutrition in parasites. 22171
- NYMPHALIDAE**
Mimetic versus disruptive coloration in intergrading populations of *Limenitis arthemis* and *astyanax* butterflies. 21763
- OAT STRAW**
Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydo-spore* germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814
- OATS**
Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807
Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
Thermal stability of stem rust resistance in oat seedlings. 21889
Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
Changes in the yield and protein quantity of oat caused by *Rhopalosiphum padi* (L.) (Hom., Aphididae). 21992
Calcium localization within live oat leaves using a semiconductor detector assembly. 22041
- ODONATA**
Weather conditions and daily activity of dragonflies (Odonata). 21656
Australian dragonflies. 21752
Genetic variability in *Ischnuran* damselflies. 21760
- OESOPHAGOSTOMUM**
Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174
- OIDIUM**
Powdery mildew of the grapevine. 21899
- OILS**
The use of attractants in pest control. 21981
- OLETHREUTIDAE**
Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728
- ONIONS**
Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
A further look at neck rot in onions. 21882
- OPISTHORCHIS**
Opisthorchiasis in swine. 22165
- ORANGES**
The effect of several dithiocarbamate fungicides on black spot control and fruit quality in Valencia oranges. 21874
- ORCHARDS**
Orchard sanitation and brown rot control. 21870
- ORCHIDACEAE**
Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
- ORGANIC COMPOUNDS**
Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200
The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215
- ORGANIZATIONS**
The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. 21791
- ORTHOPTERA**
Some Orthopteroïd insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594
- ORYCTOLAGUS CUNICULUS**
Fleas found on rabbits and other mammals from a pasture. 21586
- OSCINELLA FRIT**
A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- OSTRINIA NUBILALIS**
Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
- OVARIAN CYSTS**
Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- OVARIES**
The neurosecretory cells of the brain of *Aedes aegypti* in relation to larval molt, metamorphosis and ovarian development. 21698
Results of the transplantation of the ovaries of imago to *Locusta migratoria* (L.). 21749
- OVIPOSITION**
Biology of the black widow spider, *Latrodectus hasselti* Thorell (Araneida: Theridiidae). 21697
- OXYDEMETONMETHYL**
Poisoning of bees by insecticides. 22183

SUBJECT INDEX

OXYGEN

OXYGEN

- Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
- Oxygen consumption in adult *Echinostoma revolutum*. 22172
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219

OXYTETRACYCLINE

- Neerotic enteritis of chickens. 22049

OZONE

- Ozone damage and semimature-tissue needle blight of eastern white pine. 21884

PANCREAS

- Opisthorchiasis in swine. 22165

PANONYCHUS ULMI

- Effects of two carbamates on several pests of peach. 21829

PARAFFIN WAX

- Rat baits incorporating paraffin wax. 22031

PARALYSIS

- Four important bee diseases. 21674

PARAQUAT

- Controlling hairgrass (*Deschampsia caespitosa*). 22019
- The fate of paraquat in soils. 22187

PARASITIC INSECTS

- Notes on mallophaga on the Asiatic wild ass and bisons. 21595
- Psephenus* (Coleoptera: *Psephenidae*) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- A new species of *Fahrenholzia* (Anoplura: Hoplopleuridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626
- Hymenoptera associated with elm bark beetles in Wytham Wood, Berks. 21654
- How to get rid of ectoparasites of poultry. 22156

PARASITISM

- Research on biological pest control. 21734
- Relative significance of parasitism versus saprophytism in colonization of wheat straw by *Fusarium roseum* Culmorum in the field. 21839

PARATHION

- The effect of age, SKF 525- a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* ckl. 21708

PASTURELLA TULARENSIS

- Quantitation of susceptibility of swine to infection with *Pasteurella tularensis*. 22053

PASTURES

- Fleas found on rabbits and other mammals from a pasture. 21586
- The field thistle (*Cirsium arvense* Scop.) in the grasslands. Biology and means of control. 22016
- New knowledge about the use of herbicides in permanent grassland. 22030
- Mist sprayers for applying insecticides of low volume. 22239

PEACHES

- Breeding peaches for root-knot nematode resistance. 21800
- Effects of two carbamates on several pests of peach. 21829
- Canker of peaches by *Fusicoccum amygdali*. Biology of the parasite and methods of control. 21859
- Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916

PEANUTS

- Host range of peanut stunt virus in *Trifolium* spp. (Abstract). 21837
- The occurrence of an ash-colored mold on peanuts in the state of Sao Paulo. 21847
- Burley tobacco naturally infected with peanut stunt virus in North Carolina. (abstract). 21856
- Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207

PEARS

- Foliar absorption of boron by Bartlett pears. (Abstract). 21775
- Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
- Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle. 21793
- The use of density gradient centrifugation in a zonal centrifuge rotor during the pruification of a pear virus. 21940
- The pear and cherry slug. 21984

PEAS

- Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864
- Isolation, incidence, and virulence of *Ascochyta* spp. of peas from the soil. 21947
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of 14C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of 14C-glucose and on the incorporation of 14C-labelled amino acids into protein in pea root tips. 22216

PEAT

- Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
- A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200

PECTINOPHORA GOSSYPIELLA

- The westward movement of pink bollworm. 21995

PECTINS

- Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852

- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212

PEDICULUS HUMANUS CAPITIS

- A problem in the diagnosis of head lice. 21696

PELARGONIUM HORTORUM

- Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012

PENTACHLORONITROBENZENE

- Rhizoctonia stem rot. 21901
- Sclerotium stem rot. 21904

PENTATOMIDAE

- Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645

PENTHALEUS MAJOR

- The blue oat mite *Penthaleus major* (Duges) (Acarina: Eupodidae). 21975

PERIDERMIMUM HOLWAYI

- A distinction between *Pucciniastrum goeppertianum* and *P. epilobii* with clarification of status of *Peridermium holwayi* and *Per. ornamentale*. 21863

PERIDERMIMUM ORNAMENTALE

- A distinction between *Pucciniastrum goeppertianum* and *P. epilobii* with clarification of status of *Peridermium holwayi* and *Per. ornamentale*. 21863

PERIPLANETA AMERICANA

- Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- Contribution to the development of the anterior head and the mouth region of *Periplaneta americana*. 21730
- On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741

PERONOSPORA TABACINA

- Analysis of epidemics of the tobacco (*Peronospora tabacina* Adam) mildew in the Gembloux area. 21867

PEST CONTROL

- Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593
- Important plant protection problems in Bavarian agriculture. 21776
- Project and problems of plant protection in the developing countries. 21810
- Control of hachacs. 21959
- The use of attractants in pest control. 21981
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
- Probelm of avian leukosis in Lahore. 22134

PESTICIDE APPLICATION

- Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230

PESTICIDE RESIDUES

- Contribution to the knowledge of the possible influence of pesticides on game. 22186

- A relative study of the composition and tenacity of the Karathane deposits on bean leaves. 22188
- Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189
- Food additives permitted in food for human consumption arsenic. 22194
- Polarography of trace doses of Karathane. 22234
- PESTICIDES**
- Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593
- Important plant protection problems in Bavarian agriculture. 21776
- The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. 21791
- Concentrate spray-thinning of apples. (Abstract). 21808
- Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- Contribution to the knowledge of the possible influence of pesticides on game. 22186
- Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189
- Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190
- Pesticides and water. TD427.P38G3. 22197
- Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241
- PHAGOCYTOSIS**
- Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131
- PHALARIS TUBEROSA**
- Phalaris can be poisonous. 22198
- PHARMACOLOGY**
- Pharmacology properties of the toxins in the venom of the scorpion (*Androctonus australis*). 21743
- PHENOLS**
- Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822
- Effects of phenols on the plant. 21961
- PHEROMONES**
- Sex pheromone specificity tests in the Tortricidae--an introductory report. 21729
- The use of attractants in pest control. 21981
- PHONOCARDIOGRAMS**
- Cardiopulmonary values in normal and heart-worm-infected dogs. 22144
- PHORATE**
- Poisoning of bees by insecticides. 22183
- PHOSPHATASES**
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- PHOSPHATES**
- The influence of phosphate on the phytotoxicity of 3-Amino-1,2,4-triazole. 22229
- PHOSPHORUS**
- Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- Stimulation by 2,4-D and 2,4-D plus Fe EDTA of ³²P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
- PHOSPHORUS COMPOUNDS**
- Control of the hamster pest. 22155
- PHOSPHORUS ISOTOPES**
- The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- PHOTOPERIODISM**
- Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. Interaction between exogenous and endogenous factors in the regulation of larval diapause. 21655
- PHOTOSYNTHESIS**
- Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
- Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943
- Up to date weed control in horticulture. 22022
- PHOTOTROPISM**
- Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653
- PHYCITIDAE**
- Investigation of sterilizing doses for *Ephesia kunnii* L. in irradiation in various stages of development. 21755
- PHYSIOLOGY**
- Milky disease bacteria. 21590
- Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
- Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789
- The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792
- Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars, (Abstract). 21796
- Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798
- Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
- Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
- Fine structure of inclusions formed by the aucuba strain of tobacco mosaic virus. 21948
- The effect of scab resistance on fruit length in slicing cucumbers. (Abstract). 21955
- Potentiation by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures. 22044
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- Cytologic studies in polyoma virus-infected mouse embryo cells. 22104
- Cardiopulmonary values in normal and heart-worm-infected dogs. 22144
- Some aspects of nutrition in parasites. 22171
- Oxygen consumption in adult *Echinostoma revolutum*. 22172
- Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- PHYTOMYZA ATRICORNIS**
- Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., Agromyzidae). 21746
- PHYTOPHTHORA**
- Systematic breeding programme to combine resistance to *Phytophthora* and the quality of the potato variety Bintje. 21915
- The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- PHYTOPHTHORA INFESTANS**
- Spontaneous variability of single isolates of *Phytophthora infestans*. I. Cultural variation. 21772
- Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- PHYTOPHTHORA MEGASPERMA**
- Relative quantities of antifungal metabolites produced in resistant and susceptible soybean plants inoculated with *Phytophthora megasperma* var. *sojae* and closely related nonpathogenic fungi. 21858
- Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864
- Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojae*. 22214
- PHYTOPHTHORA PARASITICA NICOTIANAE**
- A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849
- PHYTOSEIUS**
- An undescribed *Phytoseius* from Florida and Mexico. (Acarina: Phytoseiidae). 21601
- PICEA**
- Biological characteristics of *Fomes fomentarius* found on spruce and birch. 21935
- Comparative susceptibility of large and small spruce roots to *Polyporus tomentosus*. 21950
- PICEA GLAUCA**
- Some seasonal aspects of the growth of tumors on the white spruce, *Picea glauca*. 21949
- PICLORAM**
- Experiments with Tordon herbicide in small grains. 22013

PICORNAVIRUSES

The field thistle (*Cirsium arvense* Scop.) in the grasslands. Biology and means of control. 22016

PICORNAVIRUSES

Serologic comparison of North American and Japanese porcine picornaviruses. 22116

PIGEONS

Testing of the pathogenicity of virus strains of the Newcastle disease in pigeons. 22100

PIMIENTOS

Blossom end rot of the tomato. 21843

PINEAPPLE DISEASE

Studies of the host-parasite relationship in the pineapple disease of sugarcane. 21830

PINUS

The relation of growth regulators to the development of symptoms and expression of stem resistance in white pine infected with blister rust. 21831

Erratum: Reactions of lodgepole pine to attack by *Dendroctonus ponderosae* Hopkins and blue stain fungi. 21919

PINUS RADIATA

The leaching of auxin from air layers. 21771

PINUS RESINOSA

Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226

PINUS STROBUS

Ozone damage and semimature-tissue needle blight of eastern white pine. 21884

Histological studies of symptoms in semimature-tissue needle blight of eastern white pine. 21885

PINUS SYLVESTRIS

Studies on the olfactory stimuli guiding the bark beetle *Blastophagus piniperda* L. (Coleoptera, Scolytidae) to its host tree. 21691

PINUS TAEDA

The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. 21941

PIRICULARIA ORYZAE

The ultrastructure of *Piricularia oryzae* Cav. 21812

The use of actidione on the control of rice blast. 21813

Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865

PIROPLASMOSIS

Texas (splenic) fever in cattle. Permitted dips. 22046

PLANT ANATOMY

Comparison of staminate flower production on gynoecious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774

Fine structural characterization of plant microbodies. 21777

Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789

Gibberellin A4/A7, for induction of staminate flowers on the gynoecious cucumber. (Abstract). 21794

PLANT BIOCHEMISTRY

Studies on the olfactory stimuli guiding the bark beetle *Blastophagus piniperda* L. (Coleoptera, Scolytidae) to its host tree. 21691

Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223

PLANT BREEDING

Verticillium Wilt of tomatoes. Tests with resistant lines. 21857

Systematic breeding programme to combine resistance to *Phytophthora* and the quality of the potato variety Bintje. 21915

PLANT CUTTINGS

Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663

PLANT DISEASE CONTROL

Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821

The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927

PLANT DISEASE RESISTANCE

The need for international testing centers for crop pests and pathogens. 21806

The relation of growth regulators to the development of symptoms and expression of stem resistance in white pine infected with blister rust. 21831

Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853

Verticillium Wilt of tomatoes. Tests with resistant lines. 21857

Relative quantities of antifungal metabolites produced in resistant and susceptible soybean plants inoculated with *Phytophthora megasperma* var. *sojae* and closely related nonpathogenic fungi. 21858

Non-random segregation of gene I for *Fusarium* resistance in the tomato. 21873

The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus. 21875

Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876

Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881

Thermal stability of stem rust resistance in oat seedlings. 21889

Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906

Systematic breeding programme to combine resistance to *Phytophthora* and the quality of the potato variety Bintje. 21915

Erratum: Reactions of lodgepole pine to attack by *Dendroctonus ponderosae* Hopkins and blue stain fungi. 21919

Penetrance of gene I for *Fusarium* resistance in the tomato. 21920

Can Taichung Native--I stand up to bacterial blight. 21933

Comparative susceptibility of large and small spruce roots to *Polyporus tomentosus*. 21950

PLANT DISEASE TRANSMISSION

Application of scanning microscopy in the study of virus transmission of aphids. 21584

Project and problems of plant protection in the developing countries. 21810

Analysis of epidemics of the tobacco (*Peronospora tabacina* Adam) mildew in the Gembloux area. 21867

The mode of seedling infection of grain sorghum with *Sclerospora sorghi*. (Abstract). 21869

Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908

Virus disease survey on citrus in Aegean region. 21909

Transmission of transitory yellowing virus of rice by two leafhoppers. 21965

Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006

PLANT DISEASES

Studies on biology of Banmalika leaf minor (*Agropistis limatus*, Moth, Coleoptera, Halictidae). A serious pest of Banmalika (*Jasminum aequifolium*, Vohl.) in Rajasthan. 21706

Important plant protection problems in Bavarian agriculture. 21776

The importance of plant protection for the world harvest. 21785

Plant protection problems in the cultivation of forage plants in Bavaria. 21787

The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. 21791

Breeding peaches for root-knot nematode resistance. 21800

The need for international testing centers for crop pests and pathogens. 21806

Free amino acids of sunflower hypocotyl tissue during crown gall tumor development. 21824

Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826

Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833

Wrinkled skin disease of apples. 21842

Blossom end rot of the tomato. 21843

Growth regulators to control lettuce bolting. (Abstract). 21850

Histological studies of symptoms in semimature-tissue needle blight of eastern white pine. 21885

Pests of cultivated plants in Finland in 1967. 21888

Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896

Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910

Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular

- reference to the nitrogen metabolism in infected and non-infected leaves. 21916
- New records of plant diseases in New South Wales. 21946
- Some seasonal aspects of the growth of tumors on the white spruce, *Picea glauca*. 21949
- The effect of scab resistance on fruit length in slicing cucumbers. (Abstract). 21955
- PLANT ECOLOGY**
Australian sedge in New Zealand. 22020
- PLANT EXTRACTS**
Breeding insects with artificial food. 21661
- Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207
- PLANT GALLS**
Some seasonal aspects of the growth of tumors on the white spruce, *Picea glauca*. 21949
- PLANT GENETICS**
Spontaneous variability of single isolates of *Phytophthora infestans*. I. Cultural variation. 21772
- Heritable repression due to paramutation in maize. 22036
- PLANT HORMONES**
The leaching of auxin from air layers. 21771
- Auxin (plant hormones) production in plants. 21801
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- PLANT INJURIES**
New knowledge concerning wire stringing in fruit growing. 21767
- Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770
- Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789
- Forest plant protection problems in Bavaria. 21799
- Effects of two carbamates on several pests of peach. 21829
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833
- Ozone damage and semimature-tissue necrotic blight of eastern white pine. 21884
- Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910
- Control of the banana weevil. 21960
- A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- Cicadas as pests in New South Wales. 21974
- The westward movement of pink bollworm. 21995
- Selecting tomatoes for resistance to spider mites. 21997
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
- Control of the hamster pest. 22155
- The effects of air pollution on plants and soil. 22182
- PLANT METABOLISM**
Auxin (plant hormones) production in plants. 21801
- The response of rice and barnyard grass to 3,4-dichloropropionanilide. 22027
- PLANT MORPHOLOGY**
Fine structural characterization of plant microbodies. 21777
- Influence of gibberellin upon time of bud development in globe artichoke (*Cynara scolymus*). (Abstract). 21804
- Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932
- Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- PLANT NEMATODE RESISTANCE**
Problems of nematode control in Bavarian potato cultures. 22003
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
- PLANT NEMATODES**
New records of plant diseases in New South Wales. 21946
- Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004
- Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
- PLANT NUTRITIONAL DEFICIENCIES**
The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. lycopersici. 21956
- PLANT PEST CONTROL**
Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004
- PLANT PEST RESISTANCE**
The need for international testing centers for crop pests and pathogens. 21806
- PLANT PHYSIOLOGY**
New knowledge concerning wire stringing in fruit growing. 21767
- Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
- Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). 21811
- American cotton is allergic to 2,4-D. 21818
- Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
- Influence of *Rhizopus nigricans* Ehrhnb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840
- Quantitative measurements of interactions between crown-gall tumors and the pinto bean host. 21845
- Three-year effects of systemic fungicides applied for the control of *Cytospora* in Italian prune trees. 21862
- Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864
- Chlamydospore formation in conidia of *Helminthosporium sativum*. 21893
- Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemicilia vastatrix*. 21906
- Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916
- The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927
- Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
- Some seasonal aspects of the growth of tumors on the white spruce, *Picea glauca*. 21949
- Fine structure of *Plasmodiophora brassicae* in sporogenesis. 21954
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- Observations on penetration of linden branches by stylets of the aphid *Longistigma caryae*. 21968
- Flurenol- a herbicide with new properties. 22010
- Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024
- The herbicidal activity of MSMA and DSMA on purple nutsedge. 22026
- Role of trace elements in the growth and morphology of five ascospore *Aspergillus* species. 22201
- Some effects of DDT, dieldrin, dimethoate and fenthion on growth of cucumbers. 22203
- Effect of prometryne on growth of *Fusarium oxysporum* f. sp. *vasinfectum* in soil culture. (Abstract). 22205
- Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207

SUBJECT INDEX

PLANT PROTECTION

- Stimulation by 2,4-D and 2,4-D plus Fe EDTA of ³²P uptake by bean seedlings (*Phaseolus vulgaris*). 22208
- Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209
- Ejection and dissemination of ascospores of *Hypoxylon pruinautum*. 22210
- Estradiol annulment of sterol-induced sexual reproduction by *Pythium periplocum*. (Abstract). 22213
- Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojae*. 22214
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- Light and temperature effects on growth and sporophore formation of *Lenzites trabea*. 22218
- Development and sporulation of *Polyporus hispidus*. (Abstract). 22220
- Periodicity in ascospore release in *Gymnosporangium juniperi-virginianae*. 22222
- Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224
- The interaction of the seed coat and gibberellic acid in the germination of *Datura ferax* L. 22225
- Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226
- M-N-ethylaminobenzoic acid: absence of phytotoxic activity. 22227
- An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- Carbon dioxide effects on fruits. III. The fixation of C¹⁴O₂ in lemon in an atmosphere enriched with carbon dioxide. 22232
- PLANT PROTECTION**
New knowledge concerning wire stringing in fruit growing. 21767
- Important plant protection problems in Bavarian agriculture. 21776
- The importance of plant protection for the world harvest. 21785
- Plant protection problems in the cultivation of forage plants in Bavaria. 21787
- The Bavarian Department for Agriculture, Planting and Plant Protection, and its 'Group Plant Protection'. 21791
- The effects of integrated plant protection methods. 21797

- Forest plant protection problems in Bavaria. 21799
- The need for international testing centers for crop pests and pathogens. 21806
- Project and problems of plant protection in the developing countries. 21810
- The ultrastructure of *Piricularia oryzae* Cav. 21812
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865
- Control of bachacs. 21959
- Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
- PLANT QUARANTINE**
Virus diseases of deciduous fruit trees: Apple mosaic. 21898
- Interceptions in plant quarantine for the year ending 30th June, 1966. 21902
- Virus diseases of the rose. 21958
- Australian sedge in New Zealand. 22020
- PLANT REGULATORS**
Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
- Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790
- Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- The relation of growth regulators to the development of symptoms and expression of stem resistance in white pine infected with blister rust. 21831
- Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
- PLANT REPRODUCTION**
Estradiol annulment of sterol-induced sexual reproduction by *Pythium periplocum*. (Abstract). 22213
- PLANT RESPIRATION**
Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881
- Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- PLANT TAXONOMY**
Gonatobotrys zeae sp. n. a new pathogen on corn. (Abstract). 21851
- PLANT TRANSLOCATION**
Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
- Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- Changed method of nata use in the control of *Agropyron repens* on arable land. 22014
- Calcium localization within live oat leaves using a semiconductor detector assembly. 22041

- PLANT WATER RELATIONS**
Blossom end rot of the tomato. 21843
- PLANTING**
Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012
- PLANTS**
Application of scanning microscopy in the study of virus transmission of aphids. 21584
- Mimicry in plants and animals. 21644
- Characterization of three bacteriophages of *Xanthomonas oryzae* (Uyeda et Ishiyama) Dowson. 21788
- Electron microscopic observations on the apparent replication in vivo of a plant virus. 21817
- Six powdery mildews from Jammu and Kashmir state. 21912
- PLASMA MEMBRANE**
Electron microscope studies of *Fasciola hepatica*. VI. The ultrastructural localization of phosphatases. 22173
- PLASMIDIOPHORA BRASSICAE**
Fine structure of *Plasmidiophora brassicae* in sporogenesis. 21954
- PLECOPTERA**
A new genus and three new species of stoneflies (Plecoptera) from Caucasus and Crimea. 21648
- PLEUROPNEUMONIA**
Contagious pleuro-pneumonia of goats. 22095
- PLEUROPNEUMONIA-LIKE ORGANISMS**
Studies on pathology of respiratory diseases of poultry with special reference to viral and P. P. L. O. infections. 22122
- PLUMS**
Three-year effects of systemic fungicides applied for the control of *Cytospora* in Italian prune trees. 21862
- PNEUMONIA**
Attempts to recover *Mycoplasma suis-pneumoniae* from experimental and natural cases of enzootic pneumonia in pigs. 22088
- Production of enzootic pneumonia in pigs with *Mycoplasma suis-pneumoniae* grown in embryonated hen's eggs. 22089
- POISONING**
Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048
- Ciguatera poisoning in cats in Brisbane. 22070
- Poisoning of bees by insecticides. 22183
- POISONOUS PLANTS**
Insecticides from plants. 21802
- Poisoning of cattle by *Polygala klotzchii*, Chodat, in the region of Pontal (State of Sao Paulo). 22062
- These plants might spell death to your cattle. 22069
- Abortive and teratogenic effects of locoweed on sheep and cattle. 22097
- Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196
- Phalaris can be poisonous. 22198
- POLAROGRAPHY**
Polarography of trace doses of Karathane. 22234

POLLINATION

Crop pollination and the flower relationships of the wild bees of Ludhiana, India (Hymenoptera: Apoidea). 21652

Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770

Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790

Honey bees as pollinators of red clover. 21988

POLYCHROSIS BOTRANA

Rearing of caterpillars of the eudemis moth (*Lobesia botrana* Schiff.) on some substituted natural foods. 21728

POLYGALA

Poisoning of cattle by *Polygala klotzchii*, Chodat, in the region of Pontal (State of Sao Paulo). 22062

