# Pesticides pocumentation bulletin

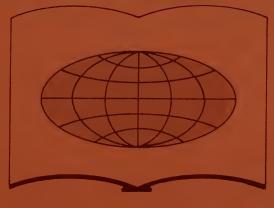
B. 2 1997. OF LONG THINK

10% 2 400

241

HATVA

When the state of the



Volume 4 Number 6 MARCH 15, 1968

**IDNAL AGRICULTURAL LIBRARY · U.S. DEPARTMENT OF AGRICULTURE** 



Use Pesticides FOLLOW THE LABEL

U.S. DEPARTMENT OF AGRICULTURE

## NATIONAL AGRICULTURAL LIBRARY

### U. S. DEPARTMENT OF AGRICULTURE

# ANNOUNCEMENT

These issues of the <u>Pesticides Documentation Bulletin</u> introduce a new computer generated current awareness service. Through the Pesticides Information Center's Update, Publication and Search (PICUPS) system, a categorized bibliographic citation file, accompanied by subject, author, organization and biographical indices will be issued bi-weekly.

All elements of the citations maintained in this mechanized file system are searchable by computer. In addition to the printed subject descriptors appearing in the <u>Bulletin</u>, other subject descriptors are incorporated in the tape file system as machine searchable but non-printable items. In the early issues some of these subject terms appear in the <u>Bulletin</u> as duplications. These duplications will be eliminated in later programs.

Since retrospective information was not previously published in searchable form, the next several issues of the <u>Bulletin</u> will contain selected coverage of pest control literature issued between 1960 and 1966. Additional retrospective material will be incorporated in future bulletins through the special bibliographies prepared by the Center. Current pest control literature will receive comprehensive coverage. Future expansion will include selected abstracts when such abstracts appear in the source document.

Recipients of this introductory issue are invited to send their comments and suggestions for its improvement to the U.S. Department of Agriculture, National Agricultural Library, Pesticides Information Center, 4112-Auditors Building, Washington, D. C. 20250. These comments together with computer produced statistical analyses will provide the bases for future changes.

Blanche L. Oliver

Blanche L. Oliveri Acting Director National Agricultural Library

# PESTICIDES DOCUMENTATION BULLETIN

# A BI-WEEKLY PUBLICATION OF

# **U. S. DEPARTMENT OF AGRICULTURE**

Volume 4

March 15, 1968

Number 6

# OBJECTIVES AND SCOPE

The Pesticides Documentation Bulletin is compiled by the Pesticides Information Center, the first of its kind to be established within a national library, It is a bi-weekly index to the literature on pests and their control and the impact on the economy and man's total environment. The index includes literature on diseases, insects, nematodes, parasites, weeds, and other pests affecting plants, animals, man, our natural resources, and other values in man's environment. Literature on biological, chemical, cultural ecological, mechanical, and integrated methods of pest control will be included. Special emphasis is given to the literature on the toxicological, physiolog-ical and epidemiological aspects of pests and their control by chemical and nonchemical methods.

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

#### FORMAT

The Bulletin is a categorized biblio-graphy, 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
- Toxicology 60
- 65 Plant Physiology & Biochemistry
- 70 Chemistry
- Engineering Industry 80
- 90

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 descrip-tors, patent or grant numbers, biblio-grapher'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 ac-' cession numbers of pertinent citations.

## AVAILABILITY OF REFERENCES CITED

## Search Requests

i

Each item appearing \_n the current format of the Bulletin is maintained in magnetic tape files which are fully searchable.

Search requests may be submitted to:

U.S. Department of Agriculture National Agricultural Library PESTICIDES INFORMATION CENTER Room 4112 - Auditors Building Washington, D.C. 20250

## 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.
- HOTORINTS: \$1.00 for each 4 pages or fraction copied from a single article or book.
- RUSH SERIVICE: 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.

## Library Coupons

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

For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C., 20402. \$14.00 per year, domestic; \$17.50 per year, foreign. Single copies vary in price.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget (March 29, 1966).

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

#### 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 effort.

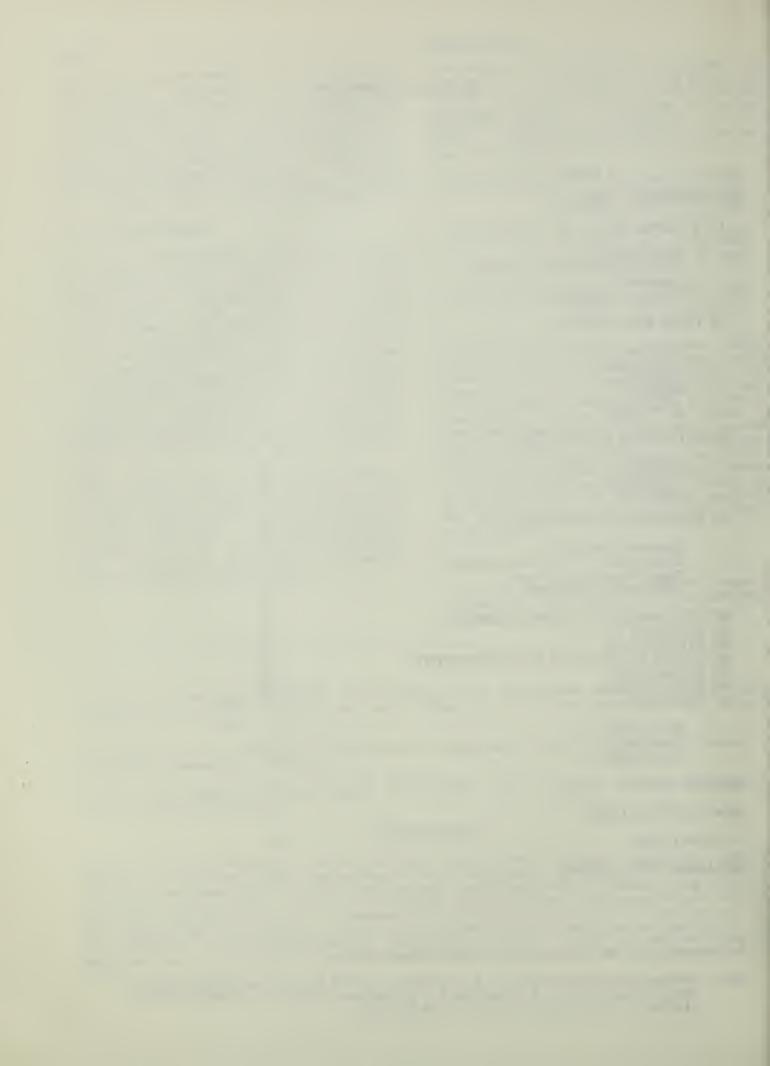
ii

# TABLE OF CONTENTS

Items	Page
BIBLIOGRAPHY (Citations)	
10 ENTOMOLOGY	1
Systematics Physiology and Biochemistry Genetics Medical Entomology	$\begin{array}{c}1\\2\\11\\12\end{array}$
20 CROP PROTECTION	13
Diseases Arthropods Nematodes Weeds Other Pests	13 28 33 35 36
30 LIVESTOCK PROTECTION	36
Diseases Arthropods Parasites	37 54 55
40 COMMODITY PROTECTION	<b>5</b> 8
Storage Diseases Arthropods Rodents and Other Pests Microbial Contamination	58 58 * 58
50 ENVIRONMENTAL CONTAMINATION 55 RESIDUES	59 59
60 TOXICOLOGY 65 PLANT PHYSIOLOGY & BIOCHEMISTRY 70 CHEMISTRY 80 ENGINEERING 90 INDUSTRY	61 62 64 65 65
Economics Education Regulations	* 65 *
SUBJECT INDEX	67
BIOGRAPHICAL INDEX	171
AUTHOR INDEX	173
ORGANIZATIONAL INDEX	179

\* 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.



6452-68

THE SHALLOT APHID IN THE PACIFIC NORTHWEST.

# 10 ENTOMOLOGY

6444-68

EVALUATION OF THE NEEDS OF OKLAHOMA EXTENSION PERSONNEL RELATIVE TO ENTOMOLOGY PROBLEMS. N W Flora Diss Abstr Sect B 27 (12,PT.1), 4192B Jun 1967 Z5055.049D53 Entomology, Extension workers.