POLYGONUM CONVULVULUS

Experiments with Tordon herbicide in small grains. 22013

Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024

POLYHEDROSES

Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591

POLYOMA VIRUS

Cytologic studies in polyoma virus-infected mouse embryo cells. 22104

POLYPORUS BETULINUS

The arthropod fauna associated with the birch bracket fungus *Polyporus betulinus*, in Eastern Canada. 21722

POLYPORUS HISPIDUS

Development and sporulation of *Polyporus hispidus*. (Abstract). 22220

POLYPORUS TOMENTOSUS

Comparative susceptibility of large and small spruce roots to *Polyporus tomentosus*. 21950

POLYSACCHARIDES

Isolation of the group-specific polysaccharide of *Mycobacterium tuberculosis*. 22130

POPULATION

The role of chemicals in the general insect control picture. 21617

Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658

Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara eliotti*. 21666

Main currents in research concerning sterilization methods of insects. 21735

The importance of plant protection for world harvest. 21786

The use of attractants in pest control. 21981

The westward movement of pink bollworm. 21995

Research on the chemical control of *Aceria sheldoni*. 21999

The distribution of the musk rat and its control in Bavaria. 22032

PORIA WEIRII

Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822

POTASSIUM

The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841

Up to date weed control in horticulture. 22022

POTATO SEEDS

Interaction of temperature and gibberellin on potato seed germination. 22217

POTATOES

Important plant protection problems in Bavarian agriculture. 21776

Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838

Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840

Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860

Systematic breeding programme to combine resistance to *Phytophthora* and the quality of the potato variety Bintje. 21915

Problems of nematode control in Bavarian potato cultures. 22003

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Methoxychlor. 22189

Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities. Diphenamid. 22190

New directions in virus control in vegetable and potato cultivation. 22231

POULTRY

National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045

Marek's disease. 22055

Studies on pathology of respiratory diseases of poultry with special reference to viral and P. P. L. O. infections. 22122

Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation. 22152

Lice of poultry. 22153

How to get rid of ectoparasites of poultry. 22156

POULTRY DISEASES

Infectious laryngotracheitis of poultry. 22125

Scaly leg in poultry--a parasitic disease. 22150

POULTRY FARM MANAGEMENT

Influence of different forms of management on the incidence of helminth parasitism in poultry. 22164

POULTRY HATCHERIES

Problem of avian leukosis in Lahore. 22134

POWDERY MILDEW

Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881

POWDERY MILDEW (GRAPES)

Powdery mildew of the grapevine. 21899

POWDERY MILDEW (PLANTS)

Six powdery mildews from Jammu and Kashmir state. 21912

PRATYLENCHUS

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

PRECIPITATION

Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987

PREDACEOUS INSECTS

Distribution and adaptive diversity of trapdoor spiders. 21701

The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750

Australian dragonflies. 21752

Adaptive significance of mycophagy in stored-product Arthropoda. 21764

Coleoptera attacking tree and shrub plantings in the city of Kharkov. 21979

PREDATORY BIRDS

A method for collecting feather lice (Mallophaga). 21583

PREGNANCY

Abortive and teratogenic effects of locoweed on sheep and cattle. 22097

Infectious bovine rhinotracheitis-infectious pustular vulvovaginitis virus infection in pregnant cows. 22103

PREVENTIVE MEDICINE

Diseases of pigs and their control. SF971.B4. 22051

Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226

PROCECIDOCHARES STONEI

Biology of the gall-former *Procecidochares stonei* on a composite. 21742

PROMETRYNE

Effect of prometryne on growth of *Fusarium oxysporum* f. sp. *vasinfectum* in soil culture. (Abstract). 22205

The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236

PROPANIL

The response of rice and barnyard grass to 3,4-dichloropropionanilide. 22027

Controlling barnyard grass in rice. 22028

PROPERTIES

Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828

Biological characteristics of *Fomes fomentarius* found on spruce and birch. 21935

Structure and antigenic properties of a staphylococcal L form. 22038

PROTEINS

The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585

SUBJECT INDEX

PRUNING

- Termites- roasted or as a soup. 21592
- Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677
- A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- Tumor formation through deoxyribonucleic acid from *Agrobacterium tumefaciens* (Smith and Townsend) Conn. 21826
- Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876
- Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908
- Serological studies on bromegrass mosaic virus and its protein fragments. 21945
- Changes in the yield and protein quantity of oat caused by *Rhopalosiphum padi* (L.) (Hom., Aphididae). 21992
- Studies on the mechanism of interferon action. 22033
- Electrophoretic fractionation of *Clostridium hemolyticum* toxic culture fluids. 22112
- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- Relation of interferon synthesis to abortive replication of Newcastle disease virus in L cells. 22145
- The use of polyacrylamide gel disc electrophoresis in delimiting three species of *Phytophthora*. 22211
- The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on the uptake and metabolism of ¹⁴C-glucose and on the incorporation of ¹⁴C-labelled amino acids into protein in pea root tips. 22216
- PRUNING**
- Increased reversion of an apple sport following X irradiation and pruning, (Abstract). 21795
- PRUNUS**
- Investigations concerning the serological proof of the necrotic ring-spot virus of the sour cherry. III. The serological variability of the necrotic ring-spot virus of the sour cherry. 21925
- PSEPHENIVORUS MEXICANUS**
- Psephenus* (Coleoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- PSEPHENUS TEXANUS**
- Psephenus* (Coleoptera: Psephenidae) parasitized by a new chalcidoid (Hymenoptera: Eulophidae). I. Description of the parasite. 21597
- PSEUDOCOCCIDAE**
- A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754
- PSEUDOMONAS**
- Bacterial scab, Sclerotinia and Botrytis rots of *Gladiolus* corms. 21896

- PSEUDOMONAS AERUGINOSA**
- Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784
- PSEUDOTSUGA MENZIESII**
- Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822
- PSILA ROSAE**
- Observations on the hibernation of *Psila rosae* F. 21660
- PSOROPHORA**
- A numerical taxonomic study of the genus *Psorophora* (Diptera: Culicidae). 21607
- PUBLIC HEALTH**
- A problem in the diagnosis of head lice. 21696
- Pesticides and water. TD427.P38G3. 22197
- PUBLIC LANDS**
- Grazing. Control of noxious plants on land under control or jurisdiction of federal government. 22196
- PUCGINIA**
- The autoecious species of *Puccinia* on *Heliantheae* in North America. 21914
- PUCGINIA RECONDITA**
- Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209
- PUCGINIA STRIIFORMIS**
- Major and minor genes in wheat for resistance to *Puccinia striiformis* and their responses to temperature changes. 21883
- A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939
- PUCGINIASTRUM EPILOBII**
- A distinction between *Pucciniastrum goeppertianum* and *P. epilobii* with clarification of status of *Peridermium holwayi* and *Per. ornamentale*. 21863
- PUCGINIASTRUM GOEPPERTIANUM**
- A distinction between *Pucciniastrum goeppertianum* and *P. epilobii* with clarification of status of *Peridermium holwayi* and *Per. ornamentale*. 21863
- PUMPKINS**
- Identification of two serotypes in squash mosaic virus strains. 21878
- PUPAE**
- Observations on the hibernation of *Psila rosae* F. 21660
- The larvae and pupae of the British *Cylindrotominae* and *Limoniinae* (Diptera, Tipulidae). 21664
- Changes in the acid-soluble nucleotides during the pupal development of the rice stem borer, *Chilo suppressalis* walker (Lepidoptera: Pyralidae). 21745
- PYRALIDAE**
- Results of efficiency studies on carbaryl in granular form at 5 per cent and 7.5 per cent of the active ingredient for the control of pyralids of corn. 21976
- PYRETHRUM**
- Insecticides from plants. 21802
- PYRRHOCORIDAE**
- Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLVIII. Hemiptera Pyrrhocoridae. 21639
- PYTHIUM DEBARYANUM**
- Fertilizer-fungicide combinations for the control of *Pythium damping-off* of tobacco. 21907

- PYTHIUM PERIPLICUM**
- Estradiol annulment of sterol-induced sexual reproduction by *Pythium periplocum*. (Abstract). 22213
- Q FEVER**
- Epizootiologic studies of Q fever in Washington dairy cattle. 22110
- QUANTITATIVE ANALYSIS**
- Quantitative relationships between fleas and rodents in a Hawaiian cane field. 21683
- QUEEN BEES**
- Introducing queen bees. 21657
- Biology of *Apis dorsata* F. 21723
- QUERCUS**
- Research on forest ecosystems. Series b: the mixed calcified oak-grove of Virelles-Blaimont. Contribution no. 19 Insect collections in tubes of water. 21681
- QUERCUS PHELLOS**
- Development and sporulation of *Polyporus hispidus*. (Abstract). 22220
- RABBITS**
- Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- Endotoxin properties of *Leptospira canicola*. 22081
- Uterine-amicotic pathway of infecting the rabbit fetus with *Listeria monocytogenes*. 22106
- Effects of *Listeria monocytogenes* hemolysins on the isolated ileum of rabbit. 22135
- Biological investigations on the cestode, *Railiellina* (R.) loeweni Bartel and Hansen, 1964. 22159
- Production of antibodies against insecticide-protein conjugates. 22191
- RADIOACTIVITY**
- Biosynthesis and occurrence of free amino acids in eggs of the grasshopper, *Aulocara eliotti*. 21666
- Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
- RAILLIETINA**
- Biological investigations on the cestode, *Railiellina* (R.) loeweni Bartel and Hansen, 1964. 22159
- RATS**
- Rat baits incorporating paraffin wax. 22031
- The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141
- Immunological unresponsiveness to helminth parasites: I. The pattern of *Nippostrongylus brasiliensis* infection in young rats. 22166
- Laboratory and field trials with a new raticide selective toxic for rats. 22199
- RED CLOVER**
- Respiratory patterns in *Trifolium pratense* inoculated and noninoculated with *Erysiphe polygoni*. 21881
- RED RING (COCONUTS)**
- Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006

SUBJECT INDEX

RESEARCH

- REDUVIIDAE**
Examination of African Reduviidae. II. Harpactorinac. Genus *Nagusta* Stal. 21640
- REOVIRUSES**
Serologic study of reovirus infection in dogs. 22079
- REPORTS**
Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663
The working party of fascioliasis in Wales. 22078
Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
Program-abstracts, 65th annual meeting, American Society for Horticultural Science. 22240
- REPRODUCTION**
The effects of high temperatures on greenbug, *Schizaphisgraminum*, reproduction. 21675
Sexual reproduction of 'green peach aphid' *Myzus persicae* (Sulz) in Mendoza (Argentina). 21679
A biochemical look at insect diapause. 21684
Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. 21769
Spontaneous variability of single isolates of *Phytophthora infestans*. I. Cultural variation. 21772
The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792
Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars, (Abstract). 21796
Some observations on egg diapause in the Trinidad sugar cane frog hopper, *Aeneolamia varia saccharina* (Homoptera, Cercopidac). 21969
The effect of *Vibrio fetus* vaccination on the breeding efficiency of cows bred to *Vibrio fetus*-infected bulls. 22084
Ejection and dissemination of ascospores of *Hypoxylon pruinaum*. 22210
Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- RESEARCH**
A method for collecting feather lice (Mallophaga). 21583
Application of scanning microscopy in the study of virus transmission of aphids. 21584
The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585
Fleas found on rabbits and other mammals from a pasture. 21586
Cockroach insecticides. How repellent are they. 21589
Milky disease bacteria. 21590
Infection of cultured silk worm embryos with the cytoplasmic-polyhedrosis virus. 21591
An undescribed *Phytoseius* from Florida and Mexico. (Acarina: Phytoseiidae). 21601
Six new species and one new name of some Dipterous families from Japan. 21627
A stroboscopic device for the study of flight in very small insects. 21632
Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650
Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663
Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia euprina*. 21665
The effects of high temperatures on greenbug, *Schizaphisgraminum*, reproduction. 21675
Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
Epizootiological research on milky disease caused by *Bacillus popilliae* (Melolontha). 21686
Effects of parental age on the life cycle of the southern green stink bug, *Nezara viridula* L. (Heteroptera: Pentatomidae). 21693
Are *Hylemya cilicrura* and *Hylemya liturata* two separate species. 21704
Stability of *Chilo iridescent* virus. 21707
A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
Studies on the feeding behavior of green rice leafhopper, *Nephotettix cincticeps* Uhler. II. Probing frequency of the adult leafhopper. 21711
On the reinform nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (Tylenchida: Hoplolaimidae). 21712
Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714
Field observations on the roosting behavior of the African migratory locust (*Locusta migratoria migratorioides* R. and F.) in the solitary phase. 21715
Buprestis aurulenta L. (Col., Buprestidae) in Ireland. 21727
Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731
Research on biological pest control. 21734
Main currents in research concerning sterilization methods of insects. 21735
Competition between insect species. 21738
Description of the adult *Tetranychus telarius* L. (Acarina, Tetranychidae). 21740
On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741
Range of host plants and larval feeding in *Phytomyza atricornis* Meigen (Dipt., Agromyzidae). 21746
The fall webworm, *Hyphantria cunea*, its distribution and natural enemies: A world list (Lepidoptera: Arctiidae). 21750
Laboratory studies on interspecific trail following and trail preference of army ants (Dorylinae). 21751
Australian dragonflies. 21752
An experimental and genetic analysis of dispersal behavior in *Tribolium*. 21761
Use of formalinized *Mycoplasma gallisepticum* antigens and chicken erythrocytes in hemagglutination and hemagglutination-inhibition studies. 21766
Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. 21769
Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770
Spontaneous variability of single isolates of *Phytophthora infestans*. I. Cultural variation. 21772
Survey of epidemic diseases of forest trees in Taiwan IV. 21773
Comparison of staminate flower production on gynocious strains of cucumbers by pure gibberellins (A3, A4, A7, and A13) and mixtures. (Abstract). 21774
Foliar absorption of boron by Bartlett pears. (Abstract). 21775
Important plant protection problems in Bavarian agriculture. 21776
Fine structural characterization of plant microbodies. 21777
Some notes on the study of bark fungi. 21778
Foliar penetration of naphthaleneacetic acid. (Abstract). 21779
New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781
Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
Protection against *Pseudomonas aeruginosa* infection by immunisation with fractions of culture filtrates of *Ps. aeruginosa*. 21784
Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acid esters. (Abstract). 21789
Auxin and gibberellin-like activity in blueberry flowers and fruit. (Abstract). 21790
The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792
Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle. 21793
Gibberellin A4/A7, for induction of staminate flowers on the gynocious cucumber. (Abstract). 21794

SUBJECT INDEX

RESEARCH

- Increased reversion of an apple sport following X irradiation and pruning. (Abstract). 21795
- Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars. (Abstract). 21796
- Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798
- Breeding peaches for root-knot nematode resistance. 21800
- The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803
- Influence of gibberellin upon time of bud development in globe artichoke (*Cynara scolymus*). (Abstract). 21804
- Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
- The need for international testing centers for crop pests and pathogens. 21806
- Concentrate spray-thinning of apples. (Abstract). 21808
- Distribution of soluble component and quality factors in the edible portion of citrus fruit. (Abstract). 21809
- Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). 21811
- The ultrastructure of *Piricularia oryzae* Cav. 21812
- Tomato bushy stunt virus from *Prunus avium* L. I. Field studies and virus characterization. 21815
- Electron microscopic observations on the apparent replication in vivo of a plant virus. 21817
- Research and identification of low titre and avirulent viruses or grapevines. 21820
- Development of downy mildew resistant broccoli, cabbage, and collards. (Abstract). 21821
- Effects of two carbamates on several pests of peach. 21829
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833
- Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840
- The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841
- Wrinkled skin disease of apples. 21842
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846
- Growth regulators to control lettuce bolting. (Abstract). 21850
- Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852
- Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865
- Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866
- Tobacco mosaic virus strains in greenhouse tomatoes. 21868
- Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
- Breeding glasshouse cucumbers in the Netherlands. 21879
- Histological studies of symptoms in semimature-tissue needle blight of eastern white pine. 21885
- Variation in response to iron nutrition among some corn inbreds. (Abstract). 21891
- Research on *Fusarium* diseases. II. Ecology and pathology of *Fusarium oxysporum*. 21894
- Genetic study of the resistance of *Coffea* spp. to leaf rust I. Identification and behavior of four factors conditioning disease reaction in *Coffea arabica* to twelve physiologic races of *Hemileia vastatrix*. 21906
- Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908
- Virus disease survey on citrus in Aegean region. 21909
- Research on the natural diffusion of soil-borne grape virus diseases in the Italian environment. 21917
- Lettuce tipburn and nitrogen metabolism. (Abstract). 21921
- The inheritance and nature of Albinism, involucre shape, and chlorophyll deficiency in lettuce. (Abstract). 21923
- Investigations concerning the serological proof of the necrotic ringspot virus of the sour cherry. III. The serological variability of the necrotic ringspot virus of the sour cherry. 21925
- The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927
- Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931
- A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939
- The use of density gradient centrifugation in a zonal centrifuge rotor during the purification of a pear virus. 21940
- Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944
- Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- The effect of scab resistance on fruit length in slicing cucumbers. (Abstract). 21955
- Effects of phenols on the plant. 21961
- A contribution to the fruit fly resistance in certain lines of corn and hybrids. 21966
- Some observations on egg diapause in the Trinidad sugar cane froghopper, *Aeneolamia varia* saccharina (Homoptera, Cercopidae). 21969
- Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (Acarina: Tetranychidae), on greenhouse cucumbers. 21970
- Chenopodium test for the demonstration of the presence of the lettuce mosaic virus 1 in seeds. 21980
- Tests for inheritance of dieldrin-resistance in the cabbage maggot, *Hylemya brassicae* (Bouche). 21993
- Reaction of tomato varieties and breeding lines to aphids. 21996
- Selecting tomatoes for resistance to spider mites. 21997
- Research on the chemical control of *Aceria sheldoni*. 21999
- Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities. 22001
- Transmission and morphological studies of diseased *H. victoricae*. 22002
- Problems of nematode control in Bavarian potato cultures. 22003
- Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012
- Efficacy of a stale seedbed approach for providing weed control in pickling cucumbers. (Abstract). 22015
- Chemical weed control in pickling cucumbers. (Abstract). 22021
- Factors affecting the performance of preemergence and postemergence herbicides in pickling cucumbers. (Abstract). 22023
- Studies on the mechanism of interferon action. 22033
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035
- Heritable repression due to paramutation in maize. 22036
- Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
- Structure and antigenic properties of a staphylococcal L form. 22038
- Methods of restraining cattle for tuberculin testing. 22040
- The classification of leptospiral strains from Kazakhstan. 22042

SUBJECT INDEX

RIFT VALLEY FEVER VIRUS

- Potiation by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures. 22044
- National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045
- The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
- Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- Uncoating of newcastle disease virus. 22071
- Vaccination against John's disease and the creation of carriers. 22077
- The working party of fascioliasis in Wales. 22078
- The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- The complement-fixation test for avian leukosis. 22085
- Production of enzootic pneumonia in pigs with *Mycoplasma suis pneumoniae* grown in embryonated hen's eggs. 22089
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- The isolation and recognition of viruses. 22093
- On the specific mechanism of the transmission of leptospiral infection. 22105
- Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
- The investigation of scrub typhus in the USSR. 22108
- Epizootiologic studies of Q fever in Washington dairy cattle. 22110
- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136
- Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141
- Swine fever eradication campaign 1963-64. 22142
- Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
- Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- Effect of soil treatment with disulfoton (Dyston) granular under low temperature condition. 22185
- Contribution to the knowledge of the possible influence of pesticides on game. 22186
- Nerve gas: Dugway accident linked to Utah sheep kill. 22195
- A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200
- Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204
- Fungal detoxication-IX. Metabolism of 1-naphthalenacetic acid by *Aspergillus niger* van Tiegh. 22206
- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. I. Culture of the fungus in a nutrient solution. 22212
- Metabolism of sporulation in filamentous fungi. I. Glucose and acetate oxidation in sporulating and nonsporulating cultures of *Endothia parasitica*. 22221
- Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- Studies on effectiveness of suspensibility with preparation technique of W.P. formulations. 22237
- Program-abstracts, 65th annual meeting, American Society for Horticultural Science. 22240
- Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241
- RESPIRATION**
Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
- RESPIRATORY DISEASES**
Experiences concerning the preparation and application of mycoplasma antigen. 22119
- Studies on pathology of respiratory diseases of poultry with special reference to viral and P. P. L. O. infections. 22122
- RETICULOENDOTHELIAL SYSTEM**
The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121
- Vervet monkey disease: Experimental infection of guinea pigs and monkeys with the causative agent. 22136
- RETINA**
Slow and spike potentials recorded from retinula cells of the honeybee drone in response to light. 21653
- RHAGOLETIS POMONELLA**
The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585
- RHINOTRACHEITIS**
Infectious bovine rhinotracheitis: Occurrence of fetal and placental lesions with viral isolations. 22123
- Infectious bovine rhinotracheitis: Relationship of level of maternal antibody titer to incidence of fetal death and abortion. 22124
- RHINOVIRUSES**
Antibody to rhinovirus in human sera. I. Standardization of neutralization test. 22076
- Antibody to rhinovirus in human sera. II. Heterotypic responses. 22082
- RHIZOCTONIA**
Rhizoctonia stem rot. 21901
- RHIZOCTONIA SOLANI**
Virulence of *Rhizoctonia solani* as influenced by age of inoculum in soil. 21872
- Vitavax-a new systemic fungicide. 21936
- RHIZOPUS NIGRICANS**
Influence of *Rhizopus nigricans* Ehrenb. on the development of *Alternaria solani* (Ell. and Mart.) Jones and Grout. 21840
- RHODNIUS PROLIXUS**
Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- RHOPALOSIPHUM PADI**
Changes in the yield and protein quantity of oat caused by *Rhopalosiphum padi* (L.) (Hom., Aphididae). 21992
- RIBONUCLEIC ACID**
Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876
- Heritable repression due to paramutation in maize. 22036
- Application of stresses to foot-and-mouth disease virus. 22080
- RICE**
The ultrastructure of *Piricularia oryzae* Cav. 21812
- The use of actidione on the control of rice blast. 21813
- Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827
- Taichung Native--I Vs bacterial blight. 21836
- Genetic analysis in rice, VIII. Inheritance of resistance to races 4, 22 and 25 of *Piricularia oryzae*. 21865
- Control of rice blast through forecasts and fungicides. 21911
- Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- Can Taichung Native--I stand up to bacterial blight. 21933
- New approaches in disease control. 21934
- Transmission of transitory yellowing virus of rice by two leafhoppers. 21965
- Pests. 21977
- New methods of pest control. 21989
- Insecticides, fungicides and antibiotics. 21994
- Susceptibility to insecticides of the green rice leafhopper, *Nephotettix cincticeps* Uhler, collected from various localities. 22001
- The response of rice and barnyard grass to 3,4-dichloropropionanilide. 22027
- Controlling barnyard grass in rice. 22028
- Weed control in upland rice at the University of the Philippines College of Agriculture. 22029
- RIFT VALLEY FEVER VIRUS**
Growth of Rift Valley fever virus in tissue culture. 22099

SUBJECT INDEX

RODENTS

RODENTS

A new species of *Fahrenholzia* (Anoplura: Hoplopleuridae) from Texas, with a key to the species of the genus and a list of their known hosts. 21626

Quantitative relationships between fleas and rodents in a Hawaiian cane field. 21683

The distribution of the musk rat and its control in Bavaria. 22032

ROOT ROT

Cylindrocladium root rot of black walnut. (Abstract). 21848

Foot-rot of wheat. 21897

Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium* root rot of beans. 21913

The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. 21941

ROOT ROT (EVERGREENS)

Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822

ROOTS

Difference in phenolic extracts from healthy Douglas-fir roots and those infected with *Poria weirii*. 21822

Factors governing zoospore responses of *Phytophthora megasperma* var. *sojiae* to plant roots. 21864

Comparative susceptibility of large and small spruce roots to *Polyporus tomentosus*. 21950

Flurenol- a herbicide with new properties. 22010

The effects of indoleacetic acid and 2,4-dichlorophenoxyacetic acid on intermediary metabolism of ¹⁴C-labelled organic acids by pea root tips. 22215

ROSA

Virus diseases of the rose. 21958

ROTENONE

Insecticides from plants. 21802

ROTYLENCHULUS NICOTIANA

On the reinfom nematode *Rotylenchulus nicotiana* (Yokoo et Tanaka, 1954) n. comb. in Japan (Tylenchida: Haplolaimidae). 21712

ROUS SARCOMA VIRUS

The complement-fixation test for avian leukosis. 22085

RUST

Selective retention of uredospores by leaves. 21957

Periodicity in aeciospore release in *Gymnosporangium juniperi-virginianae*. 22222

SABADILLA

Insecticides from plants. 21802

SACBROOD

Four important bee diseases. 21674

SACCHARICOCCUS SACCHARI

Morphology of the male pink sugarcane mealybug, *Saccharicoccus sacchari* Ckll. (Pseudococcidae: Homoptera)--Part II. Apterous form. 21647

A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754

SALIVA

Observations on penetration of linden branches by stylets of the aphid *Longistigma caryae*. 21968

SALIVARY GLANDS (INSECTS)

Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677

Developmental interactions in the dipteran salivary gland. 21699

On the alkaline and acid phosphatase in the alimentary tract of *Periplaneta americana* L. (Blattaria: Blattellidae). 21741

A contribution to the alimentary canal, salivary glands and Malpighian tubules of *Saccharicoccus sacchi* Cockerell (Homoptera Pseudococcidae). 21754

SALMONELLA

Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087

Thoughts on the Salmonella problem. 22180

On the legal classification of inspected meat from slaughtered animals in which *Salmonella* was detected. 22181

SALMONELLA TYPHIMURIUM

The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121

Passive hemolytic antibody response of primed, partially resistant mice to heat-killed *Salmonella typhimurium* vaccine. 22128

SAMIA CYNTHIA PRYERI

Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695

SAMPLING (STATISTICS)

Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658

The reliability of a method of sampling stream invertebrates. 21670

SANDY SOILS

Efficacy of Vorlex on mites and nematodes on gladiolus corm debris in sandy soils of Florida. (Abstract). 22004

SANITATION CONTROL (INSECTS)

Four important bee diseases. 21674

SANITATION CONTROL (PESTS)

Orchard sanitation and brown rot control. 21870

SAPROPHYTES

Relative significance of parasitism versus saprophytism in colonization of wheat straw by *Fusarium roseum* Culmorum in the field. 21839

Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035

SCAB (CUCUMBERS)

The effect of scab resistance on fruit length in slicing cucumbers. (Abstract). 21955

SCALY LEG

Scaly leg in poultry--a parasitic disease. 22150

SCARABAEIDAE

Milky disease bacteria. 21590

SCHISTOCERCA GREGARIA

Localization and description of stretch receptors at the level of the tibio-femoral joint of the jumping leg of the cricket, *Schistocerca gregaria*. 21672

Acid phosphatase activity in the digestive system of the desert locust *Schistocerca gregaria* (Forsk.). 21713

SCHIZAPHIS GRAMINUM

The effects of high temperatures on greenbug, *Schizaphis graminum*, reproduction. 21675

SCLEROSPORA SORGHI

The mode of seedling infection of grain sorghum with *Sclerospora sorghi*. (Abstract). 21869

SCLEROTINIA

Bacterial scab, *Sclerotinia* and *Botrytis* rots of *Gladiolus* corms. 21896

SCLEROTIUM ROLFSII

Disease development in guar (*Cyamopsis psoraloides* DC.) and gram (*Cicer arictinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

Sclerotium stem rot. 21904

Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207

Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224

SCOLYTIDAE

A flight trap for collecting living insects. 21587

Hymenoptera associated with elm bark beetles in Wytham Wood, Berks. 21654

Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658

Studies on the olfactory stimuli guiding the bark beetle *Blastophagus piniperda* L. (Coleoptera, Scolytidae) to its host tree. 21691

Territorial behavior of bark-beetle males. 21703

SCOLYTUS MULTISTRIATUS

Hymenoptera associated with elm bark beetles in Wytham Wood, Berks. 21654

SCOLYTUS VENTRALIS

Development of sampling techniques and life tables for the fir engraver *Scolytus ventralis* (Coleoptera: Scolytidae). 21658

SCORPIONIDA

Pharmacology properties of the toxins in the venom of the scorpion (*Androctonus australis*). 21743

SCRUB TYPHUS

The investigation of scrub typhus in the USSR. 22108

SEASONAL VARIATION

Seasonal and zonal distribution of *Ichneumonidae* (Hym.) on a subarctic fell during a calamity of the geometrid moth *Oporinia autumnata* (Bkh.) on birches. 21986

SEASONS

Some seasonal aspects of the growth of tumors on the white spruce, *Picea glauca*. 21949

SECRETION

Sources of larval salivary gland secretion in the dipteran *Chironomus tentans*. 21677

SEED COATS

The interaction of the seed coat and gibberellic acid in the germination of *Datura ferox* L. 22225

SEED DISSEMINATION

Ejection and dissemination of ascospores of *Hypoxylon pruinatum*. 22210

SEED GERMINATION

The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803

Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838

Contribution to the physiological study on the effect of the substance isolated from conidia of the fungus *Erysiphe graminis* f. sp. *hordei* Marchal. 21944

Deterioration of treated and untreated cottonseed during humid storage. 21952

Effects of phenols on the plant. 21961

Interaction of temperature and gibberellin on potato seed germination. 22217

The interaction of the seed coat and gibberellic acid in the germination of *Datura ferox* L. 22225

Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226

SEED TREATMENT

Fertilizer-fungicide combinations for the control of *Pythium* damping-off of tobacco. 21907

Effects of phenols on the plant. 21961

SEED-BORNE PLANT DISEASES

Transmission of tobacco mosaic virus in grape seeds. 21855

Field test of laboratory results in selecting seed dressing fungicides against seed-borne diseases of jute (*Corchorus capsularis* L.). 21887

Loose smut of wheat. 21903

SEEDBEDS

Foot-rot of wheat. 21897

Efficacy of a stale seedbed approach for providing weed control in pickling cucumbers. (Abstract). 22015

SEEDLINGS

The use of actidione on the control of rice blast. 21813

The mode of seedling infection of grain sorghum with *Sclerospora sorghi*. (Abstract). 21869

Thermal stability of stem rust resistance in oat seedlings. 21889

Disease development in guar (*Cyamopsis psoraloides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910

Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951

Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204

Stimulation by 2,4-D and 2,4-D plus Fe EDTA of 32P uptake by bean seedlings (*Phaseolus vulgaris*). 22208

SEEDS

Factors affecting virulence and pigment production of *Xanthomonas phaseoli* var. *fuscans*. 21823

Transmission of tobacco mosaic virus in grape seeds. 21855

Influence of seed size on the incidence of Loose smut in Funza barley. 21880

Chenopodium test for the demonstration of the presence of the lettuce mosaic virus 1 in seeds. 21980

On the two *Megastigmus* species (Hym., Torymidae) of the juniper seed (*Juniperus communis* L.). 21985

Growth responses of some common peanut mycoflora to various extracts from peanut seed. (Abstract). 22207

Effect of pretreatment of pine seeds with herbicides on seed germination and growth of young seedlings. 22226

SEMINAL VESICLES

Opisthorchiasis in swine. 22165

SERODIAGNOSIS

Serologic study of reovirus infection in dogs. 22079

Serologic analysis of bovine vibriosis. 22109

Experiences concerning the preparation and application of mycoplasma antigen. 22119

Infectious laryngotracheitis of poultry. 22125

Neutralising antibodies for avian infectious bronchitis virus in Queensland poultry flocks. 22138

SEROLOGICAL TESTS

Tomato bushy stunt virus from *Prunus avium*. II. Serological typing and the characterization of antibody types and activities. 21816

Tobacco mosaic virus strains in greenhouse tomatoes. 21868

Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871

Identification of two serotypes in squash mosaic virus strains. 21878

Investigations concerning the serological proof of the necrotic ringspot virus of the sour cherry. III. The serological variability of the necrotic ringspot virus of the sour cherry. 21925

Serological behavior of cucumber mosaic virus (strain Y) and the virus protein. 21928

Purification and properties of broad bean wilt virus. 21937

Serological studies on bromegrass mosaic virus and its protein fragments. 21945

The classification of leptospiral strains from Kazakhstan. 22042

Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063

Immunodiffusion reactions between human sera and *Mycoplasma pneumoniae*. 22072

Equine influenza in Mexico. Isolation and study of the strain E/Equi 2/Mexico/1/66. 22073

Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092

The isolation and recognition of viruses. 22093

Serologic comparison of North American and Japanese porcine picornaviruses. 22116

Isolation of the group-specific polysaccharide of *Mycobacterium tuberculosis*. 22130

Blood serum factors associated with erythrophagocytosis in calves with anaplasmosis. 22131

Comparison of a bovine enterovirus and foot-and-mouth disease virus. 22132

Production of antibodies against insecticide-protein conjugates. 22191

SERUM

Tumour metabolic inhibition of serum from partially hepatectomized rats as a specific lack of compensation mechanisms in tumour cells. 22141

SETARIA

The chemical make-up and selective effect of triazine herbicides. 21780

SEX

Sexual reproduction of 'green peach aphid' *Myzus persicae* (Sulz) in Mendoza (Argentina). 21679

SEX ATTRACTANTS

The use of attractants in pest control. 21981

SEX BEHAVIOR

Biology of the black widow spider, *Latrodectus hasselti* Thorell (Araneida: Theridiidae). 21697

SHEEP

Enzootic foot rot control in sheep. 22047

Clinical and pathological studies of Border Leicester rams naturally infected with *Actinobacillus seminis*. 22050

Cradles make footrot treatment easier. 22059

The persistence of foot-and-mouth disease virus in sheep. 22061

Eradicating and controlling brucellosis in sheep. 22068

Abortive and teratogenic effects of locoweed on sheep and cattle. 22097

The transmission of Dermatophilosis (mycotic dermatitis) in sheep. 22102

Keratoconjunctivitis produced by *Moraxella bovis* in laboratory animals. 22127

Influence of Haemonchosis on nutritionally induced ketosis in sheep. 22160

Internal parasites in sheep on the northern tablelands. 22163

Summary of the coprologic analyses of animal strongylosis; results obtained in Meuthet-Moselle. 22169

Carbon tetrachloride injections for liver fluke control. 22170

Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174

SUBJECT INDEX

SHRUBS

Nerve gas: Dugway accident linked to Utah sheep kill. 22195

Phalaris can be poisonous. 22198

SHRUBS

Coleoptera attacking tree and shrub plantings in the city of Kharkov. 21979

SILICA

Potentiality by silica of the growth of *Mycobacterium tuberculosis* in macrophage cultures. 22044

SIMAZINE

The influence of some electrolytes on the absorption and release of triazines on some organic colloids. 22236

SIMULIIDAE

A new species of black fly of the genus *Gymnopaia* (Diptera, Simuliidae) from the Altay. 21596

SIPHONAPTERA

Quantitative relationships between fleas and rodents in a Hawaiian cane field. 21683

Insect tormentors of livestock: III. Fleas and ticks. 22149

How to get rid of ectoparasites of poultry. 22156

SITONA

The sitona weevil—a pest of lucerne (*Sitona humeralis*). 21973

SITOPHILUS

Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera). 21614

SKIN DISEASES

Wrinkled skin disease of apples. 21842

SLAUGHTERHOUSES

Thoughts on the Salmonella problem. 22180

On the legal classification of inspected meat from slaughtered animals in which *Salmonella* was detected. 22181

SMOG

The effects of air pollution on plants and soil. 22182

SMOKE

The effects of air pollution on plants and soil. 22182

SMUT (WHEAT)

Loose smut of wheat. 21903

Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910

SOCIAL INSECTS

Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731

The use of attractants in pest control. 21981

SODIUM

Tests of the flight against the 'melting of seed' of summer onions in Nord Finistere. 22204

SODIUM CHLORIDE

Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665

SODIUM NITRATE

Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydo-spore* germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814

SOIL ADSORPTION

Flurenol—a herbicide with new properties. 22010

The fate of paraquat in soils. 22187

SOIL AMENDMENTS

Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydo-spore* germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814

Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium* root rot of beans. 21913

SOIL CONTAMINATION

The effects of air pollution on plants and soil. 22182

SOIL FUMIGATION

Chemical disinfection of the soil through methylbromide. 22202

SOIL FUNGI

Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydo-spore* germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814

Survival of root-infecting fungi in soil. II. Influence of amendment and soil carbon-to-nitrogen balance on *Fusarium* root rot of beans. 21913

SOIL HORIZONS

Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987

SOIL HYDROGEN-ION CONCENTRATION

Disease development in guar (*Cyamopsis psoraloides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

SOIL INSECTS

The role of soil arthropods in community energetics. 21678

SOIL LEACHING

The leaching of auxin from air layers. 21771

SOIL MICROBIOLOGY

The fate of paraquat in soils. 22187

SOIL MOISTURE

Influence of soil humidity on the location in depth of the galley beet worm during a favorable season. 21659

The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. 21941

Chemical disinfection of the soil through methylbromide. 22202

SOIL SERIES

A further look at neck rot in onions. 21882

Factors influencing the persistence of the herbicide 2,6-dichlorobenzonitrile in various soil types. 22193

SOIL STERILIZATION

Rhizoctonia stem rot. 21901

SOIL STRUCTURE

Factors affecting the performance of pre-emergence and post-emergence herbicides in pickling cucumbers. (Abstract). 22023

SOIL TESTING

Concerning the distribution of freely occurring nematodes of the genus *Pratylenchus* on agriculturally used areas in westphalia-Lippe. 22005

Effect of soil treatment with disulfoton (Dyston) granular under low temperature condition. 22185

SOIL-BORNE PLANT DISEASES

A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849

Disease development in guar (*Cyamopsis psoraloides* DC.) and gram (*Cicer arietinum* L.) attacked with *Sclerotium Rolfsii* under different soil pH conditions. 21890

Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224

SOILS

Aldrin, dieldrin, endrin, and chlordane persistence—a 3-year study. 21593

Virulence of *Rhizoctonia solani* as influenced by age of inoculum in soil. 21872

Research on the natural diffusion of soil-borne grape virus diseases in the Italian environment. 21917

Isolation, incidence, and virulence of *Ascochyta* spp. of peas from the soil. 21947

Problems of nematode control in Bavarian potato cultures. 22003

Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012

M-N-ethylaminobenzoic acid: absence of phytotoxic activity. 22227

SOLANACEAE

Artificial light induced leaf lesions in a diploid *Solanum* accession. (Abstract). 21811

SORGHUM

The chemical make-up and selective effect of triazine herbicides. 21780

The mode of seedling infection of grain sorghum with *Sclerospora sorghi*. (Abstract). 21869

Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943

SOYBEANS

Relative quantities of antifungal metabolites produced in resistant and susceptible soybean plants inoculated with *Phytophthora megasperma* var. *sojae* and closely related nonpathogenic fungi. 21858

Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864

SPHAEROCERA

Revision of *Sphaerocera*, with description of a new genus *Afomyia* (Diptera: Sphaeroceridae). 21615

SPHAEROCERA RICHARDSI

Revision of *Sphaerocera*, with description of a new genus *Afomyia* (Diptera: Sphaeroceridae). 21615

SPHAEROCERA TUBERCULOSA

Revision of *Sphaerocera*, with description of a new genus *Afomyia* (Diptera: Sphaeroceridae). 21615

SUBJECT INDEX

STYLETS

- SPIDERS**
A collection of spiders from Son Norway. 21642
Territoriality in the sheet-web spider *Linyphia triangularis* (Clerck) (Araneae, Linyphiidae). 21731
- SPLEEN**
The mechanism of lymphopenia produced by chronic irradiation of the rat spleen. 22083
- SPORE GERMINATION**
Survival of root-infecting fungi in soil. III. The effect of cellulose amendment on *Chlamydomyces* germination of *Fusarium solani* f. sp. *phaseoli* in soil. 21814
Analysis of epidemics of the tobacco (Peronospora tabacina Adam) mildew in the Gembloux area. 21867
Selective retention of uredospores by leaves. 21957
- SPORES**
Accumulation of hypoxanthine in potato leaves and its effect on spore germination in *Phytophthora infestans*. 21838
Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932
Development and sporulation of *Polyporus hispidus*. (Abstract). 22220
- SPOROZOA**
Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- SPOT BLOTCH**
Chlamydomyces formation in conidia of *Helminthosporium sativum*. 21893
- SPOTTED WILT (TOMATOES)**
Tomato spotted wilt (tomato spotted wilt virus). 21900
- SPRAYING**
Mortality due to *Bacillus thuringiensis* in post-larval stages of some Lepidoptera. 21650
The Australian plague locust *Chortoicetes terminifera*. 21668
New knowledge concerning wire stringing in fruit growing. 21767
Foliar absorption of boron by Bartlett pears. (Abstract). 21775
Chemical alteration of sex expression in cucumbers and cantaloupes. (Abstract). 21783
Inhibition of axillary bud growth of *Chrysanthemum morifolium* with fatty acids esters. (Abstract). 21789
Gibberellin A4/A7, for induction of staminate flowers on the gynoceious cucumber. (Abstract). 21794
Forest plant protection problems in Bavaria. 21799
Influence of growth regulators on the concentration of protein and nucleic acids in grape flowers. (Abstract). 21805
Concentrate spray-thinning of apples. (Abstract). 21808
Growth regulators to control lettuce bolting. (Abstract). 21850
Some effects of a growth retardant on shoot meristems of apple. (Abstract). 21951
Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (Acarina: Tetranychidae), on greenhouse cucumbers. 21970
Research on the chemical control of *Aceria sheltoni*. 21999
Experiments with Tordon herbicide in small grains. 22013
Up to date weed control in horticulture. 22022
Lice of poultry. 22153
Control of the hamster pest. 22155
Poisoning of bees by insecticides. 22183
New directions in virus control in vegetable and potato cultivation. 22231
- SPRAYING EQUIPMENT**
Mist sprayers for applying insecticides of low volume. 22239
- SQUIRRELS**
A new nematode parasite *Ancylostoma sindhensis* (Ancylostomidae: Strongyloidea) from intestine of the common striped squirrel, *Funambulus pennanti argentescens* wroughton, from Lower Sind. 22167
- STAPHYLINIDAE**
Three new species of African *Gabrius* (Col. Staphylinidae Philonthini). 21622
On *Stenus* (*Parastenus*) *alpicola* Fauvel and other divergently evolved Palearctic *Parastenus*-species (Col., Staphylinidae). 44. Contribution to the knowledge of the Stenidae. 21631
Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987
- STAPHYLOCOCCUS**
Influence of egg albumin-induced leukopenia on experimental *Aerobacter aerogenes* mastitis and on natural infection of mammary gland with coagulase-negative *Staphylococcus* in a cow. 22096
- STAPHYLOCOCCUS AUREUS**
Structure and antigenic properties of a staphylococcal L form. 22038
- STARCHES**
Corn earworm damage to ears with starchy (Su.) versus (su.) kernels on genetically uniform mother plants. (Abstract). 21770
- STEM ROT**
Rhizoctonia stem rot. 21901
Sclerotium stem rot. 21904
- STEM RUST**
Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
- STEM RUST (OATS)**
Thermal stability of stem rust resistance in oat seedlings. 21889
- STEM RUST (WHEAT)**
An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- STERILITY**
Eradicating and controlling brucellosis in sheep. 22068
- STERILIZATION**
A waxed-paper laboratory cage for sterilization studies with the Oriental fruit moth, *Grapholitha molesta* (Busck) (Lepidoptera: Tortricidae). 21682
- Research on biological pest control. 21734
Main currents in research concerning sterilization methods of insects. 21735
Investigation of sterilizing doses for *Ephesttia kunniiella* L. in irradiation in various stages of development. 21755
- STEROLS**
Estradiol annulment of sterol-induced sexual reproduction by *Pythium periplocum*. (Abstract). 22213
- STILBENE**
Antifungal activity of isothiocyanates and related compounds III. Derivatives of diphenyl, stilbenc, azobenzene, and several polycondensed aromatic hydrocarbons. 22235
- STORAGE**
Stability of *Chilo iridescent* virus. 21707
Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827
Deterioration of treated and untreated cottonseed during humid storage. 21952
Whole godown fumigation is economical and safe. 22177
- STORED PRODUCTS**
Adaptive significance of mycophagy in stored-product Arthropoda. 21764
- STREPTOCOCCUS**
Survey shows weakness in mastitis control. 22054
Influence of *Streptococcus equisimilis* on sites of endochondral ossification in swine. 22129
- STREPTOMYCES GRISEUS**
New antibacterial agent (U-24,544) isolated from *Streptomyces griseus*. 21781
- STRESS**
Application of stresses to foot-and-mouth disease virus. 22080
- STRIDULATION**
Warning sounds of moths. 21673
- STRIPE RUST (WHEAT)**
A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939
- STRONGYLOIDES**
Seasonal incidence and bionomics of some common gastrointestinal nematode larvae of sheep and goats. 22174
- STRONGYLOSIS**
Summary of the coprologic analyses of animal strongylosis; results obtained in Meuthe-et-Moselle. 22169
- STUNT**
Host range of peanut stunt virus in *Trifolium* spp. (Abstract). 21837
Burley tobacco naturally infected with peanut stunt virus in North Carolina. (abstract). 21856
- STYLETS**
Application of scanning microscopy in the study of virus transmission of aphids. 21584
Observations on penetration of linden branches by stylets of the aphid *Longistigma caryae*. 21968

SUBJECT INDEX

SUCCINIC ACID, 2,2DIMETHYLHYDRAZIDE

- SUCCINIC ACID, 2,2-DIMETHYLHYDRAZIDE**
Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars. (Abstract). 21796
- SUGAR BEETS**
Influence of soil humidity on the location in depth of the galley beet worm during a favorable season. 21659
- SUGARCANE**
Quantitative relationships between fleas and rodents in a Hawaiian cane field. 21683
Ecological studies of certain natural mortality factors of the sugarcane borer, *Diatraea saccharalis* (Fabricius) in Louisiana. 21714
Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
Studies of the host-parasite relationship in the pineapple disease of sugarcane. 21830
Some observations on egg diapause in the Trinidad sugar cane froghopper, *Aeneolamia varia saccharina* (Homoptera, Cercopidae). 21969
Cutting down cane losses from termites and shoot borer. 21978
- SUGARS**
Effect of growth-regulators on translocation and distribution of amino acids, organic acids, and sugars in Muscat of Alexandria grapes. (Abstract). 21930
- SULFUR**
Powdery mildew of the grapevine. 21899
- SULFUR COMPOUNDS**
Mites of camellia. 21972
- SULFUR DIOXIDE**
The effects of air pollution on plants and soil. 22182
- SUNFLOWERS**
Free amino acids of sunflower hypocotyl tissue during crown gall tumor development. 21824
- SUPERPHOSPHATES**
Foot-rot of wheat. 21897
- SUPPLY AND DEMAND**
The importance of plant protection for world harvest. 21786
The need for international testing centers for crop pests and pathogens. 21806
Organizing agricultural research to assist developing countries. 22242
- SURFACE-ACTIVE AGENTS**
A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200
- SURVEYS**
The reliability of a method of sampling stream invertebrates. 21670
The role of soil arthropods in community energetics. 21678
Survey of epidemic diseases of forest trees in Taiwan IV. 21773
Virus disease survey on citrus in Aegean region. 21909
Mycobacterium avium infection in cattle: A case series. 22066
Ciguatera poisoning in cats in Brisbane. 22070