# SYSTEMATICS

6445-68 FURTHER TESTS ON THE USE OF A POLYHEDROSIS VIRUS IN THE CONTROL OF THE COTION LEAFWORM PRODENIA LITURA, FABRICIUS. S Abul-Nasr J Invertebrate Pathol 1(2) 112-120, 12 REFS., 4 TABS. Aug 1959 421 J826 Alabama, Biological control (insects), Polyhedroses, Prodenia. 6446-68 THE CULICOIDES OF NEW MEXICO (DIPTERA, CERATOPOGONI-DAE). W R Atchley Kans Univ Sci Bull 46 (22), 937-1022 REF 03 Mar 1967 500 K132S Ceratopogonidae, Culicoides, Diptera, Insect taxonomy, New Mexico. Abstract included. 6447-68 THE EFFECT OF INFESTATION WITH ACARAPIS WOODI (RENNIE) ON THE MORTALITY OF HONEY BEES. L Bailey D C Lee J Invertebrate Pathol 1(1) 15-24, 11 REFS. May 1959 421 J826 Apis mellifera, Mites, Parasitism. 6448-68 THE INCIDENCE OF VIRUS DISEASES IN HONEY BEES. Ann Appl Biol 60 (1), 43-48 REF Aug 1967 442.8 AN72 Apis mellifera, Bee diseases, Insect diseases, Sacbrood. 6449-68 A VIRUSLIKE TRANSOVARIAN FACTOR AFFECTING MORPHOLOGY IN SPIDER MITES. J B B Boudreaux J Invertebrate Pathol 1(3) 270-280, 13 REFS. Oct 1959 421 J826 Insect eggs, Insect morphology, Tetranychidae. 6450-68 THE HIGHER CLASSIFICATION OF THE FAMILY RHOPALIDAE (HEMIP-TERA) TOGETHER WITH A REVISION OF THE GENUS ARHYSSUS STAL (RHOPALIDAEO HEMIFTERA). (RHOFALIDATO ABATTIAN). N P Chopra Diss Abstr Sect B 27 (12,PT.1), 4435B-4436B Jun 1967 25055.049D53 Arhyssus, Hemiptera, Insect taxonomy, Rhopalidae. 6451-68 A LIMNOLOGICAL INVESTIGATION OF THE AUFWUCHS CONMUNITY IN TWO MAINSTEM MISSCURI RIVER RESERVOIRS. TO CLAFIN TO CLAFIN Diss Abstr Sect B 27 (12,PT.1), 4598B-4599B Jun 1967 25055.U49D53 Aquatic insects, Chironomidae, Limnology, Missouri River, Reservoirs, Surveys.

C F Doucette J Econ Entomol 53(1) 177-178, BIBL. Feb 1960 421 J822 Lilium longiflorum, Myzus, Pacific Northwest, Plant disease transmission, Population statistics, Statistical distributions. 6453-68 THE FLIGHT RANGE OF THE EUROPEAN CHAFER. W G Evans G G Gyrisco J Econ Entomol 53(2) 222-224, BIBL. Apr 1960 421 J822 Amphimallon, Insect flight. 6454-68 A TAXONOMIC STUDY OF THE GENUS CEDUSA IN THE NEW WORLD (HOMOPTERAO DERBIDAE) . J E Flynn Diss Abstr Sect B 27 (12,PT.1), 4436B Jun 1967 Z5055.049D53 Cedusa, Derbidae, Insect taxonomy. 6455-68 A SAMPLING TECHNIQUE FOR ESTIMATING POPULATIONS OF SMALL ARTHROPODS IN SOIL AND VEGETATION. C F Henderson J Econ Entomol 53(1) 115-121, BIBL., PL. Feb 1960 421 J822 Arthropoda, Equipment, Sampling (statistics), Soils, Vegetation. 6456-68 LONG-RANGE AERIAL TRANSPORT OF THE HARLEOUIN BUG AND THE GREENBUG INTO MINNESOTA. A C Hodson E P Cook J Econ Entomol 53(4) 604-608, BIBL. Aug 1960 421 J822 Insect migration, Minnesota, Murgantia, Population statistics, Toxoptera, Weather. 6457-68 THE BLACK FLIES (DIPTERAO SIMULIIDAE) OF WESTERN MASSA-CHUSETTS. F R Holbrook Diss Abstr Sect B 27 (12,PT.1), 4436B Jun 1967 25055.049D53 Diptera, Habitats, Insect taxonomy, Simuliidae, Surveys. 6458-68 ACARINA ASSOCIATED WITH MICHIGAN BOMBINAE. I-II. . R W Husband Diss Abstr Sect B 27 (12,PT.1), 4605B Jun 1967 25055.049D53 Acarina, Bombinae, Zoogeography. 6459-68 SOME RELATIONSHIPS BETWEEN PEREZIA PYRAUSTAE PAILLOT (SPORCOA, NOSEMATIDAE) AND PYRAUSTA PIRAUSTAE P (HUBNER) (LEPIDOPTERA, PYRALIDAE). J P Kramer J Invertebrate Pathol 1(1) 25-33, 7 REFS., 2 TABS. May 1959 421 J826 Moths, Parasitism, Protozoa. 6460-68 ESTIMATING IMMATURE POPULATIONS OF RICE WEEVILS IN WHEAT BY USINATING INDATURE POPULATIONS OF RICE WE USING SUBSAMPLES. G F Krause J R Pedersen J Econ Entomol 53(2) 215-217, BIBL., TABS. Apr 1960 421 J822 Population statistics, Sampling (statistics), Sitophilus, Wheat. 6461-68 DISTANCE FROM THE APIARY AS A FACTOR IN ALFALFA POLLINATION. M D Levin J Econ Entomol 53(1) 56-60, BIBL., TABS. Feb 1960 421 J822 Alfalfa, Apiaries, Apis mellifera, Pollination. 6462-68 THE HORIZONTAL AND VERTICAL DISTRIBUTION OF FLYING INSECTS NEAR ARTIFICIAL WINDBREAKS. T Levis Ann Appl Biol 60 (1), 23-31 Aug 1967 442.8 AN72 Ecology, Insect flight, Windbreaks.