- Prevalence of salmonellosis and blackleg in material from cattle examined during the five-year period 1963-1967 in the state of Sao Paulo. 22087
Newcastle disease in England and Wales control by vaccination--the first year. 22111
The occurrence of foot-and-mouth disease in the state of Sao Paulo in 1968. 22120
Epidemiology of helminth infestation of beef cattle in central Queensland. 22176
- SWINE**
Balantidiasis may be more common than we think. 22043
Diseases of pigs and their control. SF971.B4. 22051
Quantitation of susceptibility of swine to infection with *Pasteurella tularensis*. 22053
Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063
Regrowth of primary cell cultures after infection with foot-and-mouth disease virus. 22064
Attempts to recover *Mycoplasma suis* pneumoniae from experimental and natural cases of enzootic pneumonia in pigs. 22088
Production of enzootic pneumonia in pigs with *Mycoplasma suis* pneumoniae grown in embryonated hen's eggs. 22089
Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
Evaluation of the fluorescent antibody-cell culture test for hog cholera diagnosis. 22114
Serologic comparison of North American and Japanese porcine picornaviruses. 22116
Influence of *Streptococcus equisimilis* on sites of endochondral ossification in swine. 22129
Vaccination against leptospirosis: Immunogenicity of viable, avirulent *Leptospira pomona* in hamsters, swine, and cattle. 22137
Swine fever eradication campaign 1963-64. 22142
External parasites of pigs. 22147
Recovery of porcine liver from damage caused by migrating X-irradiated and nonirradiated larvae of *Ascaris suum*. 22162
Opisthorchiasis in swine. 22165
- SWINE HOUSES**
Diseases of pigs and their control. SF971.B4. 22051
- SYMBIOSIS**
Some considerations on the name bovine malaria. 22133
- SYNANTHEDON**
Synanthedon flaviventris Stgr. (Lep., Aegeriidae) found in Suomesta. 21690
- SYNANTHEDON PICTIPES**
Notes on Bivoltinism in the lesser peach tree borer, *Synanthedon pictipes* (G and R). 21663
- SYRPHIDAE**
The male of *Neoascia petsamoensis* Kanervo (Dipt., Syrphidae) with remarks on the females and the distribution of the species. 21608

- A redescription of *Neoascia aenea* Meig. (Dipt., Syrphidae). 21609
- TABLES (DATA)**
The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585
Fleas found on rabbits and other mammals from a pasture. 21586
Aldrin, dieldrin, endrin, and chlordane persistence--a 3-year study. 21593
Action of insect hormones on the fate of C-glucose in the diapausing, brainless pupa of *Samia cynthia pryeri* (Lepidoptera: Saturniidae). 21695
The effects of integrated plant protection methods. 21797
Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908
Virus disease survey on citrus in Aegean region. 21909
The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927
The use of density gradient centrifugation in a zonal centrifuge rotor during the purification of a pear virus. 21940
Up to date weed control in horticulture. 22022
Contribution to the knowledge of the possible influence of pesticides on game. 22186
Guiding experiments concerning the influence of herbicides on the spicule development of spring barley after applications. 22230
- TAPHRINA DEFORMANS**
Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916
- TAXONOMY**
Some anatomical differences of possible taxonomic value in the female reproductive organs of *Sitophilus* (Curculionidae: Coleoptera). 21614
New records of Carabidae (Coleoptera) from Northumberland. 21623
Genera and species of the Dermaptera. 8 Eudohrniinae, Neolobophorinae, Ancistrogastrinae, Diaperasticinae and Anechurinae (Forficulidae). 21630
Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
Notes on the smut genera *Entorrhiza* and *Schroeteria*. 21938
A new nematode parasite *Ancylostoma sindhensis* (Ancylostomidae: Strongyloidea) from intestine of the common striped squirrel, *Funambulus pennanti argentescens* wroughton, from Lower Sind. 22167
- TELODRIN**
Cutting down cane losses from termites and shoot borer. 21978
- TEMPERATURE**
Termites- roasted or as a soup. 21592
Larval diapause in the tick *Ixodes ricinus* L. and its dependence on external conditions. IV. In-

- teraction between exogenous and endogenous factors in the regulation of larval diapause. 21655
- The effects of high temperatures on greenbug, *Schizaphisgraminum*, reproduction. 21675
- A biochemical look at insect diapause. 21684
- The rate of passage of food and the effect of temperature in two noctuid caterpillars. 21702
- Stability of *Chilo iridescent* virus. 21707
- Changes in the respiratory metabolism of *Rhodnius prolixus* as induced by temperature. 21718
- Ring gland transplantations and body weight in *Drosophila*. 21739
- The temperature-sensitive period in the development of rolled hemizygotes of *Drosophila melanogaster*. 21759
- Effect of fluorescent lighting beyond the normal day on the flowering of the carnation. 21769
- Dormancy of onion sets as influenced by irradiation, gibberellin and temperature treatments. (Abstract). 21782
- Characterization of three bacteriophages of *Xanthomonas oryzae* (Ucyda et Ishiyama) Dowson. 21788
- Penetration of naphthaleneacetic acid and naphthaleneacetamide through isolated pear leaf cuticle. 21793
- Aflatoxin production by *Aspergillus flavus* as related to various temperatures. 21798
- The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803
- Accumulation of aflatoxins in stored rice in relation to competition between *Aspergillus parasiticus* and *A. chevalieri*. (Abstract). 21827
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833
- Cylindrocladium root rot of black walnut. (Abstract). 21848
- Growth regulators to control lettuce bolting. (Abstract). 21850
- Analysis of epidemics of the tobacco (*Peronospora tabacina* Adam) mildew in the Gembloux area. 21867
- Major and minor genes in wheat for resistance to *Puccinia striiformis* and their responses to temperature changes. 21883
- Thermal stability of stem rust resistance in oat seedlings. 21889
- Aflatoxins: Production of the toxins in vitro in relation to temperature. 21926
- The influence of induced soil moisture stress upon *Fomes annosus* root rot of loblolly pine. 21941
- Carabidae and Staphylinidae occurring on soil surface in lucerne fields. 21987
- Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012
- Studies on leptospiral lipase. I. Characterization of lipases from pathogenic and saprophytic strains. 22035
- Propagation of the Newcastle disease virus on tissue cultures at different temperatures. 22067
- Effects of temperature on in vitro excystation of various *Eimeria* species. 22091
- Effect of soil treatment with disulfoton (*Disyston*) granular under low temperature condition. 22185
- Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209
- Interaction of temperature and gibberellin on potato seed germination. 22217
- Light and temperature effects on growth and sporophore formation of *Lenzites trabea*. 22218
- TENTHREDINIDAE**
Endophytus anemones (Hering) in Finland (*Hym.*, Tenthredinidae). 21637
- TERMITES**
Termites- roasted or as a soup. 21592
- Cuticular esterase in the sternal gland of *Calotermes flavicollis* F. (Isoptera, Termitidae). 21724
- Cutting down cane losses from termites and shoot borer. 21978
- TETRANYCHUS CINNABARINUS**
Selecting tomatoes for resistance to spider mites. 21997
- TETRANYCHUS TELARIUS**
Description of the adult *Tetranychus telarius* L. (*Acarina*, Tetranychidae). 21740
- TETRANYCHUS URTICAE**
Some factors influencing control of the two-spotted spider mite *Tetranychus urticae* Koch (*Acarina*: Tetranychidae), on greenhouse cucumbers. 21970
- THERAPEUTICS**
Virus diseases of the rose. 21958
- THINNING SPRAYS**
Concentrate spray-thinning of apples. (Abstract). 21808
- THRIPS TABACI**
Tomato spotted wilt (tomato spotted wilt virus). 21900
- THUJA PLICATA**
Experiments on the precocious flowering of western red cedar and four species of *Cupressus* with gibberellins A3 and A4/A7 mixture. 22223
- TILIA AMERICANA**
Observations on penetration of linden branches by stylets of the aphid *Longistigma caryae*. 21968
- TILLAGE**
Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars, (Abstract). 21796
- Changed method of nata use in the control of *Agropyron repens* on arable land. 22014
- TILLETIA CARIES**
Vitavax- a new systemic fungicide. 21936
- TILLETIA CONTROVERSA**
Vitavax- a new systemic fungicide. 21936
- TIMBER**
Buprestis aurulenta L. (*Col.*, Buprestidae) in Ireland. 21727
- TIME**
Significance of the time factor in the irradiation of imago insects (experiments on granary weevils). 21667
- Three-year effects of systemic fungicides applied for the control of *Cytospora* in Italian prune trees. 21862
- Virulence of *Rhizoctonia solani* as influenced by age of inoculum in soil. 21872
- The three R's of herbicide use. 22017
- TINGIDAE**
Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
- TIPBURN (LETTUCE)**
Lettuce growth and tipburn incidence under controlled humidity. (Abstract). 21768
- Lettuce tipburn and nitrogen metabolism. (Abstract). 21921
- TIPULIDAE**
The larvae and pupae of the British *Cylindrotominae* and *Limoninae* (Diptera, Tipulidae). 21664
- TISSUE CULTURE**
Comparison of selected characteristics of four strains of infectious bovine rhinotracheitis virus. 22058
- Regrowth of primary cell cultures after infection with foot-and-mouth disease virus. 22064
- African swine fever. Application of immunofluorescence to the study of tissue cultures. 22065
- Propagation of the Newcastle disease virus on tissue cultures at different temperatures. 22067
- Application of stresses to foot-and-mouth disease virus. 22080
- Production of enzootic pneumonia in pigs with *Mycoplasma suis* pneumoniae grown in embryonated hen's eggs. 22089
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
- Growth of Rift Valley fever virus in tissue culture. 22099
- Cytologic studies in polyoma virus-infected mouse embryo cells. 22104
- Synthesis and cytopathogenesis of African swine fever virus in porcine cell cultures. 22117
- Infectious bovine rhinotracheitis: Correlation of fetal and placental lesions with viral isolations. 22123
- Comparison of a bovine enterovirus and foot-and-mouth disease virus. 22132
- TISSUES**
Fine structural characterization of plant microbodies. 21777
- Free amino acids of sunflower hypocotyl tissue during crown gall tumor development. 21824
- Biochemical changes during the development of cork spot of 'York Imperial' apples. (Abstract). 21846

SUBJECT INDEX

TOBACCO

- Production of pectic and cellulolytic enzymes by *Phytophthora infestans* de By. II. Infection of potato tubers. 21860
- Ozone damage and semimature-tissue needle blight of eastern white pine. 21884
- Texas (splenic) fever in cattle. Permitted dips. 22046
- Food additives permitted in food for human consumption arsenic. 22194

TOBACCO

- Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832
- A selective medium for isolation of *Phytophthora parasitica* var. *nicotianae* from soil. (abstract). 21849
- Burley tobacco naturally infected with peanut stunt virus in North Carolina. (abstract). 21856
- Analysis of epidemics of the tobacco (*Peronospora tabacina* Adam) mildew in the Gembloux area. 21867
- The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus. 21875
- Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876
- Fertilizer-fungicide combinations for the control of *Pythium* damping-off of tobacco. 21907
- Morphology and pathogenicity of single-spore isolates of *Alternaria longipes*. (Abstract). 21932
- Fine structure of inclusions formed by the aucuba strain of tobacco mosaic virus. 21948

TOMATOES

- Effects of Alar treatment on growth, flowering, and fruiting of greenhouse tomato cultivars. (Abstract). 21796
- Longevity of tomato plants in diseased fields as affected by breeding. (Abstract). 21853
- Verticillium Wilt of tomatoes. Tests with resistant lines. 21857
- Tobacco mosaic virus strains in greenhouse tomatoes. 21868
- Non-random segregation of gene I for *Fusarium* resistance in the tomato. 21873
- Bacterial canker of tomato (*Corynebacterium michiganense*). 21905
- Penetration of gene I for *Fusarium* resistance in the tomato. 21920
- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- Reaction of tomato varieties and breeding lines to aphids. 21996
- Selecting tomatoes for resistance to spider mites. 21997

TORTRICIDAE

- Sex pheromone specificity tests in the Tortricidae--an introductory report. 21729

TOXICOLOGY

- The effect of age, SKF 525- a hydrochloride, and chlorcyclizine dihydrochloride on the toxicity of parathion to adult alkali bees, *Nomia melanderi* kll. 21708

- American cotton is allergic to 2,4-D. 21818
- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833
- Changed method of nata use in the control of *Agropyron repens* on arable land. 22014
- Moldy corn poisoning as the major cause of an encephalomalacia syndrome in Egyptian equidae. 22048
- Poisoning of cattle by *Polygala klotzchii*, Chodat, in the region of Pontal (State of Sao Paulo). 22062
- Toxicity studies of *Listeria monocytogenes* grown in vivo. 22075
- Abortive and teratogenic effects of locoweed on sheep and cattle. 22097
- In vivo production of a toxin(s) by *Listeria monocytogenes*. 22113
- Commonwealth of Australia Dept of Health Public Health Branch. Pesticides Review. 22184
- Contribution to the knowledge of the possible influence of pesticides on game. 22186
- Food additives permitted in food for human consumption arsenic. 22194
- Nerve gas: Dugway accident linked to Utah sheep kill. 22195
- Pesticides and water. TD427.P38G3. 22197
- Phalaris can be poisonous. 22198
- Laboratory and field trials with a new raticide selective toxic for rats. 22199
- A proposed method for evaluation of wetting agents on organic amendments used in horticulture. (Abstract). 22200
- Fungal detoxication-IX. Metabolism of 1-naphthaleneacetic acid by *Aspergillus niger* van Tiegh. 22206
- M-N-ethylaminobenzoic acid: absence of phytotoxic activity. 22227
- The influence of phosphate on the phytotoxicity of 3-Amino-1,2,4-triazole. 22229

TOXINS

- Pharmacology properties of the toxins in the venom of the scorpion (*Androctonus australis*). 21743
- Amyloidosis induced in mice by *Escherichia coli* endotoxin. 22034
- Electrophoretic fractionation of *Clostridium hemolyticum* toxic culture fluids. 22112
- In vivo production of a toxin(s) by *Listeria monocytogenes*. 22113

TRANSPLANTING

- Ring gland transplantations and body weight in *Drosophila*. 21739

TRAPS

- The response of *Rhagoletis pomonella* (Walsh) adults and other insects to trap boards baited with protein hydrolysate baits. 21585
- Fleas found on rabbits and other mammals from a pasture. 21586
- A list of Sinhalese aphids (Hem., Aphididae). 21688

TREE DISEASES

- Survey of epidemic diseases of forest trees in Taiwan IV. 21773
- Virus disease survey on citrus in Aegean region. 21909

TREES

- Survey of epidemic diseases of forest trees in Taiwan IV. 21773
- Alterations in the peach trees (cv. red haven) attacked by *Taphrina deformans* with particular reference to the nitrogen metabolism in infected and non-infected leaves. 21916
- Magnesium nutrition of apple trees as affected by a wide range of fertilizer materials. (Abstract). 21931
- Effect of cytokinins on apple shoot development from axillary buds. 21953
- Coleoptera attacking tree and shrub plantings in the city of Kharkov. 21979

TREMATODA

- The working party of fascioliasis in Wales. 22078
- Internal parasites in sheep on the northern tablelands. 22163
- Oxygen consumption in adult *Echinostoma revolutum*. 22172

TRIAZINE

- The chemical make-up and selective effect of triazine herbicides. 21780

TRIBOLIUM

- An experimental and genetic analysis of dispersal behavior in *Tribolium*. 21761

TRICHINELLA SPIRALIS

- Diffusion chambers for inducing immunity to *Trichinella spiralis* in mice. 22161

TRICHLORFON

- Cutworms and armyworms. 21983

TRICHLOROACETIC ACID

- Changed method of nata use in the control of *Agropyron repens* on arable land. 22014

TRICHODERMA VIRIDE

- Effect of *Trichoderma viride* on saccharase activity and growth of *Sclerotium rolfsii* in mixed soil culture. (Abstract). 22224

TRICHOMONAS

- Diagnosis of *Trichomonas foetus* infection in bulls. 22140

TRICHOMONIASIS

- Diagnosis of *Trichomonas foetus* infection in bulls. 22140

TRICHOPTERA

- Data on the caddisfly (Trichoptera) fauna of Siberia and the Far East. 21621
- Trichoptera collected in Sor-Trondelag County. 21634
- Insecticide treatment of water lily ponds to stop caddis fly damage. 21971

TRICHURIS

- Some aspects of nutrition in parasites. 22171

TRIFLURALIN

- Trifluralin-treated cloth controls weeds in geranium plantings. (Abstract). 22012

SUBJECT INDEX

VIRUS DISEASES (PLANTS)

- TROGODERMA GRANARIUM**
A cytological study of changes in the fat body of *Trogoderma granarium* during metamorphosis, with special reference to the proteinaceous globules. 21710
- TROMBICULIDAE**
Trombiculid mites (Acariformes, Trombiculidae) from the Crimea. 21633
- TRYPTOPHAN**
Auxin (plant hormones) production in plants. 21801
- TUBERCULIN TEST**
Methods of restraining cattle for tuberculin testing. 22040
- TUBERCULOSIS**
Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- TUBERCULOSIS VACCINES**
Experimental immunity to tuberculosis in rabbits immunized with BCG microsomal fraction. 22060
- TURF**
Infection and development of *Helminthosporium sorokinianum* in *Agrostis palustris*. 21861
- TURKEYS**
National poultry and turkey improvement plans and auxiliary provisions. Notice of proposed rule making. 22045
Food additives permitted in food for human consumption arsenic. 22194
- ULMUS AMERICANA**
Histochemical studies on the alteration of lignin and pectic substances in white elm infected by *Ceratocystis ulmi*. 21852
- ULTRAVIOLET RAYS**
The effect of the near ultra-violet light (3000A4000A) on the physiological development of cucumbers *Cucumis sativus*, cultivar Spartan Dawn. (Abstract). 21792
Application of stresses to foot-and-mouth disease virus. 22080
- UPLAND COTTON**
American cotton is allergic to 2,4-D. 21818
- UREDIA**
An electron microscope study of intravacuolar bodies in the uredia of wheat stem rust and in hyphae of other fungi. 22228
- UREDINALES**
The autoecious species of *Puccinia* on Helianthaceae in North America. 21914
- UREDOSPORES**
Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834
Uredospore production of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature. 22209
- USTILAGINALES**
Notes on the smut genera *Entorrhiza* and *Schroeteria*. 21938
- USTILAGO HORDEI**
Vitavax- a new systemic fungicide. 21936
- USTILAGO NUDA**
Influence of seed size on the incidence of Loose smut in Funza barley. 21880
Loose smut of wheat. 21903
- Vitavax- a new systemic fungicide. 21936
- USTILAGO TRITICI**
Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910
- VACCINES**
Studies of live attenuated Japanese encephalitis vaccine in swine. 22107
Swine fever eradication campaign 1963-64. 22142
- VAPORS**
American cotton is allergic to 2,4-D. 21818
- VEGETABLES**
New directions in virus control in vegetable and potato cultivation. 22231
Polarography of trace doses of Karathane. 22234
- VEINS**
Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832
- VENATION (INSECTS)**
Genetic variability in *Isonurana* damselflies. 21760
- VENOMS**
Pharmacology properties of the toxins in the venom of the scorpion (*Androctonus australis*). 21743
- VERTICILLIUM ALBO-ATRUM**
Respiratory and enzymatic studies with *Verticillium albo-atrum* from cotton. 22219
- VERTICILLIUM DAHLIAE**
Verticillium Wilt of tomatoes. Tests with resistant lines. 21857
- VETERINARY MEDICINE**
Purina poultry worming tablets. Drugs for veterinary use; drug efficacy study implementation. 22152
- VIBRATION**
Response characteristics and probable behavioural roles for abdominal vibration receptors of some cockroaches. 21680
- VIBRIO**
The effect of *Vibrio* fetus vaccination on the breeding efficiency of cows bred to *Vibrio* fetus-infected bulls. 22084
Serologic analysis of bovine vibriosis. 22109
- VIBRIOSIS**
Eradication of vibriosis from a stud herd. 22118
- VIROLOGY**
Current activities--Lasswade. 22039
Infectious laryngotracheitis of poultry. 22125
- VIRUCIDES**
Contagious pleuro-pneumonia of goats. 22095
- VIRUS DISEASES**
Growth of Rift Valley fever virus in tissue culture. 22099
- VIRUS DISEASES (ANIMALS)**
Virus-like particles in the spiral ganglion of the guinea pig cochlea. 22037
The morphological and biological effects of various antisera on avian infectious bronchitis virus. 22052
Britains's experience with foot and mouth disease. 22074
The complement-fixation test for avian leukosis. 22085
- Laboratory differences between the WS strain of influenza A virus and its neurotropic variants. 22092
Studies on pathology of respiratory diseases of poultry with special reference to viral and P. P. L. O. infections. 22122
Infectious bovine rhinotracheitis: Relationship of level of maternal antibody titer to incidence of fetal death and abortion. 22124
Chemically characterized media for study of foot-and-mouth disease virus in baby hamster kidney cells. 22126
Neutralising antibodies for avian infectious bronchitis virus in Queensland poultry flocks. 22138
Immunologic and histologic studies of a hamster adenovirus tumor and a mouse mammary tumor. 22143
Relation of interferon synthesis to abortive replication of Newcastle disease virus in L cells. 22145
- VIRUS DISEASES (INSECTS)**
Infection of cultured silkworm embryos with the cytoplasmic-polyhedrosis virus. 21591
- VIRUS DISEASES (PLANTS)**
Tomato bushy stunt virus from *Prunus avium* L. I. Field studies and virus characterization. 21815
Tomato bushy stunt virus from *Prunus avium*. II. Serological typing and the characterization of antibody types and activities. 21816
Electron microscopic observations on the apparent replication in vivo of a plant virus. 21817
Clonal selection of grapevines in some areas of Italy. 21819
Chemical, physical and biological properties of four strains of sugarcane mosaic virus. 21828
Tobacco leaf veins in sources of a cucumber mosaic virus for aphids. 21832
Citrus fruit virus diseases in the light of the results of the 4th conference of the I.O.C.V. 21835
Host range of peanut stunt virus in *Trifolium* spp. (Abstract). 21837
Wrinkled skin disease of apples. 21842
Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
Transmission of tobacco mosaic virus in grape seeds. 21855
Burley tobacco naturally infected with peanut stunt virus in North Carolina. (abstract). 21856
Studies on some strains of tobacco mosaic virus in orchids. I. Biological, chemical, and serological studies. 21871
The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus. 21875
Susceptibility to tobacco mosaic virus in relation to RNA and protein synthesis in tobacco and bean plants. 21876
mathematical models for infectivity dilution curves of plant viruses. 21877
Identification of two serotypes in squash mosaic virus strains. 21878
Preventive measures can control bunchy top. 21892

SUBJECT INDEX

VIRUS DISEASES PLANTS

- Virus diseases of deciduous fruit trees: Apple mosaic. 21898
- Tomato spotted wilt (tomato spotted wilt virus). 21900
- Interceptions in plant quarantine for the year ending 30th June, 1966. 21902
- Investigations of inhibiting mechanisms in virus-infected plants. 3rd communication. Problems of the mechanical transmission of fruit virus to herbaceous host. 21908
- Virus disease survey on citrus in Aegean region. 21909
- Research on the natural diffusion of soil-borne grape virus diseases in the Italian environment. 21917
- Radial mosaic virus of grapevines. 21918
- Investigations concerning the serological proof of the necrotic ringspot virus of the sour cherry. III. The serological variability of the necrotic ringspot virus of the sour cherry. 21925
- The dynamics of virus-induced changes in the release of substances from leaves and sprouts. 21927
- Serological behavior of cucumber mosaic virus (strain Y) and the virus protein. 21928
- Purification and properties of broad bean wilt virus. 21937
- The use of density gradient centrifugation in a zonal centrifuge rotor during the purification of a pear virus. 21940
- Effect of maize dwarf mosaic virus infection on respiration and photosynthesis of corn. 21942
- Comparisons of chloroplasts and photosynthetic rates of plants infected and not infected by maize dwarf mosaic virus. 21943
- Serological studies on bromegrass mosaic virus and its protein fragments. 21945
- Fine structure of inclusions formed by the aucuba strain of tobacco mosaic virus. 21948
- Virus diseases of the rose. 21958
- Transmission of transitory yellowing virus of rice by two leafhoppers. 21965
- Chenopodium test for the demonstration of the presence of the lettuce mosaic virus 1 in seeds. 21980
- New directions in virus control in vegetable and potato cultivation. 22231
- VIRUS DISEASES PLANTS**
Research and identification of low titre and avirulent viruses or grapevines. 21820
- VIRUS HEPATITIS**
Comparative pathological anatomy of the hepatitis virus of man and dogs. 22101
- VIRUS Y (POTATOES)**
New directions in virus control in vegetable and potato cultivation. 22231
- VIRUSES**
Host specificity and serologic disparity of African swine fever virus and amphibian polyhedral cytoplasmic viruses. 22063
- The isolation and recognition of viruses. 22093
- Some considerations on the name bovine malaria 22133

VISCERA

- A biochemical look at insect diapause. 21684
- Transdetermination in the layout of the organs of the *Drosophila* fly. 21753

VITAMIN B COMPLEX

- The role of diet and the reticuloendothelial system in the response of rats to *Salmonella typhimurium* infection. 22121

VITAMINS

- Termites- roasted or as a soup. 21592

WATER

- Effects of altering the composition and volume of the haemolymph on water ingestion of the blowfly, *Lucilia cuprina*. 21665

- Foliar absorption of boron by Bartlett pears. (Abstract). 21775

- The effects of kinetin in overcoming high-temperature inhibition of lettuce seed germination. (Abstract). 21803

- The relationship between calcium magnesium, and potassium accumulation and titratable acidity in the leaves of selected McIntosh apple clones. (Abstract). 21841

- Effect of antifungal compounds on aspergillosis in hatching chick embryos. 21866

- The effect of leaf water balance on the susceptibility of French bean to tobacco necrosis virus. 21875

- Selective retention of uredospores by leaves. 21957

- Virus diseases of the rose. 21958

- Pesticides and water. TD427.P38G3. 22197

- Studies on effectiveness of suspensibility with preparation technique of W.P. formulations. 22237

WATER ANALYSIS

- Pesticides in water. Amitrole concentrations in creek waters downstream from an aerially sprayed watershed sub-basin. 22241

WATER CORE (APPLES)

- Toxicity of fermentation products accumulating in watercored 'Delicious' apples. (Abstract). 21833

WATERMELONS

- Identification of two serotypes in squash mosaic virus strains. 21878

WEATHER

- Termites- roasted or as a soup. 21592
- Weather conditions and daily activity of dragonflies (Odonata). 21656

- Reaction of tomato varieties and breeding lines to aphids. 21996

- Current activities--Lasswade. 22039

WEED CONTROL

- Important plant protection problems in Bavarian agriculture. 21776

- Weedicides in sedge control trials. 22018

- Australian sedge in New Zealand. 22020

- Mechanical control of cotton weeds. 22025

WEEDS

- The importance of plant protection for the world harvest. 21785

- Forest plant protection problems in Bavaria. 21799
- Some important weeds in the Northern Territory. 22008
- Chemical weed control in pickling cucumbers. (Abstract). 22021
- Up to date weed control in horticulture. 22022

WHEAT

- Production of aflatoxin on wheat and oats: Measurements with a recording densitometer. 21807

- Measurement of oxygen consumption of wheat stem rust uredospores with an oxygen electrode. 21834

- Major and minor genes in wheat for resistance to *Puccinia striiformis* and their responses to temperature changes. 21883

- Foot-rot of wheat. 21897

- Loose smut of wheat. 21903

- Distribution of loose smut of wheat (*Ustilago tritici* (Pers) in the year of 1965 in Turkey. 21910

- A study on the epidemiology of stripe rust, *Puccinia striiformis* West., in California. 21939

- Experiments with Tordon herbicide in small grains. 22013

- Effect of dicamba on wheat and wild buckwheat at various stages of development. 22024

WHEAT STRAW

- Relative significance of parasitism versus saprophytism in colonization of wheat straw by *Fusarium roseum* Culmorum in the field. 21839

WILDLIFE

- Notes on mallophaga on the Asiatic wild ass and bisons. 21595

WILT

- Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956

WILT (BROADBEANS)

- Purification and properties of broad bean wilt virus. 21937

WINGS (INSECTS)

- The method of action of the dark and light phases on the production of winged gymnospires of *Dysaphis plantaginea* Pass. (Homoptera, Aphididae). 21662

- Genetic variability in *Ischnura damselflies*. 21760

WOOD

- An arylsulfatase in the wood-rotting basidiomycete, *Fomes geotropus*. 21895

WOOD DESTROYING FUNGI

- An arylsulfatase in the wood-rotting basidiomycete, *Fomes geotropus*. 21895

WOOD-DESTROYING INSECTS

- Observations on wood-destroying insects living in the footbridge over Siikaneva bog. 22178

WORLD AGRICULTURAL SITUATION

- The importance of plant protection for the world harvest. 21785

- The importance of plant protection for world harvest. 21786

- X-RAYS**
 The modification of adult life span in *Bracon hebetor* (Hymenoptera: Braconidae) by irradiation in nitrogen. 21671
 Increased reversion of an apple sport following X irradiation and pruning. (Abstract). 21795
 Recovery of porcine liver from damage caused by migrating X-irradiated and nonirradiated larvae of *Asearis suum*. 22162
- XANTHOMONAS ORYZAE**
 Characterization of three bacteriophages of *Xanthomonas oryzae* (Uyeda et Ishiyama) Dowson. 21788
- XANTHOMONAS PHASEOLI**
 Factors affecting virulence and pigment production of *Xanthomonas phaseoli* var. *fuscans*. 21823
- XIPHINEMA INDEX**
 Radial mosaic virus of grapevines. 21918
- YELLOW DWARF**
 Rate of movement of barley yellow dwarf virus out of inoculated cereal leaves. 21854
- ZEUZERA PYRINA**
 Contribution to studies of *Zeuzera 'Zeuzera pyrina'* L. (Lepidoptera Cossidae) in the lower valley of the Rhine: The life cycle and biological characteristics of different stages. 21651
- ZINC**
 Micronutrient effects on the in vitro growth and pathogenicity of *Fusarium oxysporum* f. sp. *lycopersici*. 21956
- ZOOGEOGRAPHY**
 Some Orthopteroid insects of the orders Blattoptera, Orthoptera, and Dermaptera from Afghanistan. 21594
 A faunistic study of Philippine aphids (Aphididae, Homoptera). 21598
 Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. L. Orthoptera Grylloidea. 21600
 The treehoppers of Wisconsin in relation to the tension zone (Homoptera, Membracidae). 21602
Wesmaelius balticus Tjeder, 1931 (Neuroptera, Planipennin) new to Norway. 21605
 Notes on *Ephylus* Forst. and description of two new species (Ichneumonidae, Braconidae, Doryctinae). 21606
- The male of *Neoscia petsamoensis* Kanervo (Dipt., Syrphidae) with remarks on the females and the distribution of the species. 21608
 A redescription of *Neoscia aenea* Meig. (Dipt., Syrphidae). 21609
 Coleoptera in southern Nordland. 21610
 Catalogue on the Indian Dermaptera. 21612
 Revision of *Sphaerocera*, with description of a new genus *Afromyia* (Diptera: Sphaeroceridae). 21615
 Data on the caddisfly (Trichoptera) fauna of Siberia and the Far East. 21621
 New records of Carabidae (Coleoptera) from Northumberland. 21623
 Genera and species of the Dermaptera. 8 Eudohrniinae, Neolobophorinae, Ancistrogastrinae, Diaperasticinae and Anechurinae (Forficulidae). 21630
 On *Stenus* (*Parastenus*) *alpicola* Fauvel and other divergently evolved Palearctic *Parastenus*-species (Col., Staphylinidae). 44. Contribution to the knowledge of the *Stenids*. 21631
 Tricoptera collected in Sor-Trondelag County. 21634
 Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLVIII. Hemiptera Pyrrhocoridae. 21639
 Examination of African Reduviidae. II. Harpactorinae. Genus *Nagusta* Stal. 21640
 Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. descarpentries. LIV. Hemiptera Plataspidae. 21641
 Heteroptera beaten from blackcurrants at Long Ashton Research Station in 1967. 21645
Porphyria purpurina Hb. (Lep., Noctuidae), new for Finland. 21649
 Ecology of *Gomphomastax elauata* plotnikovi C. Bol. (Orthoptera Eumastacidae). 21669
 Contribution to the fauna of the Congo (Brazzaville). Mission A. Villiers and A. Descarpentries. XLV. Coleoptera Oedodeidae. 21676
Synanthedon flaviventris Stgr. (Lep., Aegeriidae) found in Suomesta. 21690
- The present distribution of *Hylotrupes bajulus* L. (Col., Cerambycidae) in Norway and its abundance in some districts. 21694
 On my acquaintance with middle and northern European Species of the genus *Psenulus* Kohl (Hym., Sphecoidea). 21705
 Mating choice in crosses between geographic populations of *Drosophila pseudoobscura*. 21756
 Evolution and hybridization in the *Utetheisa* ornatrix complex (Lepidoptera: Arctiidae). I. Inter- and intrapopulation variation and its relation to hybridization. 21762
 Mimetic versus disruptive coloration in intergrading populations of *Limenitis arthemis* and *astyanax* butterflies. 21763
 Pests of cultivated plants in Finland in 1967. 21888
 New records of plant diseases in New South Wales. 21946
 Coleoptera attacking tree and shrub plantings in the city of Kharkov. 21979
 Seasonal and zonal distribution of *Ichneumonidae* (Hym.) on a subarctic fell during a calamity of the geometrid moth *Oporinia autumnata* (Bkh.) on birches. 21986
 Red ring (*Radinaphelenchus cocophilus*) of the coconut tree in the zone of Tumaco (Narino). 22006
 Problems of the control of the cereal cyst nematode (*Heterodera avenae*) in Bavaria. 22007
 The distribution of the musk rat and its control in Bavaria. 22032
 Synanthropic Diptera of the genera *Dasyphora* R. D. and *Morellia* R. D. (Diptera, Muscidae) in Soviet Central Asia. 22157
- ZOONOSES**
 On the specific mechanism of the transmission of leptospiral infection. 22105
- ZOOSPORES**
 Factors governing zoospore responses of *Phytophthora megasperma* var. *sojae* to plant roots. 21864
 Anatomy of beads on flagella of zoospores of *Phytophthora megasperma* var. *sojae*. 22214 ae). 21669
 War on locusts goes on. 22000

BIOGRAPHICAL INDEX

- Adams, P B**
U. S. Dept. of Agriculture, Beltsville, Maryland; Agricultural Research Service; Crops Research Division
21814
- Adler, H E**
California University, Davis; Dept of Epidemiology and Preventive Medicine
21766
- Adler, H E**
California University, Davis; Dept of Epidemiology and Preventive Medicine
22233
- Afscharpour, F**
Pflanzenschutzamt des Landes, Schleswig-Holstein; Bezirksstelle Rellingen
21767
- Afscharpour, F**
Pflanzenschutzamt des Landes Schleswig-Holstein, Rellingen; Bezirksstelle für pflanzenschutz
21958
- Agnihotri, V P**
Forest Research Lab., Maple, Ontario, Canada; Southern Research Station
22201
- Allen, W R**
Canada Dept. of Agriculture, Vineland Station, Ontario; Research Station
21815
- Allen, W R**
Canada Dept. of Agriculture, Vineland Station, Ontario; Research Station
21816
- Allison, A C**
National Inst. for Medical Research, Millhill, London, England; Clinical Research Centre Lab.
22044
- Almeida, P R**
Instituto Biologico, Sao Paulo; Seccao de Insecticidas
22239
- Amer, S**
National Research Center, Cairo, United Arab Republic
21961
- Anastasiadis, B**
Louisiana State Univ. and Agricultural and Mechanical Coll; Baton Rouge
22002
- Anderson, W W**
Yale Univ., New Haven, Conn.; Dept. of Biology
21756
- Anghel, C G**
Institutul agronomic Dr. Petru Groza, Cluz, Romania
22047
- Angus, T A**
Dept. of Forestry, Sault Ste. Marie, Ontario; Insect Pathology Research Institute
21650
- Arnott, H J**
Texas University, Austin; Cell Research Institute
21817
- Ash, R J**
Cincinnati Univ., Ohio
22033
- Assche, C V**
Katholieke Universiteit, Leuven, Belgium; Laboratorium für Pflanzenkrankheiten
22202
- Audemard, H**
Institut National de la Recherche Agronomique, Montfavet, France; Station de Zoologie Agricole
21651
- Badiali, L**
United Nations Development Programme, Cairo, Egypt; Near East Animal Health Inst.
22048
- Bains, B S**
Provincial traders Pty. Ltd., Murarrie, Australia
22049
- Bakshi, B**
Hissar, India
21818
- Baldacci, E**
Milano Univ., Italy; Inst. di Patologia Vegetale
21819
- Baldacci, E**
Milano Univ., Italy; Inst. di Patologia
21820
- Banks, C C**
Department of Agriculture, Paeroa, New Zealand
22146
- Barnes, W C**
Clemson Univ., Charleston, S. C.
21821
- Barrett, J H**
Department of Primary Industries, Brisbane, Australia
21962
- Bartel, M H**
Moorhead State Coll., Minn.; Dept. of Biology
22159
- Barth, W F**
National Inst. of Arthritis and Metabolic Diseases; Bethesda, Md.; Arthritis and Rheumatism Branch
22034
- Barton, G M**
Canada Dept. of Forestry and Rural Development, Vancouver 8; British Columbia; Forest Products Lab.
21822
- Basu, P K**
Canada Dept. of Agriculture, Ottawa; Cell Biology Research Inst.
21823
- Batra, S W T**
Kansas University, Lawrence; Dept. of Entomology
21652
- Batten, G J**
Department of Agriculture, Thames, New Zealand
22009
- Bauman, F**
Ecole de Medecine, Geneva, Switzerland; Inst. de Physiologie
21653
- Baynes, I D**
Animal Research Inst. Yeerongpilly, Australia; Dept. of Primary Industries
22050
- Beaver, R A**
North Wales Univ. Coll., Bangor, England; Dept. of Zoology
21654
- Beck, W**
Osterreichische Stickstoffwerke, Linz; Biologisches Forschungslaboratorium
22186
- Behki, R M**
Canada Dept. of Agriculture, Ottawa; Cell Biology Research Inst.
21824
- Behrens, H**
Tiergesundheitsamt der Landwirtschaftskammer, Hannover, West Germany
22051
- Behringer, P**
Bayerischen Landesanstalt fuer Bodenkultur, Pflanzenbau; und Pflanzenschutz, Muenchen, West Germany; Nematodenstelle Neuburg a.d. Donau
22003
- Belozarov, V N**
Leningrad Univ., USSR; Dept. of Entomology
21655
- Belyshev, B F**
USSR Academy of Sciences, Irkutsk; Siberian Div.
21656
- Benecke, F S**
Department of Agriculture, Tamworth, Australia
21657
- Bennett, D G**
Purdue Univ., Lafayette, Ind.; Dept. of Veterinary Microbiology, Pathology, and Public Health
22160
- Berg, L A**
Tela Railroad Company, La Lima, Honduras; Division of Tropical Research
21825
- Berker, J**
Darmstadt
22010
- Berry, D M**
Glaxo Laboratories Ltd., Greenford, Middlesex
22052
- Berryman, A A**
Washington State Univ., Pullman
21658
- Bieber, J**
Deutschen Akademie der Wissenschaften, Berlin, East Germany; Institut für Mikrobiologie und Experimentelle Therapie; Jena
21826
- Bischoff, J**
Veterinaruntersuchungsanstalt der Freien und Hansestadt; Hamburg, Germany
22180
- Bivin, W S**
Fort Detrick, Frederick, Md.; Army Medical Unit
22053
- Blagoveschenskiy, D I**
USSR Academy of Sciences, Leningrad; Inst. of Zoology
21595
- Bobrova, S I**
USSR Academy of Sciences, Novosibirsk; Siberian Div.
21596
- Boller, R A**
U. S. Dept. of Agriculture, College Station, Texas; Agricultural Research Service; Market Quality Research Division
21827
- Bond, W P**
Louisiana State Univ. and Agricultural and Mechanical Coll; Baton Rouge
21828
- Boness, M**
Farbenfabriken Bayer A G, Leverkusen-Bayerwerk; Biologisches Institut
21661
- Bonnemaison, L**
Inst. National de la Recherche Agronomique, Versailles, France; Station Centrale de Zoologie agricole
21662
- Bootes, B W**
Department of Agriculture, Newcastle, Australia
22054
- Bottenberg, G E**
Wisconsin Univ., Madison
21768
- Boyce, H R**
Canada Dept. of Agriculture, Harrow, Ontario; Research Branch; Research Station
21663
- Boyce, H R**
Canada Dept. of Agriculture, Harrow; Research Branch; Research Station
21829
- Boyd, H W**
Georgia Experiment Station
21830
- Boyer, M G**
York Univ., Toronto, Ontario, Canada; Dept. of Biology
21831
- Bradley, R H E**
Canada Dept. of Agriculture, Fredricton; Research Station
21832
- Braithwaite, B M**
Division of Science Services, Murwillumbah, Australia
21964
- Bramlage, W J**
Massachusetts Univ., Amherst
21833
- Brindle, A**
Manchester Museum, England; Dept. of Entomology
21664
- Brian, A.**
Ecole Nationale Veterinaire, Alfort, France
22055
- Brookbanks, E O**
Department of Agriculture, Hamilton, New Zealand; Animal Health Div.
22056
- Brookbanks, E O**
Department of Agriculture, Hamilton, New Zealand
22057
- Browne, L B**
Commonwealth and Scientific Industrial Research Organiza; Tion, Canberra, Australia; Division of Entomology
21665

BIOGRAPHICAL INDEX

Buening, G M

Buening, G M
Iowa State Univ., Ames; Dept. of Veterinary Microbiology and Preventive Medicine 22058

Bunde, D E
Idaho State University, Pocatello; Biology Dept 21666

Burkes, B D
U. S. Dept. of Agriculture, Washington, D. C.; Agricultural Research Service; Entomology Research Division 21597

Burnell, R E
Department of Agriculture, Papakura, New Zealand 22059

Burnell, R E
Department of Agriculture, Papakura, New Zealand 22147

Burns, R M
Ohio State Univ., Columbus 22060

Bush, L
Kentucky University, Lexington; Dept. of Agronomy 21834

Butterfield, N W
Massachusetts University, Waltham; Dept. of Environmental Sciences 21769

Bychkovskaya, I B
Ministry of Health, Leningrad, USSR; Central Scientific Research Roentgenoradiological Inst. 21667

Calderbank, A
Jalott's Hill Research Station, Bracknell, England 22187

Calilung, V J
Philippines Univ. Coll. of Agriculture, Laguna; Dept. of Entomology 21598

Calilung, V J
Philippines Univ., Laguna; Dept. of Entomology 21599

Camargo, W V A de
Instituto Biologico, Sao Paulo, Brazil; Seccao de Bioquimica e Farmacodinamica 22062

Came, P E
Schering Corp., Bloomfield, N. J.; Dept. of Microbiology 22063

Cameron, J W
California Univ., Riverside 21770

Cameron, R J
Forest Research Inst., Rotorua 21771

Campbell, C H
Agricultural Research Service, Greenport, N. Y.; Plum Island Animal Disease Lab. 22064

Carnero, R
Laboratoire Central de Recherches Veterinaires, Alfort, France 22065

Casimir, M
Department of Agriculture, Rydalmere, Australia; Div. of Science Services 21668

Catara, A
Universita di Catania, Italy; Inst. di Patologia Vegetale 21835

Caten, C E
Univ. of Western Ontario, London; Dept. of Botany 21772

Cernik, K
Biovetca, Nation, Enterpr., Nitra, Czechoslovakia 22067

Chalam, G V
Government of India; Dept. of Agriculture 21836

Champ, B R
Queensland Dept. of Primary Industries, Australia; Div. of Plant Industry 22203

Chaudhury, R P
Indian Veterinary Research Inst., Izatnagar 22148

Chaudhury, R P
Indian Veterinary Research Inst., Izatnagar 22149

Chen, C C
National Taiwan Univ.; Dept. of Plant Pathology and Entomology 21773

Cherblanc, G
Brest, France 22204

Chernyakhovskiy, M Ye
Lenin State Educational Inst., Moscow, USSR; Dept. of Zoology and Darwinism 21669

Chiu, R
Joint Commission on Rural Reconstruction, Taipei, Taiwan; Plant Industry Division 21965

Choopanya, D
Clmson University, South Carolina 21837

Chopra, B K
Auburn University, Auburn, Alabama 22205

Chorvath, B
Comenius Univ., Bratislava, Czechoslovakia; Dept. of Epidemiology 22035

Christie, D G
Department of Agriculture, Sydney, Australia 22068

Christopher, J
College of Veterinary Science, Tirupati, India 22069

Chutter, F M
South African Council for Scientific and Industrial Research, Pretoria, South Africa; National Inst. for Water Research 21670

Clark, A M
Delaware University; Dept. of Biological Sciences 21671

Clark, L
School of Veterinary Science, St. Lucia, Australia 22070

Clark, M C
Canada Dept. of Agriculture, New Brunswick; Research Station 21838

Clifford, D K
Bristol Univ., Great Briatin; Long Ashton Research Station 22206

Coe, E H
Department of Agriculture; Dept. of Genetics 22036

Coillot, J P
Laboratoire de Physiologie Animale, France; Faculte des Sciences de Rennes 21672

Collard, W D
Missouri Univ., Columbia 22071

Conant, R M
Ohio State Univ., Columbus; Depts. of Pediatrics and Medical Microbiology 22072

Cook, R J
U. S. Dept. of Agriculture, Pullman, Washington; Agricultural Research Service; Crops Research Division 21839

Copin, A
Faculte des Sciences agronomiques, Gembloux, Belgium; Lab. de chimie analytique 22188

Copin, A
Faculte des Sciences agronomiques Gembloux, Belgium; Lab. de chimie analytique 22234

Covalt-Dunning, D
Duke Univ., Durham, N. C.; Dept. of Zoology 21673

Craft, J L
Yale Univ. School of Medicine, New Haven, Conn.; Otologic Research Lab. 22037

Crandall, O C
Washington State Univ., Pullman 21775

Crockett, D B
Central Methodist College, Fayette, Missouri; Dept. of Biology 21583

Cunha, R G
Ciudad Univ., Mexico; Lab. de Virologia 22073

Cutts, N A
Hawkesbury Agricultural Coll., Australia 21674

Daniels, N E
Texas A and M University; U. S. Dept. of Agriculture 21675

Danielson, L L
Dept. of Agriculture, Beltsville, Md.; Agricultural Research Service; Crops Research Division 22012

Dannis, D C
Baylor Univ., Waco, Tex 22038

Das, C R
State Agricultural Research Institute, Calcutta, India 21840

Davidson, R M
Department of Agriculture, Wellington, New Zealand 22074

Ddungu, J C M
New Hampshire Univ., Durham 21841

De Leon, D
Erwin, Tenn. 21601

De Zoeten, G A
Wisconsin University, Madison; Dept. of Plant Pathology 21584

Dennis, C J
Wisconsin State Univ., Whitewater; Dept. of Biology 21602

Desponmier, D D
The Rockefeller Univ., N. Y., N. Y. 22161

DiCapua, R A
Connecticut Univ., Storrs; Microbiology Section 22075

Diercks, R
Landesanstalt fuer Bodenkultur, Pflanzenbau und Pflanzen; Schutz, Muenchen, West Germany; Gruppe Pflanzenschutz 21776

Dimaguila, L S
Zamboanga Normal Coll., Phillippines; Dept. of Science and Mathematics 21844

Dolinka, B
Ungarischen Akademie der Wissenschaften, Martonvasar; Landwirtschaftlichen Forschungsinstitut 21966

Douglas, R G
Baylor Univ. Coll. of Medicine, Houston, Texas; Dept. of Microbiology 22076

Doupnik, B
Florida Gulf Coast Experiment Station, Bradenton 22207

Doyle, D
Stanford Univ. School of Medicine, Palo Alto, Calif.; Dept. of Pharmacology 21677

Drobnic, L
Slovak Polytechnical University, Bratislava, Czechoslovakia; Faculty of Chemistry; Dept. of Microbiology and Biochemistry 22235