PAGE 1

#### 10 6462-68

```
10 6463-68
6463-68
   THE OCCURRENCE OF SPECIES OF THE GENUS BREVIBACTERIUM IN
   INSECTS
   O Lysenko
   J Invertebrate Pathol 1(1) 34-42, 9 REFS., 1 TAB.
   May 1959 421 J826
   Bacteria, Brevibacterium, Insect diseases.
6464-68
   NORTH AMERICAN SPECIES OF ASCHERSONIA PARASITIC ON ALEY-
   BODTDAE
   E B Mains
   J Invertebrate Pathol 1(1) 43-47, 5 REFS.
May 1959 421 J826
   Aleyrodidae, Coccidae, Insect diseases, Parasitism.
6465-68
   SCIENTIFIC NOTES.
   DISCOVERY IN MICHIGAN OF ORGILUS OBSCURATOR (NEES), A
FOREIGN PARASITE OF THE EUROPEAN PINE SHOCT MOTH-
   W E Miller
   W E MIIIEI
J Econ Entomol 53(2)318, BIBL.
Apr 1960 421 J822
Michigan, Orgilus obscurator.
6466-68
   DROSOPHILID SURVEY OF INDIA. III. THE DROSOPHILIDA OF
   KASHMIR VALLEY.
   R Parshad K K Duggal
Panjab Univ Res Bull (N.S.) 17 (3/4), 277-290 REF
   Paljab univ Res Bull (n-S.) If (3/4), 277-230 REF
Dec 1966 513 EA72
Dorsilopha, Drosophila, Drosophilidae, Insect taxonomy,
Pholadoris, Scaptomyza, Sophophora.
Abstract included.
6467-68
   FLEAS (SIPHONAPTERA) OF ALABAMA AND THEIR HOST RELATION-
   SHIP.
   L G Sanford
   Diss Abstr Sect B 27 (12, PT. 1), 4438B
Jun 1967 Z5055.U49D53
   Parasitic insects, Siphonaptera, Zoogeography.
6468-68
   THE AQUATIC AND SEMI-AQUATIC HEMIPTERA OF OKLAHOMA. THE LYGAEIDAE OF OKLAHOMA (HEMIPTERA).
   K F Schaefer
   Diss Abstr Sect B 27 (12,PT.1), 4609B
Jun 1967 Z5055.049D53
   Aquatic insects, Insect taxonomy.
6469-68
   A PRELIMINARY STUDY OF THE SYRPHIDAE OF OKLAHOMA (DIP-
TERAO SYRPHIDAE.
   D A Shorter
   D A SHOFTER
Diss Abstr Sect B 27 (12,PT.1), 4610B
Jun 1967 Z5055.U49D53
Diptera, Insect taxonomy, Syrphidae.
6470-68
   STUDIES OF EUGREGARINA IN INSECTS.
   J Theodorides
   J Invertebrate Pathol 1(2) 107-111, 20 REFS.
Aug 1959 421 J826
Colcoptera, Eugregarina, Parasitism, Protozoa.
6471-68
   TAXONOMY AND BIOLOGY OF THE SUBFAMILY BEROSINAE OF NORTH
AND CENTRAL AMERICA AND THE WEST INDIES (COLEOPTERAO
   HYDROFHILIDAE.
   E R Van Tassell
Diss Abstr Sect B 27 (12,PT.1), 4612B
Jun 1967 25055.049D53
   Aquatic insects, Berosinae, Hydrophilidae, Insect biology,
Insect taxonomy.
6472-68
   LOXOSCELES RECLUSA IN SOUTHERN CALIFORNIA.
W G Waldron F E Russell
   Toxicon 5 (1), 57
Jul 1967 391.8 T66
   Arachnoidism, California, Loxosceles reclusa, Spiders.
6473-68
   NOSEMA LAPHYMAE N. SP. AND THE INTERNAL STRUCTURE OF THE
   MICROSPORIDIAN SPORE.
    J Weiser
   J Invertebrate Pathol 1(1) 52-59, 13 REFS.
May 1959 421 J826
Bacteria, Insect diseases, Laphygma.
PAGE
           2
```