Dun, G S
Lowlands Agricultural Experiment Station, Keravat, New; Britain 21967

Ehrman, L
The Rockefeller Univ., New York City, N. Y. 21757

BIOGRAPHICAL INDEX

Hill, F F

- El Khalifa, M D**
Northwestern Univ., Evanston, Ill.; Dept. of Biological Sciences
21845
- Engelhard, A W**
Gulf Coast Experiment Station, Bradenton, Florida
22004
- Engelmann, M D**
Michigan State Univ., East Lansing; Dept. of Natural Science
21678
- Espul, J C**
Instituto Nacional de Tecnologia Agropecuaria, Buenos, Aires, Argentina; Estacion Experimental Agropecuaria La Consulta
21679
- Etter, H M**
Forest Research Lab., 132 9th Avenue S. W., Calgary, Alberta; Canada
22208
- Evert, R F**
Wisconsin Univ., Madison; Dept. of Botany
21968
- Eyal, Z**
Rutgers Univ., New Brunswick, N. J.; Dept. of Plant Biology
22209
- Fairchild, G A**
Pennsylvania Univ., Philadelphia; Dept. of Clinical Studies
22079
- Faust, M**
Department of Agriculture, Beltsville, Md.
21846
- Fellowes, O N**
Agricultural Research Service, Greenport, N. Y.; Plum Island Animal Disease Lab.
22080
- Ferguson, D L**
Nebraska Univ., Lincoln; Dept. of Veterinary Science
22162
- Fewkes, D W**
Tate and Lyle Central Agricultural Research Station, Waterloo Estate, Trinidad
21969
- Figueiredo, M B**
Instituto Biologico, Sao Paulo, Brazil
21847
- Filer, T H**
U. S. Forest Service, Stoneville, Mississippi
21848
- Finco, D R**
Minnesota Univ., St. Paul; Dept. of Veterinary Medicine
22081
- Fleet, W F**
Vanderbilt Univ. School of Medicine, Nashville, Tenn.; Dept. of Pediatrics
22082
- Florentine, G J**
U S Army Natick Laboratories, Natick, Mass.; Pioncering Research Laboratory; Applied Entomology Group
21680
- Flowers, R A**
Kentucky University, Lexington
21849
- Foott, W H**
Canada Dept. of Agriculture, Harrow, Ontario; Research Branch; Research Station
21970
- Ford, W L**
Oxford Univ., England; M. R. C. Cellular Immunology Research Unit
22083
- Foster, R E**
Arizona Univ., Mesa
21850
- Frank, A H**
Agricultural Research Service, Ames, Iowa; National Animal Research Lab.
22084
- Frederick, S E**
Wisconsin Univ., Madison; Dept. of Botany
21777
- Freeman, B A**
Washington State University, Pullman; Dept. of Entomology
21604
- Froyd, J D**
Minnesota Univ.; Dept. of Plant Pathology
22210
- Furminger, I G S**
Glaxco Laboratories Ltd., Sefton Park, Stoke Poges, Bucks
22085
- Fusi, P**
Consiglio Nazionale delle Ricerche, Florence, Italy; Inst. di Chimica Agraria e Forestale
22236
- Futrell, C**
U. S. Dept. of Agriculture, State College, Mississippi; Agricultural Research Service
21851
- Gagnon, C**
Canada Dept. of Forestry and Rural Development, Sillery, Quebec; Forest Research Lab.
21852
- Gamrasni, M A**
Association Francaise pour L'etude des Eaux
22197
- Gantz, R L**
Don Chemical Company
22013
- Garner, J H B**
Kentucky Univ., Lexington; Dept. of Botany
21778
- Gaspar, C**
Faculte des Sciences agronomique, Gembloux, Belgium; Lab. de Zoologie generale
21681
- Gates, D W**
Agricultural Research Service, Beltsville, Md.; Beltsville Parasitological Lab.
22086
- Gellatley, J G**
Department of Agriculture, Gosford, Australia
21971
- George, J A**
Canada Dept. of Agriculture, Ontario; Research Station
21682
- Ghadiok, G R**
Office of the Regional Director (Food), New Delhi, India
22177
- Gibbs, G W**
Victoria Univ., Wellington, New Zealand; Dept. of Zoology
21758
- Gibson, F A**
Department of Agriculture, Rydalmere, Australia; Div. of Science Services
21972
- Gilbert, J C**
Hawaii Univ., Honolulu
21853
- Gill, C C**
Canada Dept. of Agriculture, Winnipeg; Research Station
21854
- Gill, H S**
Illinois Univ., Urbana; Dept. of Plant Pathology
22211
- Gilmer, R M**
New York (Cornell) Agricultural Experiment Station, Geneva
21855
- Giorgi, W**
Instituto Biologico, Sao Paulo, Brazil
22087
- Goodling, G V Jr.**
North Carolina State University, Raleigh
21856
- Goodwin, R F W**
Cambridge Univ., England; School of Veterinary Medicine
22088
- Goodwin, R F W**
Cambridge Univ., England; School of Veterinary Medicine
22089
- Gray, G**
Maryland Univ., College Park; Dept. of Botany
21858
- Green, D W**
Michigan State Univ., East Lansing
21779
- Greenup, L R**
Department of Agriculture, Rydalmere, Australia; Div. of Science Services
21973
- Greenup, L R**
Department of Agriculture, Rydalmere, Australia; Div. of Science Services
21974
- Greenup, L R**
Department of Agriculture, Rydalmere, Australia; Div. of Science Services
21975
- Greve, L**
Bergen Univ., Norway; Zoological Museum
21605
- Grosclaude, C**
Institut National de la Recherche Agronomique; Pont-de-la-Maye, France; Station de Pathologie Vegetale du Sud-Ouest
21859
- Grossman, F**
Justus Liebig Giessen Univ., West Germany; Institut fur Phytopathologie
21860
- Grossmann, F**
Giessen Univ., Giessen, West Germany; Institut fuer Phytopathologie
22212
- Gysin, H**
Basel
21780
- Haas, G E**
Deerfield, 677 Deerpath Drive, Ill.
21683
- Haas, G J**
General Foods Corp., Tarrytown, N. Y.; Dept. of Corp. Research
22191
- Hackman, R**
Research Labs. of Medica Ltd., Helsinki, Finland
21759
- Hadzistevic, D**
Institut de Mais, Zemun, Yugoslavia
21976
- Harris, A N A**
Department of Agriculture, Armidale, Australia
22163
- Hayes, D K**
U. S. Department of Agriculture, Beltsville, Md.; Agriculture Research Service; Entomology Research Division
21684
- Healey, J S**
Department of Agriculture, Sydney, Australia
22090
- Healey, J S**
Department of Agriculture, Sydney, Australia
22150
- Healey, J S**
Department of Agriculture, Sydney, Australia
22198
- Healy, M J**
Illinois University, Urbana; Dept. of Plant Pathology
21861
- Helton, A W**
Idaho Univ., Moscow; Dept. of Plant Sciences
21862
- Hendrickson, J A**
Kansas University; Dept. of Entomology
21607
- Hendrix, J W**
Kentucky University, Lexington
22213
- Herr, R R**
Upjohn Company, Kalamazoo, Mich.; Dept of Microbiology
21781
- Hess, F D**
Michigan State Univ., East Lansing
22015
- Hibbert, L E**
Utah State Univ., Logan; Dept. Of Zoology
22091
- Hill, A R**
Glasgow Univ., Scotland; Dept. of Zoology
21685
- Hill, F F**
The Ford Foundation
22242

BIOGRAPHICAL INDEX

Hippa, H

Hippa, H
Turku Univ., Finland; Dept. of Zoology 21608

Hippa, H
Turku Univ., Finland; Dept. of Zoology 21609

Hiratsuka, Y
Canada Dept. of Forestry and Rural Development, Calgary,; Alberta; Forest Research Lab. 21863

Ho, H H
University of Western Ontario, London, Canada; Dept. of Botany 21864

Ho, H H
University of Western Ontario, London, Canada; Dept. of Botany 22214

Hohson, D
Liverpool Univ., England; Dept. of Bacteriology 22092

Hopen, H J
Illinois University 21782

Howitt, A J
Michigan State University, East Lansing; Dept of Entomology 21585

Hsieh, S C
Taiwan Agricultural Research Institute 21865

Huhtanen, C N
U S Dept of Agriculture, Wyndmoor, Pa.; Eastern Regional Laboratories 21866

Hurpin, B
Institut National de la Recherche Agronomique, Versailles,; Station de Recherches de Biocoenotique et de Lutte Biolo 21686

Hurwood, I S
Department of Primary Industries, Yeerongpilly, Australia; Animal Research Inst. 22192

Hussain, M Z
West Pakistan Veterinary Research Inst., Lahore; Parasitology Section 22164

Irving, R M
Oklahoma State Univ., Stillwater 21783

Israel, P.
Central Rice Research Inst., Cuttack, India 21977

Iuanov, K S
USSR Academy of Sciences, Leningrad; Inst. of Zoology 22151

Iyer, P R K
Indian Veterinary Research Inst., Izatnagar, India 22095

Jadot, R
Centrum voor Tabakonderzoek, Gembloux, Belgium 21867

Jain, N C
California Univ., Davis; Dept. of Clinical Pathology 22096

James, I F
Agricultural Research Service, Logan, Utah; Animal Disease And Parasite Research Div. 22097

Jarrett, E E E
Glasgow Univ., Scotland; Wellcome Labs. for Experimental Parasitology 22166

Jensen, M H
Rutgers Univ., New Brunswick, N. J. 21868

Jiran, E
Bioveta, Terezin, Czechoslovakia 22098

Johnson, C
Manchester Museum, England 21610

Johnson, C
Florida Univ., Gainesville; Dept. of Zoology 21760

Johnson, R W
Agent Development and Engineering Lab., Frederick, Md. 22099

Jones, B L
Lower Rio Grande Valley Research and Experiment Center,; Weslaco, Texas 21869

Jones, J C
Maryland University, College Park; Dept. of Entomology 21687

Jones, R J
Birmingham Accident Hospital, England; M. R. C. Industrial Injuries and Burns Research Unit 21784

Judenko, E
Fisons Pest Control Limited, Karen, Nairobi 21688

Kabelik, V
State Veterinary Inst., Cesky Brod, Czechoslovakia 22100

Kable, P F
Yanco Agricultural Coll. and Research Station, Australia 21870

Kado, C I
California University, Berkeley; Virus Laboratory 21871

Kaiser, W
Frankfurt/Main 21786

Kalra, A N
Indian Inst., of Sugarcane Research, Lucknow 21978

Kamal, M
Agricultural Research Inst., Tandojam, West Pakistan 21872

Kangas, E
Helsinki Univ., Finland; Dept. of Zoology 21691

Kapoor, V C
Indian Agricultural Research Inst., New Delhi; Div. of Entomology 21612

Kapoor, V C
Agra College; Dept. of Zoology 21613

Ke Riche, P D
Nicholas Inst., Sherbrooke, Victoria 22102

Kedar, N
Hebrew Univ., Rehovot, Israel; Faculty of Agriculture 21873

Kemper, A
Pflanzenschutzamt der Landwirtschaftskammer westfalen; Lippen, Munster 22005

Kendrick, J W
California Univ., Davis 22103

Khan, N R
Guelph Univ., Ontario, Canada; Dept. of Zoology 21614

Khanum, Z
Karachi Univ., Pakistan; Dept. of Zoology 22167

Khare, G P
Kansas State Univ., Manhattan; Dept. of Bacteriology 22104

Kiely, T B
Department of Agriculture, Gosford, Australia 21874

Kiktenko, V S
Patrice Lumumba Univ. of International Friendship, Moscow,; Ussr; Dept. of Microbiology 22105

Kim, K C
Minnesota University, St. Paul; Dept. of Entomology, Fisheries, and Wildlife 21615

Kim, W K
Canada Dept. of Agriculture, Winnipeg, Manitoba; Research Station 22215

Kim, W K
Canada Dept. of Agriculture, Winnipeg, Manitoba; Research Station 22216

Kimmins, W C
Dalhousie Univ., Halifax, Nova Scotia; Dept. of Biology 21875

King, C D
Wisconsin Univ., Madison; Dept. OF Veterinary Science 22106

Kinnear, J F
Melbourne Univ., Australia; Dept. of Genetics 21692

Kiraly, Z
Research Institute for Plant Protection, Budapest, India 21876

Kiritani, K
Prefectural Institute of Agricultural and Forest Science,; Nangoku, Kochi-Pref., Japan; Division of Entomology 21693

Kleczkowski, A
Rothamsted Experimental Station, Harpenden, Herts, England 21877

Klyuchko, Z F
Kiev Univ., USSR; Arachnological-Entomological Lab. 21616

Knudsen, P
Norwegian Forest Research Inst., Vollebakk, Norway 21694

Knuhtsen, H K
Arizona University, Tucson; Dept. of Plant Pathology 21878

Kobayashi, M
Sericultural Experiment Station, Wada, Suginamiku, Tokyo 21695

Kodama, K
Biken Laboratories, Incorporated, Kyoto, Japan 22107

Koenig, K
Bayrische Landesanstalt fuer Bodenkultur, Pflanzenbau; und Pflanzenschutz, Muenchen, West Germany; Abteilung Praktischer Pflanzenschutz 21787

Kooistra, E
Institute of Horticultural Plant Breeding, Netherlands 21879

Korobitsin, V G
Nikitskiy Botanical Gardens, Yalta, USSR 21618

Kovalev, V G
Moscow State Univ., USSR; Dept. of Entomology 21619

Kulagin, S M
N. F. Gamaleya Institute for Epidemiology and Microbio; Logy, Moscow, Ussr 22108

Kutz, F W
Purdue Univ., Lafayette, Ind.; Dept. of Entomology 21696

Lam, S L
Purdue Univ., Lafayette, Ind.; Dept. of Horticulture 22217

Lariso, B L
Philippines Univ. Coll. of Agriculture, Laguna; Dept. of Entomology 21697

Larsen, J R
Illinois Univ., Urbana; Dept. of Entomology 21698

Larson, K
Washington State Univ., Pullman; Dept. of Veterinary Microbiology 22109

Latch, G C M
New Zealand Dept of Scientific and Industrial Research, Pa 21881

BIOGRAPHICAL INDEX

Negm, A A G

Laufer, H Connecticut Univ., Storrs; Div. of Biological Sciences 21699	Mallach, N Bayerische Landesanstalt fuer Bodenkultur, Pflanzenbau; und Pflanzenschutz, Muenchen, West Germany; Ueberwachung und Pflanzenbeschau 22032	Mengeling, W L Agricultural Research Service, Ames, Iowa; National Animal Disease Lab. 22114
Lawes, G S Department of Agriculture, Christchurch, New Zealand 21882	Mamaye, B M USSR Academy of Sciences, Moscow; Severtsov Inst. of Animal Morphology 21625	Menon, M R Agricultural Coll. and Research Inst., Vellayani; Trivandrum, India 21892
Leonard, D E Connecticut University 21620	Markkula, M Agricultural Research Centre, Tikkurila, Finland; Dept. of Pest Investigation 21888	Meronuck, R A Minnesota University, St. Paul; Dept. of Plant Pathology 21893
Lert, P J California Univ., Davis 21789	Marrou, J Institut National de la Recherche Agronomique, Domaine; Saint-Maurice, Montfavet; Station de Pathologie Vegetale 21980	Merry, D M E Department of Agriculture, Pukekohe, New Zealand 22018
Levanidova, I M Pacific Research Inst. of Fisheries and Oceanography; USSR; Kamchatka Div. 21621	Marston, R B U S Dept of the Interior; Federal Water Pollution Control Administration; Pacific Northwest Water Laboratory 22241	Meyer, J Husum 22019
Lewellen, R T Agricultural Research Service, Salinas, Calif.; Crops Research Div. 21883	Martens, E Staatlichen Veterinaruntersuchungsamt, Krefeld, Germany 22181	Meyer, J A L'universite de Louvain, Heverlee, Belique; Faculte des Sciences Agronomiques; Laboratoire de Phytopathologie et de Mycologie 21894
Limbourg, P Instut de la Recherche Scientifique dans L'Industrie; et L'Agriculture, Belgium 22016	Martens, J W Canada Dept. of Agriculture, Winnipeg, Manitoba; Research Station 21889	Milazzo, F H Queen's Univ., Kingston, Ontario, Canada; Dept. of Microbiology and Immunology 21895
Lingard, D R Washington State Univ., Pullman 22110	Mathur, L M L Udaipur Univ., India; Agricultural Experiment Station 21702	Mital, V P Rajasthan Coll. Of Agriculture, Udaipur, Agra; Dept. of Zoology and Entomology 21706
Linzon, S N Forest Research Lab., Maple, Ontario, Canada 21884	Mathur, M K Central Arid Zone Research Inst., Jodhpur, India 22017	Mital, V P Rajasthan Coll. of Agriculture, Udaipur, India; Dept. of Zoology and Entomology 21982
Linzon, S N Canada Dept. of Forestry, Maple, Ontario; Forest Research Lab. 21885	Mathur, S B Danish Government Institute of Seed Pathology for Develop; Ing Countries, 78 Ryvangs Alle, Hellerup-Copenhagen, Den; Mark 21890	Mitsuhashi, J National Institute of Agricultural Sciences, Tokyo 21707
Lopez-George, J Instituto 'popez Neyra' de Parasitologia, Granada, Spain; Catedra de Bioquimica 22168	Mathews, L J Ruakura Agricultural Research Centre, Hamilton, New Zealand 22179	Miyatake, M Ehime University, Matsuyama, Japan; Entomological Laboratory 21627
Loytyniemi, K Helsinki Univ., Finland; Dept. of Agricultural and Forest Zoology 22178	Mayer, H R Landesanstalt fuer Bodenkultur, Muenchen, West Germany; Pflanzenbau und Pflanzenschutz 21791	Mohanty, G C Agricultural Research Service, Greenport, N. Y.; Plum Island Animal Disease Lab. 22115
Lozano, E A Montana State Univ., Bozeman; Veterinary Research Lab. 22112	Mayer, K Institut fur Zoologie, Berlin-Dahlem; Bundesanstalt fur Land- und Forstwirtschaft 21981	Molloy, B P J Department of Agriculture, Christchurch, New Zealand 22020
Luckey, T D Missouri University, Columbia; Dept of Biochemistry and Entomology 21700	Maynard, D N Massachusetts Univ., Amherst 21891	Monaco, T J North Carolina State University, Raleigh 22021
Luff, M L Newcastle University, England; Dept. of Agricultural Zoology 21623	McCracken, F I U. S. Forest Service, Stoneville, Mississippi 22220	Moradeshaghi, M J Utah State Univ., Logan 21708
Lukezic, F L Pennsylvania State Univ., Univ. Park; Dept. of Plant Pathology 21886	McDaniel, B South Dakota State University, Brookings; Entomology-Zoology Dept. 21626	Morimoto, T. National Inst. of Animal Health, Tokyo, Japan 22116
Lundy, F Laboratoire d'Analyses Veterinaires, Nancy, France 22169	McDowell, L L State Univ. College of Forestry, East Lansing, Mich.; Dept. of Forest Botany and Pathology 22221	Moulton, J California Univ., Davis; Dept. of Pathology 22117
MacGillivray, M E Canada Dept. of Agriculture, Fredricton, New Brunswick; Research Station 21624	McGhehey, J H Canada Dept. of Forestry and Rural Development, Calgary.; Alberta; Forest Research Lab. 21703	Mumford, D H Department of Agriculture, Dubbo, Australia 22118
Madhosingh, C Canada Dept. of Agriculture, Ottawa; Plant Research Inst. 22218	McIlwain, P K North Dakota State Univ., Fargo; Dept. of Veterinary Science 22113	Nachtigall, W Zoologisches Institut der Universitat, Munchen 21709
Mahboob-E-Illah, S Jute Research Inst., Dacca, Pakistan 21887	McKenzie, J I Guelph Univ., Ontario 21792	Nair, K S S M. S. Baroda University, Baroda, India; Dept of Zoology; Division of Entomology 21710
Main, B Y Western Australian Museum, Perth 21701	McLeod, D G R Canada Dept. of Agriculture, Chatham, Ontario; Entomology Laboratory 21704	Naito, A Central Agricultural Experiment Station, Konosu 21711
Mainland, C M Rutgers Univ., New Brunswick, N. J. 21790	Mead-Briggs, A R Infestation Control Laboratory, Worpleston, England; Ministry of Agriculture 21586	Nakasono, K National Institute of Agricultural Sciences, Tokyo, 21712
Maksimova, Yu P Kharkov Univ., USSR; Dept. of Entomology 21979		Nakata, M Nihon Tokusho Noyaku Seizo Company Ltd., Tokyo, Japan; Agricultural Chemicals Institute 22185
Malca, I California University, Riverside; Dept. of Plant Pathology 22219		Naqui, S N H Pakistan Council of Scientific and Industrial Research.; Karachi, Pakistan; Pesticide Section 21713
		Negm, A A G Louisiana State Univ. and Agricultural and Mechanical Coll.; Baton Rouge. 21714