6474-68 ADELINA SERICETHIS N. SP., A NEW COCCIDIAN PARASITE OF SCARABAEID LARVAE. J Weiser R L Beard J Invertebrate Pathol 1(2) 99-106, 4 REFS. Aug 1959 421 J826 Coleoptera, Insect diseases, Parasitism, Protozoa, Scarabaeidae.

# **Physiology and Biochemistry**

6475-68 FURTHER RECORDS OF PARASITES OF NIPAECOCCUS VASTATOR MAS-KELL (HOMOPTERA, COCCIDAE) FROM INDIA. Q A Abbasi Y Singh Indian J Entomol 28 (3), 408-410 Sep 1966 420 IN23 Nipaecoccus Vastator, Parasitism. 6476-68 EVALUATION OF COMPOUNDS OF CADMIUM AND RELATED METALS AS RE-PRODUCTION INHIBITORS IN INSECTS. M El T Abdel-razig Diss Abstr Sect B 27 (12,PT.1), 4594B Jun 1967 Z5055.U49D53 Blattella germanica, Cadmium, Chemosterilants, Drosophila melanogaster, Fertility, Metals, Musca domestica, Periplaneta americana, Reproduction. 6477-68 SYMBIONTIC INTERRELATIONSHIPS BETWEEN MICROBES AND AMBROSIA BEETLES. II. THE ORGANS OF MICROBIAL TRANSPORT AND PERPET-UATION IN TRYPODENDRON BETULE AND T. RETUSUM (COLEOPTERA, SCOLYTIDAE) . L P Abrahamson H M Chu D M Norris Entomol Soc Amer Ann 60 (5), 1107-1110 Sep 1967 420 EN82 Microorganisms, Mycangia, Symbiosis, Trypodendron betulae, Trypodendron retusum. Abstract included. 6478-68 MODE OF MULTIPLICATION OF SILKWORM NUCLEAR POLYHEDROSIS VIRUS II. MULTIPLICATION OF THE VIRUS IN THE EARLY PERIOD OF THE LD50-- TIME CURVE. K Aizawa J Invertebrate Pathol 1(1) 67-74, 9 REFS. May 1959 421 J826 Bombyx mori, Polyhedroses. 6479-68 THE POTENTIAL ROLE OF A PEEDING STIMULANT USED IN COMBINA-TION WITH THE NUCLEAR POLYHEDROSIS VIRUS OF HELIOTHIS. G E Allen T L Pate J Invertebrate Pathol 8(1) 129-131, 1 TAB. Mar 1966 421 J826 Feed additives, Heliothis zea, Polyhedroses. 6480-68 SEPARATION OF BACTERIAL SPORES AND PARASPORAL BODIES WITH A FLUOROCARBON. T A Angus J Invertebrate Pathol 1(1) 97-98 May 1959 421 J826 Bacteria, Carbon, Inclusion bodies. 6481-68 NEW NOTES ON THE STRUCTURE OF PTEROSIPHONIA (RHODOMELACE-AE, CERAMIALES), AND THEIR SYSTEMATIC RELATIONSHIP WITH POLYSOPHONIA. )FR ( F Ardre Acad Sci Compt Rend Ser D Sci Nat 264 (18), 2192-2195 REF 03 May 1967 505 P21 Polysophonia, Pterosiphonia. 6482-68 PRELIMINARY BIOLOGICAL OBSERVATIONS ON LINOGNATHUS AFRICA-NUS KELLOG AND PAINE WITH A DESCRIPTION OF THE FIRST IN-STAR NYMPH (HAEMATOPINIDAE, ANOPLURA). G L Arona L K Vats Panjab Univ Res Bull (N.S.) 17 (3/4), 291-296 REF Dec 1966 513 EA72

10 6503-68

Anoplura, Goats, Insect pests, Linognathus africanus. Abstract included. VITRO. 6483-68 THE NATURAL MECHANISM OF SUPPRESSION OF NOSEMA APIS ZANDER IN ENZOOTICALLY INFECTED COLONIES OF THE HONEY HEE, APIS MELLIFERA LINNAEUS. L Bailey J Invertebrate Pathol 1(4) 347-350, 6 BEFS., 1 TAB. Dec 1959 421 J826 Apis mellifera, Bee diseases, Protozoa. 6494-68 6484-68 AN IMPROVED METHOD FOR THE ISOLATION OF STREPTOCOCCUS PLUTON, AND OBSERVATIONS ON ITS DISTRIBUTION AND ECOLOGY. L Bailey J Invertebrate Pathol 1(1) 80-85, 13 REFS. 1959 421 J826 Apis mellifera, Bacteria, Insect diseases, Insect ecology. 6495-68 6485-68 SYNTHESES OF THE ALIPHATIC DEUTERIUM ANALOGS OF DDT AND TDE AND THEIR TOXICITY AND DEGRADATION WHEN APPLIED TO ADULT HOUSE PLIES. R J Barker J ECON Entomol 53(1) 35-41, BIBL. 40-41, TABS. Feb 1960 421 J822 6496-68 Deuterium, DDT , Electronic structure, Musca domestica, TDE , Toxicology. 6486-68 NESTS AND SOCIAL EEHAVIOR OF BALICTINE BEES OF INDIA (HY-MENOPTERA, HALICTIDAE). S W T Batra Indian J Entomol 28 (3), 375-393 REF Sep 1966 420 IN23 6497-68 Bees, Balictinae, Insect behavior. BOACHES. 6487-68 SPICARIA RILEYI (FARLOW) CBARLES AND ASPERGILLUS PLAVUS LINK, ENTOMOGENOUS FUNGI OF THE CABBAGE LOOPER, TRICBOPLU-SIA NI (HUBNEE), IN INDIANA AND WISCONSIN. C N Behnke J D Paschke J Invertebrate Pathol 8(1) 103-108, 11 REPS., 1 TAB. Mar 1966 421 J826 Entomogenous fungi, Trichoplusia. 6498-68 6488-68 PROTECTION OF A SUSCEPTIBLE INSECT BOST AGAINST A NUCLEAR POLYBEDEOSIS VIRUS BY ETHER EXTRACTS FROM INSECT LARVAE. Y Ben-Shaked I Barpaz J Invertebrate Pathol 8(2) 283-285, 1 TAB. 6499-68 Jun 1966 421 J826 Caterpillars, Polyhedroses. 6489-68 ON THE STRUCTURE OF CYTOPLASMIC POLYHEDRA OF SOME LEFTDCPTERA\_ G E Bergold J Suter 6500-68 J Invertebrate Pathol 1(1) 1-14, 20 REPS. May 1959 421 J826 Bombyx mori, Moths, Polyhedroses. 6490-68 PURIFICATION OF INSECT VIRUS INCLUSION BODIES WITH & FLUORO-CARBON. 6501-68 G B Bergold J Invertebrate Pathol 1(1) 96-97 May 1959 421 J826 Carbon, Inclusion bodies, Polyhedroses. Dec 6491-68 CUMULATIVE EFFECT OF SUBLETHAL DOSES OF MYRISTYL CBLORO-6502-68 ACETATE ON A BIGHLY DDT -RESISTANT STRAIN OF MUSCA DOMESTICA L. S Bettini M Boccacci G Natalizi J Econ Entomol 53(1) 99-101, BIBL. Feb 1960 421 J822 DDT , Musca domestica, Myristyl chloroacetate. 6492-68 POLYBEDEOSIS AND GRANULOSIS VIRUSES CAUSING SINGLE AND 6503-68 DOUBLE INFECTIONS IN THE SPRUCE BUDWORM, CHORISTONEURA FUMIFERANA CLEMENS. F T Bird J Invertebrate Pathol 1(4) 406-430, 23 REFS., 2 TABS. Dec 1959 421 J826 Choristoneura, Choristoneura fumiferana, Granuloses, Polyhedroses.