BIOGRAPHICAL INDEX

Negrobov, O P

- Negrobov, O P
USSR Academy of Sciences, Leningrad; Inst. of Zoology 21628
- Netto, L P
Instituto Biologico, Sao Paulo, Brazil; Plano de Controle da Febre aftosa 22120
- Neururer, H
Bundesanstalt fur Pflanzenschutz, Wien 22022
- Newberne, P M
Massachusetts Inst. of Technology, Cambridge; Dept. of Nutrition and Food Science 22121
- Nickerson, B
College of Technology, Leicester; Dept. of Biology 21715
- Nigam, S K
United Provinces Coll. Of Veterinary Sciences, Mathura; Dept. of Pathology 22122
- Nijholt, W W
Canada Dept. of Forestry and Rural Development, Victoria.; British Columbia; Forest Research Lab. 21587
- Noronha-Wagner, M
Estacao Agronomica Nacional; Dept. of Genetics 21906
- Norris, R F
Michigan State Univ., East Lansing 21793
- Nuorteva, M
Helsinki Univ., Finland; Inst. for Agricultural and Forest Zoology 21716
- Nuorteva, M
Helsinki Univ., Finland; Landwirtschafts- And Forstzoologisches Inst. 21985
- Nuorteva, P
Helsinki Univ., Finland; Zoological Museum 21717
- Nuorteva, P
Helsinki Univ., Finland; Zoological Museum 21986
- Obrero, F P
Philippines Univ. Coll. of Agriculture, Laguna; Dept. of Plant Pathology 21907
- Obrtel, R
Forage Plants Research Station, Troubsko u Brna 21987
- Ogden, J C
Stanford Univ., Calif. 21761
- Okasha, A Y K
Assiut University, Egypt; Dept of Zoology 21718
- Opel, H
Deutsche Akademie der Landwirtschaftswissenschaften, Berlin; Institut fur Phytopathologie 21908
- Owen, N V
Eli Lilly and Co., Greenfield, Ind. 22123
- Owen, N V
Eli Lilly and Co., Greenfield, Ind. 22124
- Ozkan, M
Zirai Mucadele Enstitusu Tarla Bitkileri Hastaliklari; Laboratuvari, Ankara 21910
- Ozturk, S
Zirai Mucadele Ilac ve Aletleri Enstitusu Fizikii Analiz.; Ankara 22237
- Padmanabhan, S 4
Central Rice Research Inst., Cuttaek, India 21911
- Pady, S M
Kansas State University, Manhattan; Division of Biology 22222
- Palevody, C
Faculte des Sciences, Dijon, France; Lab. de Biologie animale et generale 21719
- Palmer-Jones, T
Wallaceville Animal Research Centre, Wellington, New Zealand 21988
- Pandotra, V R
Regional Research Lab., Jammu, India 21912
- Papavizas, G C
U. S. Dept. of Agriculture, Beltsville, Maryland; Agricultural Research Service; Crops Research Division 21913
- Parmelee, J A
Canada Dept. of Agriculture, Ottawa; Plant Research Inst. 21914
- Pasfield, G
Department of Agriculture, Rydalmerc, Australia; Entomology Branch 21720
- Pasquali-Ronchetti, I
Modena Univ., Italy; Inst. of General Pathology 21721
- Patrascu, I
I. C. V. B. pasteur; Lab. veterinar, Bacau, Romania 22125
- Pease, R W
G. and C. Merrimam Co., Springfield, Mass. 21762
- Perrett, W J
Department of Agriculture, New South Wales, Australia 22170
- Petrosini, G
Consiglio Nazionale delle Richerch, Perugia, Italy; Centro di Studio per gli Antiparassitari 22193
- Pharis, R P
Calgary Univ., Alberta, Canada; Dept. of Biology 22223
- Pielou, D P
Canada Dept. of Agriculture, Ottawa; Entomology Research Inst. 21722
- Pike, L M
Texas A Oand M Univ., College Station 21794
- Platt, A P
Wesleyan Univ., Middletown, Conn.; Dept. of Biology 21763
- Polatnick, J
Agricultural Research Service, Greenport, N Y; Animal Disease and Parasite Research Division; Plum Island Animal Disease Laboratory 22126
- Poos, J A J
Plant Breeding Station C.I.V., Ottersum, Netherlands 21915
- Popham, E J
Salford University, England; Dept. of Biology 21630
- Pratt, C
New York Experiment Station, Geneva 21795
- Pridantseva, Ye A
Moscow State Univ., USSR; Dept. of Entomology 22154
- Pristavko, V P
Ukrainian Research Inst. of Plant Protection, Kiev, USSR 21990
- Pugh, G W
Agricultural Rcearch Service, Ames, Iowa; National Animal Disease Lab. 22127
- Puthz, V
Berlin, Germany 21631
- Putman, A R
Michigan State University, east Lansing 22023
- Qayyum, H A
West Pakistan Agricultural Univ., Lyallpur 21723
- Quennedey, A
Faculte des Sciences, Dijon, France; Lab de Zoologie 21724
- Quimby, P C
North Dakota State University, Fargo 22024
- Radova, E
Institute of Epidemiology and Microbiology, Prague.; Czechoslovakia 22199
- Raggi, V
Universita di Perugia; Inst. di Patologia Vegetale 21916
- Ramade, F
Institut National Agronomique, P ris, France; Lab. de Zoologie 21725
- Rangaiah, P K
Agricultural Coll. and Research Inst., Coimbatore, India 22025
- Ransom, J P
New England Inst. for Medical Research, Ridgefield, Conn. 22128
- Rao, V P
Commonwealth Inst. of Biological Control, Bangalore, India 21991
- Rautapaa, J
Agricultural Research Centre, Tikkurila, Finland; Dept. of Pest Investigation 21992
- Read, C P
Rice Univ., Houston, Texas; Dept. of Biology 22171
- Read, D C
Western Ontario University, London, Canada; Dept. of Zoology 21993
- Read, P E
Minnesota Univ. St. Paul 21796
- Reedy, M K
California Univ., Los Angeles; School of Medicine; Dept. of Physiology 21726
- Refatti, E
Milano Univ., Italy; Inst. di Patologia Vegetale 21917
- Refatti, E
Milano Univ., Italy; Inst. di Patologia Vegetale 21918
- Retig, N
Hebrew Univ., Rehovot, Israel; Faculty of Agriculture 21920
- Richards, A B
California Agricultural Extension Service, Bakersfield 22026
- Ries, S K
Michigan State Univ., East Lansing 21921
- Ringoet, A
Association Euratom-Ital, Wageningen, Netherlands 22041
- Roberts, E D
Rockefeller Foundation, Colombia, South America; Colombian Agricultural Progam 22129
- Robinson, D M
Oxford Univ.; Hope Dept. of Zoology 21632
- Roche, G
National Museum of Ireland, Dublin; Dept. of Natural History 21727
- Rodriguez-Kabana, R
Auburn University, Alabama 22224
- Roehrich, R
Institut National de la Recherche Agronomique.; Pont-de-la-Maye, France; Station de Zoologie Agricole du Sud-Ouest 21728
- Roelofs, W L
New York State Agricultural Experiment Station, Geneva 21729
- Rovner, R S
Johannes-Gutenberg Univ., Mainz, West Germany; Institut Fuer Allgemeine Zoologie 21731

BIOGRAPHICAL INDEX

Threadgold, L T

Roy, A K Department of Agriculture, Jorhat, India 21922	Sheikh, S A West Pakistan Veterinary Research Inst., Lahore 22134	Srivastava, J P Rajasthan University, Jaipur, India; Dept of Zoology 21741
Ruegg, J C Max-Planck Inst. for Medical Research, Heidelberg, Germany; Dept. of Physiology 21732	Sheldrake, A R Cambridge Univ., England; Department of Biochemistry 21801	Stakman, E C Minnesota University 21806
Russ, K Bundesanstalt fur Pflanzenschutz, Wien 21797	Sheldrake, R Cornell Univ., Ithaca, N. Y. 22200	Stalheim, O H V Agricultural Research Service, Ames, Iowa; National Animal Disease Lab. 22137
Ryder, E J U S Dept of Agriculture, Salinas, Calif. 21923	Shindy, W W California Univ., Davis 21930	Steinkraus, K H Cornell University, Geneva, N Y; New York Agricultural Experiment Station 21590
Sanchez Potes, A Universidad Nacional, Palmira, Colombia; Facultad de Agronomia 22006	Siddique, I H Tuskegee Inst., Ala.; Dept. of Veterinary Microbiology 22135	Stephens, P Dept. of Primary Industries, yeerongpilly, Australia; Animal Research Inst. 22138
Sanchez, R A Buenos Aires Univ., Argentina; Faculty of Agronomy 22225	Sierra, J N Philippines Univ., Laguna; Dept. of Agricultural Botany 22027	Stoessl, A Canada Dept. of Agriculture, Univ. Sub-Post Office, London; Ontario; Research Inst. 22227
Sandoval, B Escuela Nacional de Ciencias Biologicas, Mexico; Dept. de Microbiologia 22130	Simpson, D I H Microbiological Research Establishment, Porton, Salisbury, Wilts, England 22136	Stone, H D Agricultural Research Service, Ames, Iowa; National Animal Disease Lab. 22139
Sanger, J W Pennsylvania University Medical School, Philadelphia; Dept of Anatomy 21733	Singh, S Government Agricultural Coll., Ludhiana, India 21736	Stoner, A K National Communicable Disease Center, Atlanta, Ga; Aedes Aegypti Eradication Program 21996
Sasaki, S Wisconsin Univ., Madison; Dept. of Forestry 22226	Singh, S Government of india, New Delhi 21737	Stoner, A K U S Dept of Agriculture, Beltsville, Md 21997
Saturnino-Dimaguila, L A Zamboanga Normal Coll., Phillipines; Dept. of Science and Mathematics 21924	Singh, S Government of India, New Delhi 21994	Strebler, M G Faculte des Sciences, Orsay, France 21998
Schade, C Martin Luther Univ., Halle, East Germany; Abteilung Virusserologie 21925	Sinha, R N Canada Dept. of Agriculture Research Station, Winnipeg 21764	Stubblefield, R D U S Dept of Agriculture, Peoria, Illinois; Northern Regional Research Laboratory 21807
Scherney, F Bayerischen Landesanstalt fuer Bodenkultur, Pflanzenbau; und Pflanzenschutz, Muenchen, West Germany; Abteilung Zoologie 21734	Sisli, M N Ankara Univ., Ankara; Fen Fakultesi Zooloji 21738	Stys, P Khartoum Univ., Sudan; Dept. of Zoology 21635
Schindler, A F Division of Microbiology, Food and Drug Administration; Washington, D. C. 21798	Smith, C B Pennsylvania State Univ., University Park, Pa. 21931	Suvorov, P A Corky State Univ., Arzamasskoje Shosse, 17, USSR 21935
Schluger, Ye G USSR Academy of Medical Sciences, Moscow; Dept. of Infections with Natural Foci 21633	Smith, O E California Univ., Riverside 21803	Swain, D J Yanco Agricultural Coll. and Research Station, Australia 22028
Schreier, O Bundesanstalt fur Pflanzenschutz, Wien 22155	Smittle, B J Agricultural Research Service; Entomology Research Division 21589	Sychevskaya, V I Uzbek Inst. of Medicinal Parasitology and Helminthology; Samarkand, USSR 22157
Schroeder, H W Agricultural Research Service, College Station; Market Quality Research Division 21926	Snyder, M J California Univ., Davis 21804	Taft, J L The Johns Hopkins Univ., Baltimore, Md.; Dept. of Oceanography 22172
Schroeder, W F Illinois Univ., Urbana; Dept. of Veterinary Pathology and Hygiene 22131	Sobers, E K Georgia Coastal Plain Station, Tifton 21932	Tate, H D U. S. Rubber Company, Bethany 21936
Schumakov, E M Leningrad, United Soviet Socialist Republic 21735	Soleimani, A California Univ., Davis 21805	Tauber, M J Cornell University, Ithaca, New York; Dept. of Entomology and Parasitology 21742
Schuster, G Karl Marx Univ., Leipzig, East Germany; Abteilung Landwirtschaftliche Botanik 21927	Solem, J O Norske Videnskabers Selskab, Musect, Trondheim, Norway 21634	Taylor, R H Victorian Plant Research Inst., Burnley, Australia 21937
Schwenke, W Institut fuer Angewandte Zoologie, Muenchen, West Germany; Forstliche Forschungsanstalt 21799	Sondhi, K C Rutgers University, Newark, N. J.; Dept of Zoology and Physiology 21739	Tazieff-Depierre, F Pasteur Inst., Paris, France; Lab. de Pharmacologie 21743
Scott, F W Cornell Univ., Ithaca, N. Y.; Dept. of Microbiology 22132	Spears, J F U. S. Department of Agriculture; Agriculture Research Service; Plant Pest Control Division 21995	Thirumalachar, M J Hindustan Antibiotics Ltd., Poona, India 21938
Scott, H A U S Dept of Agriculture, Beltsville, Md; Agricultural Research Service; Crops Research Division; Plant Virology Laboratory 21928	Srivastava, B K State Entomological Research Laboratory, Rajasthan, India 21740	Thomas, P L Canada Dept. of Agriculture, 25 Dafee Road, Winnipeg 19,; Manitoba; Research Station 22228
Sharpe, R H California University, Davis 21800	Srivastava, B P College of Agriculture, Jobner, India; Dept. of Entomology 22156	Thompson, A H Maryland University, College Park 21808
Shaw, D E Department of Agriculture, Stock and Fisheries, Port; Moresby, Papua 21929	Srivastava, D N Indian Agricultural Research Inst., New Delhi; Div. of Mycology and Plant Pathology 21933	Thompson, F B Department of Agriculture, Wellington, New Zealand 22158
	Srivastava, D N Indian Agricultural Research Inst., New Delhi; Div. of Mycology 21934	Threadgold, L T Rice Univ., Houston, Tex.; Dept. of Biology 22173

BIOGRAPHICAL INDEX

Ting, S V

- Ting, S V**
Florida University, Lake Alfred
21809
- Tkalcu, B**
Czechoslovak Entomological Society, Praha
21744
- Todorovic, R**
Illinois Univ., Urbana; Dept. of Pathology and Hygiene
22140
- Tojo, S**
Tokyo University, Bunkyo-ku; Faculty of Agriculture; Laboratory of Applied Entomology
21745
- Tokmakoglu, C**
Zirai Mucadele Enstitusunde, Adana
21999
- Tollenaar, H**
California Univ., Davis; Dept. of Plant Pathology
21939
- Tomlinson, J A**
California University, Berkeley; Department of Plant Pathology
21940
- Tornow, W**
Federal Ministry for Food, Agriculture, and Forest, Bonn
21810
- Towers, B**
North Carolina University, Chapel Hill; Dept. of Environmental Sciences and Engineering
21941
- Trehan, K N**
I2/L Sector 8-B, Chandigarh, Punjab, India
21746
- Tripathi, J C**
Zoological Survey of India, Dehra Dun; Northern Regional Station
22174
- Truckenbrodt, W**
Heiligenberg-Inst. fur experimentelle Biologie, Germany
21747
- Tu, J C**
Iowa State University, Ames; Dept. of Botany and Plant Pathology
21942
- Tu, J C**
Iowa State University, Ames; Dept. of Botany and Plant Pathology
21943
- Usherwood, P N R**
Glasgow Univ., Scotland; Dept. of Zoology
21748
- Valentin, P**
Cameroon
21592
- Varfolomeeva, A A**
Ministry of Health, USSR; Central Institute of Epidemiology
22042
- Vega, M R**
Philippines Univ., Laguna; Dept. of Agricultural Botany
22029
- Vega, M R**
Philippines Univ., Laguna; Dept. of Agricultural Botany
22229
- Vikberg, V**
Central Hospital, Joensuu, Finland
21637
- Viktorov, G A**
USSR Academy of Sciences, Moscow; Severtsov Inst. of Animal Morphology
21638
- Vizarova, G**
Slovak Academy of Sciences, Bratislava; Botanical Institut
21944
- Vogel, A**
Faculte des Sciences, Strasbourg, France; Lab. de Biologie Generale
21749
- Volm, M**
Inst. fuer Experimentelle Pathologie, Heidelberg; Deutsches Krebsforschungszentrum
22141
- Von Wechmar, M B**
Stellenbosch University, South Africa; Dept. of Microbiology
21945
- Waalder, P F**
Oslo, Kristins. Norway
21642
- Waddell, A H**
Queensland Univ., St. Lucia, Australia; Dept. of Parasitology
22175
- Wagner, F**
Bayerischen Landesanstalt fuer Bodenkultur, Pflanzenbau; und Pflanzenschutz, Muenchen, West Germany; Aussenstelle Wuerzburg
22007
- Wagner, F**
Regierung von Niederbayern, Landshut-Schoebrunn, West; Germany
22030
- Walker, J**
Division of Science Services, Rydalmere, Australia
21946
- Wallen, V R**
Canada Dept. of Agriculture, Ottawa; Cell Biology Research Inst.
21947
- Walton, G M**
Department of Agriculture, Auckland, New Zealand
21643
- Warmke, H E**
Florida University, Gainesville; Plant Virus Laboratory
21948
- Warren, L O**
Arkansas University
21750
- Watkins, J F**
Baylor University, Waco, Texas
21751
- Watson, J A L**
Commonwealth Scientific AND Industrial Research; Organization, Camberra; Division of Entomology
21752
- Wedemeyer, G**
U S Fish and Wildlife Service, Sand Point Naval Air Station; Seattle, Wash.; Western Fish Disease Laboratory
22238
- Wehner, R**
Universitat Zurich; Zool.-Vergl. Anatomisches Institut
21753
- Weigand, G**
Landesanstalt fur Bodenkultur, Pflanzenbau und Pflanzen; Schutz, Munchen
22230
- Wenzl, H**
Bundesanstalt fur Pflanzenschutz, Wien
22231
- White, P R**
Jackson Lab., Bar Harbor, Maine
21949
- Whitney, R D**
Canada Dept. of Forestry and Rural Development, 25 Daffoe; Road, Winnipeg 19, Manitoba
21950
- Whitten, M J**
Commonwealth Scientific and Industrial Research; Organization, Canberra, Australia; Div. of Entomology
21765
- Wightman, J A**
Bristol University Research Station, Long Ashton, Bristol.; England
21645
- Wilde, M**
Cornell Univ., Ithaca, N. Y.
21951
- Wiles, A B**
U. S. Dept. of Agriculture, State College, Mississippi; Agricultural Research Service; Crops Research Division
21952
- Williams, M W**
U S Dept of Agriculture, Wenatchee, Wash; Agricultural Research Service; Crop Research Division
21953
- Williams, P H**
Wisconsin Univ., Madison; Dept. of Plant Pathology
21954
- Wilson, K N**
Washington State Univ., Pullman
21811
- Wilson, J N**
Cornell Univ., Ithaca, N. Y.
21955
- Wiltshire, E P**
33, avenue de Bude, Geneva, Switzerland
21646
- Winks, R**
Commonwealth Scientific and Industrial Research; Organization, Yeerongpilly, Australia; Veterinary Parasitology Lab.
22176
- Winnett, G**
Rugters University, New Brunswick, N J; Dept of Agricultural Chemistry
21593
- Woltz, S S**
Florida University, Bradenton; Gulf Coast Experiment Station
21956
- Wood, C J**
Saint Louis Univ., Mo.
22143
- Yadava, R L**
R. B. S. Coll., Agra, India; Dept. of Zoology
21647
- Yadava, R L**
Freiburg Univ., Germany; Fortzoologisches Inst.
21754
- Yarns, D A**
Wagner Coll., Staten Island, N. Y.; Dept. of Biology
22144
- Yarwood, C E**
California University, Berkeley; Dept. of Plant Pathology
21957
- Yoshioka, K**
National Institute of Agricultural Sciences, Tokyo
22001
- Young, R E**
California Univ., Los Angeles; Dept. of Botanical Sciences
22232
- Youngner, J S**
Pittsburgh Univ. School of Medicine, Pa. 15213; Dept. of Microbiology
22145
- Yusifov, N I**
Academy of Sciences, Pushchino on the Oka, USSR; Inst. of Biological Physics
21755
- Zhil'tsova, L A**
USSR Academy of Sciences, Leningrad; Inst. of Zoology
21648

AUTHOR INDEX

Abou-Youssef, M H	22048	21660	22124	Esul, J C	21679
Adams, P B	21814	Binns, W	22097	Estrada-Parra, S	22130
21913		Bir, R E	21833	Etter, H M	22208
Adler, H E	21766	Bischoff, J	22180	Evert, R F	21968
22233		Bivin, W S	22053	Eyal, Z	22209
Afscharpour, F	21767	Blagoveschenskiy, D I	21595	Faber, H	21958
21958		Bobrova, S I	21596	Fairchild, G A	22079
Agnihotri, V P	22201	Boffey, P M	22195	Faust, M	21846
Ahluwalia, S S	22043	Boistel, J	21672	Fellowes, O N	22080
Ahmad, M	22134	Boller, R A	21827	Feng, K C	21729
Ahmad, N	21723	Bond, W P	21828	Ferguson, D L	22162
Ahmed, Q A	21887	Boness, M	21661	Fewkes, D W	21969
Alfieri, F J	21968	Boney, W A	22139	Figueiredo, M B	21847
Ali, E M	21961	Bonnemaison, L	21662	Filer, T H	21848
Allen, W R	21815	Bootes, B W	22054	Finco, D R	22081
21816		Booth, C	21929	Fleet, W F	22076
Allison, A C	22044	Bottenberg, G E	21768	22082	
Allison, C C	21830	Boyce, H R	21663	Flockton, H I	22092
Almeida, J D	22052	21829		Florentine, G J	21680
Almeida, P R	22239	Boyd, H W	21830	Flowers, R A	21849
Alvas, J	21649	Boyer, M G	21831	Fontes, L F	22239
Amer, S	21961	Bradley, R H E	21832	Foott, W H	21970
Amerault, T E	22086	Braithwaite, B M	21964	Ford, R E	21942
Amici, A	21917	Bramlage, W J	21833	21943	
Anastasiadis, B	22002	Bravo, L E	21880	Ford, W L	22083
Anderson, L D	21770	Bredt, H	22011	Foster, R E	21850
Anderson, R J	22045	Bridge, M	21858	Frank, A H	22084
22046		Brindle, A	21664	Frederick, S E	21777
Anderson, W W	21756	Brion, A.	22055	Freeman, B A	21604
Anghel, C G	22047	Britton, M P	21861	Freeman, O L	22196
Angus, T A	21650	Broadbent, A	21698	French, C W	22210
Anonymous,	22008	Broeck, H V D	22202	Fried, B	22172
Anthony, D W	22086	Brookbanks, E O	22056	Froyd, J D	22210
Antos, K	22235	22057		Furminger, I G S	22085
Arnott, H J	21817	Brower, L P	21763	Fusi, P	22236
Ash, R J	22033	Browne, L B	21665	Futrell, C	21851
Ashkar, S	21921	Bruhel, G W	21839	Gagnon, C	21852
Ashrafi, S H	21713	Bryner, J H	22084	Gallagher, P	22056
Assche, C V	22202	Buening, G M	22058	Gamrasni, M A	22197
Audemard, H	21651	Bukovac, M J	21779	Gantz, R L	22013
Azeri, T	21909	21793		Garner, J H B	21778
Badiali, L	22048	Bunde, D E	21666	Gaspar, C	21681
Bain, D C	21851	Burden, G S	21589	Gates, D W	22086
Bains, B S	22049	Burkes, B D	21597	Gebeshuber, J	22186
Baker, L	21921	Burnell, R E	22059	Gellatley, J G	21971
Bakke, A	21694	22147		Gentile, A G	21996
Bakshi, B	21818	Burns, R M	22060	George, J A	21682
Baldacci, E	21819	Burrows, R	22061	Gesswagner, D	22186
21820		Bush, L	21834	Ghadiok, G R	22177
Baldrige, R S	21751	Businelli, M	22193	Gibbs, A J	21937
Banks, C C	22146	Butterfield, N W	21769	Gibbs, G W	21758
Banks, W A	21589	Bychkovskaya, I B	21667	Gibson, F A	21972
Barnes, R W	22113	Calderbank, A	22187	Gilbert, J C	21853
Barnes, W C	21821	Calilung, V J	21598	Gill, C C	21854
Barrett, J H	21962	21599		Gill, H S	22211
Bartel, M H	22159	Camargo, W V A de	22062	Gilmer, R M	21855
Barth, W F	22034	Came, P E	22063	Giorgi, W	22087
Barton, G M	21822	Cameron, J W	21770	Glofke, E	22186
Basu, P K	21823	Cameron, R J	21771	Glukhova, V M	22151
Batra, S W T	21652	Campbell, C H	22064	Gogoasa, V	22125
Batten, G J	22009	Cardoso, R M	21847	Goodling, G V Jr.	21856
Bauman, F	21653	Carnero, R	22065	Goodwin, R F W	22088
Baurant, R	21963	Casimir, M	21668	22089	
Baynes, A D	22050	Cassidy, D R	22066	Gordon, J K	22034
Beale, A J	22085	Castiblanco, L E	21880	Gottl, R	21857
Beaver, R A	21654	Catara, A	21835	Gould, E A	22092
Beck, W	22186	Cate, T R	22076	Gratzek, J B	22058
Behki, R M	21824	22082		Gray, G	21858
Behrens, H	22051	Caten, C E	21772	Green, D W	21779
Behringer, P	22003	Celik, M Y	21999	Green, G J	21889
22007		Cernik, K	22067	Greenup, L R	21973
Bell, D K	22207	Cernikova, E	22067	21974, 21975	
Belli, G	21819	Cesati, R	21819	Gregory, M G	22092
21820, 21917		Chalam, G V	21836	Greve, L	21605
Belozerov, V N	21655	Champ, B R	22203	Grosclaude, C	21859
Belyshev, B F	21656	Chandel, B S	21754	Grossman, F	21860
Benecke, F S	21657	Chapman, J A	21587	Grossmann, F	22212
Bennett, D G	22160	Chaudhury, R P	22148	Guardia, E J	22191
Berg, L A	21825	22149		Guta, M	22011
Berker, J	22010	Chen, C C	21773	Gysin, H	21780
Berry, D M	22052	Chen, M	21965	Haas, G E	21683
Berryman, A A	21658	Cherblanc, G	22204	Haas, G J	22191
Betig, N	21873	Chernyakhovskiy, M Y	21669	Hackman, R	21759
Bettencourt, A J	21906	Chinn, J T	21853	Hadenfeldt, H P	22019
Betto, E	21917	Chiu, R	21965	Hadzistevic, D	21976
Bey-Bienko, G Ja	21594	Choopanya, D	21837	Halalau, D	22011
Biale, J B	22232	Chopard, L	21600	Hall, H H	21807
Bidwell, R G S	22215	Chopra, B K	22205	Halpin, J E	21837
22216		Chorney, W	21782	Hamdy, F	22048
Bieber, J	21826	Chorvath, B	22035	Hammond, D M	22091
Bienz, D R	21811	Chou, L T	21813	Hansen, C J	21800
Biernaux, J	21659	Chow, T L	22123	Hansen, M F	22159