6493-68 A STUDY OF THE LIFE HISTORY OF THE PIGEON FEATHER MITE, FALCULIFER ROSTRATUS (BUCBHOLZ), 1869, IN VIVO AND IN D F Blake Diss Abstr Sect B 27 (12,PT.1), 4243B Jun 1967 Z5055.049D53 Palculifer rostratus, Peathers, Metamorphosis, Pigeons, Sarcoptoformes. LABORATORY METHOD FOR SCREENING COMPOUNDS AS ATTRACTANTS TO GYPSY MOTH MALES. B C Block J Econ Entomol 53(1) 172-173, BIBL. Feb 1960 421 J822 Insect behavior, Porthetria, Spanish gypsy moths. HISTOCHEMICAL STUDIES OF LAEVAL MACEACANTHORHYNCHUS INGENS AND CERTAIN SPIROBOLID MILLIPEDS. C Bowen Diss Abstr Sect B 27 (12, PT. 1), 4596B-4597B Jun 1967 Z5055.049D53 Diplopoda, Histochemistry, Macracanthorhynchus ingens. A SEASONAL STUDY OF DIAPAUSE, REPRODUCTIVE ACTIVITY AND SEASONAL TOLERANCE TO INSECTICIDES IN THE BOLL WEEVIL. J R Brazzel B G Hightower J Econ Entomol 53(1) 41-46, BIBL. Feb 1960 421 J822 Anthonomus grandis, Azinphosmethyl, Cotton, Diapause, Toxaphene. ON THE IN-VITRO CULTURE OF INTRACELLULAR SYMBIOTES OF COCK-M & Brooks K Richards J Invertebrate Pathol 8(2) 150-157, 23 REFS. Jun 1966 421 J826 Bacteria, Blattidae, Symbiosis. MECBANISM OF LOCUST JUMPING. R H J Brown Nature 214 (5091), 939 27 May 1967 472 N21 Acrididae, Insect morphology, Locomotion. BACTERIA OF GRASSBOPPERS OF WESTERN CANADA III. FREQUEN-CY OF OCCURRENCE, PATHOGENICITY. G E Bucher J Invertebrate Pathol 1(4) 391-405, 7 REFS. Dec 1959 421 J826 Bacteria, Canada, Grasshoppers, Insect diseases. SCHIZOGREGARINE INFECTION IN GRASSHOPPERS. G E Bucher J Invertebrate Pathol 8(1) 127-129 Mar 1966 421 J826 Grasshoppers, Insect diseases. BACTERIA OF GRASSBOPPERS OF WESTERN CANADA I. THE ENTERO-BACTERIACEAE. G E Bucher J M Stephens J Invertebrate Pathol 1(4) 356-373, 23 EEFS., 4 TABS. 1959 421 J826 Bacteria, Canada, Grasshoppers. FUNGUS DISEASE OF ADULT PARASITE INSECTS CAUSED BY TORULA NIGRA (MARPMANN). G E Bucher G K Bracken J Invertebrate Pathol 8(2) 193-204, 18 EEFS. Jun 1966 421 J826 Insect diseases, Parasitic insects. BACTERIA OF GRASSHOPPERS OF WESTERN CANADA II. THE PSEUDOMONADACEAE, ACHROMOBACTERACEAE, MICROCOCCACEAE, BREVIBACTERIACEAE, LACTOBACILLACEAE, AND LESS INPORTANT FAMILIES. G E Bucher J M Stephens J Invertebrate Pathol 1(4) 374-390, 10 REFS., 5 TABS. Dec 1959 421 J826 Achromobacteraceae, Bacteria, Brevibacteriaceae, Canada,