AUTHOR INDEX

Hanson, E W

Hanson, E W	21881	Kaiser, W J	21886	Ley, H L	22152	Molloy, B P J	22020
Harris, A N A	22163	Kaisila, J	21690	Liang, H L	21865	Monaco, T J	22021
Hayes, D K	21684	Kalra, A N	21978	Librini, F	21917	Moraco, T J	22168
Healey, J S	22090	Kamal, M	21872	Limbourg, P	22016	Moradeshaghi, M J	21708
22150, 22198		Kanareykina, S K	22042	Lin, M H	21865	Morahouse, L G	22066
Healy, M J	21861	Kanda, T	21591	Lingard, D R	22110	Morf, W	22223
Hedqvist, K J	21606	Kangas, E	21691	Linzon, S N	21884	Morgan, D B	22040
Hehn, E R	21883	Kapoor, V C	21612	21885		Morimoto, T	22116
Hein Jr., H	21926	21613		Lippincott, J A	21845	Morita, T	22062
Helton, A W	21862	Kapp, P	22101	Litz, R E	21875	Moulton, J	22117
Hemerick, G A	21769	Karnavar, G K	21710	Lo, T	21965	Mueller, H D	21734
Hendrickson, J A	21607	Katan, J	21873	Long, M	22219	Mumford, D H	22118
Hendrix, J W	21849	21920		Lopez-George, J	22168	Munger, H M	21955
22213		Ke Riche, P D	22102	Lopez, G G	22073	Musgrave, A J	21614
Herbold, F	22014	Kedar, N	21873	Louch, R B	22076	Nachtigall, W	21709
Herr, R R	21781	21920		Lougheed, G J	21895	Nagy, G	22119
Hess, F D	22015	Keeler, R F	22097	Low, D G	22081	Nair, K S S	21710
Hesse, C O	21800	Kegler, H	21908	Lownsberry, B F	21800	Naito, A	21711
Hesseltine, C W	21807	Kelts, L J	21855	Loxam, J G	22111	Nakasono, K	21712
Hibbert, L E	22091	Kemper, A	22005	Loytyniemi, K	22178	Nakata, M	22185
Hickman, C J	21864	Kendrick, J W	22103	Lozano, E A	22112	Nalewaja, J D	22024
22214		Kenney, D S	21774	Lucas, A	22065	Naqui, S N H	21713
Hildebrandt, P K	22048	Khan, N R	21614	Luckey, T D	21700	Naton, E	21734
Hilding, D A	22037	Khanum, Z	22167	Luff, M L	21623	Negm, A A G	21714
Hill, A R	21685	Khare, G P	22104	Lukezic, F L	21886	Negrobov, O P	21628
Hill, F F	22242	Kiely, T B	21874	Lundy, F	22169	Nelson, M R	21878
Hinderer, H	22141	Kiktenko, V S	22105	Lyons, J M	21803	Nemec, P	22235
Hippa, H	21608	Kim, K C	21615	MacGillivray, M E	21624	Netto, L P	22120
21609		Kim, W K	22215	Madhosingh, C	22218	Neufeld, G J	21692
Hirano, C	21745	22216		Mahboob-E-Illah, S	21887	Neururer, H	22022
Hiratsuka, Y	21863	Kimmins, W C	21875	Main, B Y	21701	Newberne, P M	22121
Ho, H H	21864	Kimura, K	21693	Mainland, C M	21790	Newcomb, E H	21777
22214		Kimura, S	21695	Maksimova, Yu P	21979	Nickerson, B	21715
Hobson, D	22092	King, C D	22106	Malca, I	22219	Nigam, S K	22122
Hogge, A L	22053	Kinnear, J F	21692	Mallach, N	22032	Nijholt, W W	21587
Hopen, H J	21782	Kinoshita, A	21769	Mamayev, B M	21625	Noble, R G	21670
Houston, B R	21939	Kiraly, Z	21876	Manjunath, T M	21991	Noirot, C	21724
Howard, M G	21682	Kiritani, K	21693	Mansur, P S	21679	Noronha-Wagner, M	21906
Howitt, A J	21585	Kitazawa, T	21591	Markkula, M	21888	Norris, R F	21793
Hsieh, S C	21865	Klarman, W L	21858	Marrour, J	21980	Nuorteva, M	21716
Huang, T C	21788	Kleczkowski, A	21877	Marston, R B	22241	21985	
Huck, R A	22093	Kliewer, W M	21805	Martens, E	22181	Nuorteva, P	21717
Hughes, D E	22127	21930		Martens, J W	21889	21986	
Huhtanen, C N	21866	Klyuchko, Z F	21616	Martin, M D	21692	O'Berry, P A	22084
Hunt, C E	22121	Knight, C A	21871	Martinez, M M	21886	Obrero, F P	21907
Hurpin, B	21686	Knipling, E F	21617	Martvon, A	22235	Obrtel, R	21987
Hurrell, J M W	22089	Knudsen, P	21694	Masaki, J	21711	Ochinskaya, G K	21667
Hurwood, I S	22192	Knuhtsen, H K	21878	Mathur, L M L	21702	Odurukwe, S	21891
Hussain, M Z	22164	Kobayashi, M	21695	21740		Ogden, J C	21761
Hutt, F B	22094	Kochan, W J	21862	Mathur, M K	22017	Okasha, A Y K	21718
Hyland, F	21949	Kodama, K	22107	Mathur, S B	21890	Oksanen, H	21691
Ichinohe, M	21712	Koenig, K	21787	Matkin, O A	22200	Ollerenshaw, C B	22078
Igritan, A	22165	Kofranek, A M	21789	Matthews, L J	22179	Olson, C	22106
Inoue, Y K	22107	Kooistra, E	21879	Mayer, H R	21791	Ona, J D	22029
Irving, R M	21783	Korobitsin, V G	21618	Mayer, K	21981	Opel, H	21908
Isaac, P K	22228	Kovalev, V G	21619	Maynard, D N	21891	Orlando, M D	22099
Ishino, Y	22185	Koyama, K	21707	Mayor, F	22168	Osebold, J W	22075
Isokoski, M	21717	Kozlova, E P	22042	McArthur, L E	21863	Overman, A J	22004
Israel, P.	21977	Kozlowski, T T	22226	McCann, F V	21733	Owen, N V	22123
Iuanov, K S	22151	Kramer, C L	22222	McCracken, F I	22220	22124	
Iwata, T	22001	Krass, C J	21943	McDaniel, B	21626	Ozaki, K	21588
Iyer, P R K	22095	Kristian, P	22235	McDaniel, H A	22066	Ozalp, M O	21909
Jackson, H D	22160	Krull, C F	21880	McDonald, T J	22127	Ozkan, M	21910
Jadot, R	21867	Krzelj, S	21681	McDowell, L L	22221	Ozturk, S	22237
Jain, N C	22096	Kudryasova, N I	22108	McGhehey, J H	21703	Padmanabhan, S 4	21911
James, L F	22097	Kulagin, S M	22108	McIlwain, P K	22113	Pady, S M	22222
Janitor, A	21944	Kuo, T T	21788	McKenzie, J I	21792	Page, O T	21838
Jarrett, E E E	22166	21813		McKenzie, R I A	21889	Page, R J C	21586
Jarrett, W F H	22166	Kurosu, Y	21588	McLeod, D G R	21704	Pal, A	21840
Jean, J	21965	Kutz, F W	21696	McNabola, S S	21954	Palevody, C	21719
Jensen, M H	21868	Laiho, K	21717	McNutt, S H	22140	Paller, E C	22029
Jeun, J	21947	Lakovaara, S	21759	Mead-Briggs, A R	21586	Palm, T	21629
Jinks, J L	21772	Lam, S L	22217	Mebus, C A	22162	Palmer-Jones, T	21988
Jiran, E	22098	Larenaudie, B	22065	Medler, J T	21968	Palmer, J G	21798
Johnson, C	21610	Lariaso, B L	21697	Melloni, M	22041	Pandotra, V R	21912
21760		Larsen, J R	21698	Mengato, W	22062	Papavizas, G C	21814
Johnson, R W	22099	Larson, J	22109	Mengeling, W L	22114	21913	
Jones, B	22219	Lasmanis, J	22096	Menon, M R	21892	Parmelee, J A	21914
Jones, B L	21869	Latch, G C M	21881	Merisuo, A K	21705	Pasfield, G	21720
Jones, J C	21687	Laufer, H	21677	Meronuck, R A	21893	Pasquali-Ronchetti, I	21721
Jones, J P	21956	21699		Merry, D M E	22018	Pathak, M D	21989
Jones, R J	21784	Lawes, G S	21882	Meyer, J	22019	Patrascu, I	22125
Judenko, E	21688	Layton, J M	22129	Meyer, J A	21894	Pease, R W	21762
Jussila, R	21611	Lebeda, K	22186	Mijares, L G	22073	Pensack, J M	21866
21689, 21986		Leonard, D E	21620	Milazzo, F H	21895	Pepper, E H	21893
Kabelik, V	22100	Lert, P J	21789	Miller, C H	22021	Pepper, J H	21666
Kable, P F	21870	Lesley, S M	21824	Mital, V P	21706	Perrett, W J	22170
Kachroo, J L	21912	Levanidova, I M	21621	21982		Perttunen, V	21691
Kado, C I	21871	Levasseur, L	21622	Mitsubishi, J	21707	Pessina, F	21819
Kahl, E	22186	Lewellen, R T	21883	Miyatake, M	21627	Peterson, C E	21794
Kaiser, W	21785	Lewis, J A	21814	Mohanty, G C	22115	Peterson, J L	22209
21786		21913		Molledo, J A	22123		

AUTHOR INDEX

Zlotnik, I

Petit, C	21757	Sanger, J W	21733	Stephens, P	22138	Volm, M	22141
Petr, G	22098	Sarfert, E	21826	Stoessi, A	22227	Volynova, T P	21667
Petrosini, G	22193	Sasaki, N	22107	Stone, H D	22139	Von Wechmar, M B	21945
Pharis, R P	22223	Sasaki, S	22226	Stone, K R	22075	Vshivkov, F N	21633
Pielou, D P	21722	Sastru, K S	21912	Stone, P C	21700	Waalder, P F	21642
Pike, L M	21794	Saturino-DiMaguila	21924	Stoner, A K	21996	Waddell, A H	22175
Pinto, A A	22120	Saxena, S C	21741	21997		Wagner, F	22007
Pireclu, D K	21795	Schade, C	21925	Straub, O C	22103	22030	
Platt, A P	21763	Schalm, O W	22096	Strebler, M G	21998	Walker, C A	22135
Platzsch, F	22062	Scherney, F	21734	Stublefeld, R D	21807	Walker, J	21946
Plotnikova, L F	22108	Schindler, A F	21798	Stys, P	21635	Wallen, V R	21823
Polatnick, J	22126	Schluger, Ye G	21633	Suga, O	22120	21947	
Pollack, B L	21868	Schmeling, B V	21936	Sugiyama, H	21591	Walton, G M	21643
Pomeroy, A P	22088	Schreier, O	22155	Surdan, C	22125	Wang, J T	22116
Poos, J A J	21915	Schroeder, H W	21827	Suvorov, P A	21935	Warren, H E	21948
Popa, V	22125	21926		Swain, D J	22028	Warmke, L E	22013
Popham, E J	21630	Schroeder, W F	22131	Switzer, W P	22129	Warren, L O	21750
Pordesimo, A N	21907	Schults, D W	22241	Sychevskaya, V I	22157	Watkins, J F	21751
Powell, D	22211	Schumakov, E M	21735	Tadic, M	21750	Watson, J	22142
Pozsar, B I	21876	Schuster, G	21927	Taft, J L	22172	Watson, J A	21919
Pratt, C	21795	Schwenke, W	21799	Tafari, F	22193	Watson, J A L	21752
Pridantseva, Ye A	22154	Scott, A W	22145	Taga, M	22125	Weaver, R J	21805
Pristavko, V P	21990	Scott, F W	22132	Tahir, K A	22134	21930	
Privora, M	22199	Scott, H A	21928	Takam, T	21591	Webb, R E	21996
Pugh, G W	22127	Sehgal, V K	21746	Tanaka, J S	21853	Wedemeyer, G	22238
Puthz, V	21631	Senterfit, L B	22072	Tarasevic, I V	22108	Wehner, R	21753
Putman, A R	22023	Sergent, E	22133	Tashiro, H	21590	Weigand, G	22230
Putnam, A R	22015	Sharma, V P	22156	Tashjian, R J	22144	Weinhold, A R	21872
Qadri, M A H	21713	Sharp, E L	21883	Tate, H D	21936	Welch, N C	21804
Qayyum, H A	21723	Sharpe, R H	21800	Tauber, C A	21742	Wenzl, H	22231
Quennedy, A	21724	Shaw, D E	21929	Tauber, M J	21742	Wergin, W P	21777
Quimby, P C	22024	Shear, C B	21846	Taylor, R H	21937	West, J L	22115
Radova, E	22199	Sheikh, S A	22134	Tazieff-Depierre, F	21743	White, P R	21949
Radwan, A I	22048	Sheldrake, A R	21801	Thirumalachar, M J	21938	Whitehead, M D	21938
Raggi, V	21916	Sheldrake, R	22200	Thomas, P L	22228	Whiteside, W F	21782
Ramade, F	21725	Shindy, W W	21930	Thompson, A H	21808	Whitney, H S	21919
Ramsey, F K	22129	Shiroyama, T	22241	Thompson, F B	22158	Whitney, R D	21950
Rangaiah, P K	22025	Shome, M K	21922	Thompson, J A	21692	Whittlestone, P	22089
Rankin, W B	22194	Shorey, H H	21770	Threadgold, L T	22173	Whitten, M J	21765
Ransom, J P	22128	Shotwell, O L	21807	Tibbitts, T W	21768	Whittlestone, P	22088
Rao, V P	21933	Shupe, J L	22097	Tiessen, H	21792	Whitwell, G B	22070
21991		Siddique, I H	22135	Ting, S V	21809	Whitworth, J W	22026
Rautapaa, J	21992	Siddiqui, A A	21802	Tkalcu, B	21744	Wickler, W	21644
Read, C P	22171	Sierra, J N	22027	Todorovic, R	22140	Wightman, J A	21645
Read, D C	21993	Simmons, G C	22050	Tojo, S	21745	Wilde, M	21951
Read, P E	21796	22138		Tokmakoglu, C	21999	Wiles, A B	21952
Rechenmann, R V	22041	Simpson, D I H	22136	Tollenaar, H	21939	Willerson, J T	22034
Reed, J P	21593	Sims, J J	22219	Tomlinson, J A	21940	Williams, M W	21953
Reedy, M K	21726	Simsir, N	22237	Tomlinson, T E	22187	Williams, P H	21954
Refatti, E	21819	Singh, S	21736	Toole, E R	22220	Wilson, K N	21811
21917, 21918		21737, 21994		Tornow, W	22180	Wilson, J N	21955
Reid, R W	21919	Sinha, R N	21764	Torrey, J P	22114	Wiltshagen, E P	22041
Reinganum, C	21937	Sinha, S	21890	Torrie, J H	22226	Wiltshire, R	21646
Retig, N	21920	Sisli, M N	21738	Towers, B	21941	Winks, R	22176
Reusser, F	21781	Slabnik, S	22225	Trehan, K N	21746	Winnett, G	21593
Reyes, T T	21907	Smith, C B	21931	Tripathi, J C	22174	Wolf, F	21681
Richards, A B	22026	Smith, K M	21817	Troise, C	22087	Woltz, S S	21956
Richter, K	22051	Smith, L D S	22112	Truckenbrodt, W	21747	Wong, S I	21947
Rico, G	21880	Smith, M L	21807	Tsao, T H	21812	Wood, C J	22143
Ries, S K	21921	Smith, O E	21803	Tsoumis, G	21949	Woodbridge, C C	21775
Ringel, L	22109	Smith, P R	21937	Tu, J C	21942	Woodcock, D	22206
Ringoet, A	22041	Smith, R E	21671	21943		Woodstock, M	22000
Ristic, M	22131	Smith, S H	21940	Twiehaus, M J	22162	Wostmann, B S	22161
Robayo, G	21880	Smittle, B J	21589	Urbanek, Z	22098	Wrba, H	22141
Roberts, E D	22129	Snyder, L V	22241	Urquhart, G M	22166	Wu, H K	21812
Robinson, D M	21632	Snyder, M J	21804	Usherwood, P N R	21748	Wu, R Y	21788
Roby, T O	22086	Sobers, E K	21932	Valbuena, L A	21880	Yadava, R L	21647
Roche, G	21727	Sokal, R R	21607	Valentin, P	21592	21754	
Rodriguez-Kabana, R	22205	Soleimani, A	21805	Van Dewark, S D	22160	Yamazaki, M	21695
22224		Solem, J O	21634	Van Regenmortel, M H	21871	Yang, C M	21788
		Somerson, N L	22072	21945		Yang, L H	21813
Roehrich, R	21728	Sondhi, K C	21739	Vanachter, A	22202	Yarns, D A	22144
Roelofs, W L	21729	Soriano, A	22225	Vappula, N A	21636	Yarwood, C E	21957
Rogers, B L	21808	Soylu, O Z	21999	Varfolomeeva, A A	22042	Yen, W	21803
Rohrschneider, I	21730	Spears, J F	21995	Varney, E H	21868	Yida, O	22120
Rovner, R S	21731	Srivastava, B K	21740	Vega, M R	22027	Yoshioka, K	22001
Roy, A K	21922	Srivastava, B P	22156	22029, 22229		Young, R E	22232
Rubatzki, V E	21804	Srivastava, D N	21933	Verma, A N	21722	Young, V R	22121
Ruegg, J C	21732	21934		Verstraeten, C	21681	Youngner, J S	22145
Ruiz, F	22065	Srivastava, J P	21741	Vigil, E L	21777	Yusifov, N I	21755
Rupes, V	22199	Stahly, E A	21953	Vikberg, V	21637	Zachariah, K	22214
Russ, K	21797	Stakman, E C	21806	Viktorov, G A	21638	Zavodska, E	22235
Rusu, V	22125	Stalheim, O H V	22137	Villiers, A	21639	Zawawi, M A	21783
Rutter, D A	22136	Stambaugh, W J	21941	21640		Zemanova, M	22235
Ryder, E J	21923	Starratt, A N	22227	Villiers, L	21641	Zeve, V H	21687
Sanchez Potes, A	22006	Stastny, E	22186	Vizarova, G	21944	Zhil'tsova, L A	21648
Sanchez, R A	22225	Steinkraus, K H	21590	Vogel, A	21749	Zlotnik, I	22136
Sandoval, B	22130						



ORGANIZATIONAL INDEX

- Agra Coll., India
Dept. of Zoology
21612
- Agra College, India
Dept. of Botany
21890
- Agricultural Research Council, London, England
22182
- Agricultural Research Service, Greenport, N. Y.
Plum Island Animal Disease Lab.
22132
- Agricultural Society of Trinidad and Tobago,
Port-of
Spain
21960, 22183
- Agricultural Society of Trinidad and Tobago,
Port-of
Spain.
21959
- American Cyanamid Company, Princeton, N J
Agricultural Division
21866
- Animal Medical Center, New York, N. Y.
22144
- Army Research
22121
- Auburn Univ., Alabama
Dept. of Botany and Plant Pathology
22201
- B. R. Boll., Agra, India
Dept. ZOOLOGY
21754
- Birmingham Univ., England
Dept. of Genetics
21772
- California Univ., Davis
Dept. of Veterinary Microbiology
22075
- California University, Davis
22240
- Cambridge University
Dept. of Zoology
21718
- Canada Dept. of Forestry, Calgary, Alberta
Forest Research Lab.
22208
- Centro Nacional de Investigaciones
Agropecuarias Tibaitata,
Bogota, Colombia
21880
- Coffee Rust Research Center, Oeiras, Portugal
21906
- Colorado State Univ., Fort Collins
Coll. of Veterinary Medicine
22123, 22124
- Commonwealth of Australia
Dept. of Health
22184
- Connecticut Agricultural Station, New Haven
Dept. of Entomology
21620
- Connecticut Univ., Storrs
Biological Sciences Group
21677
- Cooperative State Research Service, Washington,
D. C.
22094
- Dartmouth Medical School, Hanover, N. H.
Dept. of Physiology
21733
- Department of Agriculture
21773
- Department of Agriculture, Stock and Fisheries,
Port
Moresby, Paupa
22031
- Department of Health, Hanokaa, Hawaii
Plague Research Unit
21683
- Duke University, Durham, North Carolina
School of Forestry
21941
- East African Veterinary Research Organization,
Muguga, Kenya
22117
- Entomological Society of New Zealand
21603
- Federal Research Inst. for Virus Diseases of
Animals,
Tubingen, West Germany
22103
- Forest Research Lab., Maple, Ontario, Canada
21831
- Hawkesbury Agricultural Coll., Richmond,
Australia
21857
- Indian Veterinary Research Inst., Izatnagar
22174
- Institut de la Recherche Scientifique dans
L'Industrie
et L'Agriculture
21660
- Iowa State Univ., Ames
Dept. of Veterinary Pathology
22129
- Kansas State Univ., Manhattan
Dept. of Pathology, Parasitology, and Public
Health
22115
- Lafayette College, Easton, Pa.
Dept. of Biology
22172
- Michigan State University, East Lansing
Dept. of Entomology
21583
- Ministry of Agriculture, Fisheries and Food
22077
- Ministry of Agriculture, Fisheries and Food,
England
22040, 22093, 22111, 22142
- Ministry of Agriculture, Fisheries, and Food
22039
- Minnesota University, St. Paul
Dept. of Plant Pathology
21834
- Missouri Univ., Columbia
Dept. of Veterinary Anatomy
22053
- Montana State Univ., Bozeman
Dept. of Botany and Microbiology
21883
- National Animal Disease Lab., Amcs, Iowa
Pathology Section
22066
- National Foundation
22210
- National Inst. of Allergy and Infectious Diseases,
Bethesda, Md.; Lab. of Clinical Investigations
22076, 22082
- National Inst. of Health
21954
- National Institute of Agricultural Sciences,
Nishigahara,
Kita-ku, Tokyo
21745
- National Research Council of Canada
22223
- National Science Foundation
21750, 21751, 21957
- New South Wales Dept. of Agriculture, Australia
Biology Branch
21896, 21897, 21898, 21899, 21900, 21901,
21902, 21903, 21904, 21905
- New South Wales Dept. of Agriculture, Australia
Div. of Animal Industry
22153
- New South Wales Dept. of Agriculture, Australia
Entomology Branch
21983, 21984
- North Dakota State University, Fargo
Dept. of Plant Pathology
21893
- Notre Dame Univ., Indiana
Dept. of Microbiology
22161
- Ohio State University
21830
- Pennsylvania State Univ., Univ. Park
Dept. of Veterinary Science
22116
- Phylaxia State Serum Inst., Budapest, Hungary
22119
- Plum Island Animal Disease Lab., Greenport, N.
Y.
22063
- Public Health Service
National Center for Air Pollution Control;
Research Grants Branch
22222
- Public Health Service
National Center of Urban and Industrial Health
21858
- Public Health Service
National Inst. of Allergy And Infectious Diseases
22145
- Punjab Univ., India
Dept. of Zoology
21746
- Queen's Univ. Belfast, N. Ireland
22173
- State Dept. of Agriculture, Rajasthan, India
21702
- Sydney Univ., Australia
School of Biological Sciences
21758
- Tela Railroad Co., La Lima, Honduras
Vining C. Dunlap Labs.
21886
- Toronto Univ., Ontario, Canada
Dept. of Botany
22215, 22216
- Tufts Univ., Heddford, Mass.
Dept. of Biology
21673
- U S Dept. of Agriculture
Agricultural Research Service
22045, 22046
- U S Dept. of Agriculture
Crops Research Division
21996
- U S Fish and Wildlife Service, Columbia, Mo.
Fish-Pesticide Research Laboratory
22238
- U S Food and Drug Administration
22152, 22189, 22190, 22194
- U S Public Health Service
National Institutes of Health
21700
- U. S. Public Health Service
National Cancer Institute; U. S. Public Health
Service; National Institute of Allergy and In-
fectious Diseases
21871
- Us Dept. of Agriculture
Forest Service
22196
- Veterinarmedizinischen Universitat, Budapest,
Hungary
Lehrstuhl fur Pathologische Anatomie
22101
- Wisconsin Univ., Madison
Dept. of Veterinary Science
22140
- Wisconsin University, Madison
Dept. of Plant Pathology
21881
- Yale Univ., New Haven, Conn.
21762





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