10 6504-68 Grasshorpers, Lactobacillaceae, Micrococcaceae, Pseudcmonadaceae. 6504-68 THE BACTERIUM COCCOBACILLUS ACRIDIOBUM D HERELLE ITS TAXONCMIC FOSITION AND STATUS AS A PATHOGEN OF LOCUSTS AND GRASSHOFPERS. G E Bucher J Invertebrate Pathol 1(4) 331-346, 38 REFS., 2 TABS. Dec 1959 421 J826 Acrididae, Bacteria, Grasshoppers Insect diseases. 6505-68 BOLL WEEVIL SUSCEPTIBILITY TO TCXAPHENE, ENDBIN, AND GUTBION IN FIVE ALABAMA LCCALITIES. G F Burkhalter F S Arant J Econ Entomol 53(2) 311-313, BIBL. Apr 1960 421 J822 Alabama, Anthonomus grandis, Azinphosmethyl, Endria, Toxaphene. 6506-68 INACTIVATION BY IRRADIATION OF SPOBES OF BACILLUS THURINGI-ENSIS VAR. THURINGIENSIS. G E Cantwell B A Franklin J Invertebrate Pathol 8 (2) 256-258, 3 TABS. Jun 1966 421 J826 Bacteria, Insect control, Irradiation. 6507-68 507-68 TBE HISTOPATHOLOGICAL EFFECTS OF CERTAIN CARCINOGENIC 2-FLUCBENAMINE DEBIVATIVES ON LABVAE OF TBE BOUSE FLY. G E Cantwell T J Shortino W E Robbins J Invertebrate Pathol 8(2) 167-174, 16 REFS., 1 TAB. Jun 1966 421 J826 Carcinogens, Musca domestica. 6508-68 MORTALITY OF THE HONEY BEE, APIS MELLIFERA, IN COLONIES MORTALITY OF THE HONEY BEE, APIS MELLIPERA, IN COLONIES TREATED WITH CERTAIN BIOLOGICAL INSECTICIDES. G E Cantwell D A Knox T Lehnert A S Michael J Invertebrate Pathol 8(2) 228-233, 16 REFS., 2 TABS. Jun 1966 421 J826 Apis mellifera, Granuloses, Insecticides, Polyhedroses. 6509-68 DUG-58 STABLIITY, TOXICITY, AND REACTION MECBANISM WITB ESTERASES OF CERTAIN CARBAMATE INSECTICIDES. J E Casida K E Augustinsson G Jonsson J Econ Entomol 53(2) 205-212, BIBL. Apr 1960 421 J822 Mice, Musca domestica, Toxicology. 6510-68 THE OCCURENCE OF FOLYPHENOLOXIDASE IN THE HEMOCYTES OF ACTIVELY IMMUNIZED LABVAE OF THE GBEATER WAX MOTE, GALLEBIA MELLONELLA. J S Chadwick J Invertebrate Pathol 8(1) 126-127 Mar 1966 421 J826 Galleria, Immunization, Phenolases. 6511-68 MICBOBIAL ISOLATIONS FROM THE MID-GUT OF CULEX TARSALIS COQUILLETT. J Chao G A Wistreich J Invertebrate Pathol 1(4) 311-318, 23 REFS., 3 TABS. Dec 1959 421 J826 Culex, Culicidae, Insect biology, Microorganisms. 6512-68 STUDIES ON THE NUTRITIONAL REQUIREMENTS OF THE FBUIT PLY DACUS CUCURBITAE COQUILLETT (DIFTEBA, THYPETIDAE). IV. RESPONSES OF D CUCUBBITAE LARVAE TO VITAMIN DEFICIENT DIETS. S S Chawla Panjab Univ Res Bull (N.S.) 17 (3/4), 327-334 REF Dec 1966 513 EA72 Dacus cucurbitae, Insect nutrition, Vitamins. Abstract included. 6513-68 STUDIES ON THE NUTRITIONAL BEQUIREMENTS OF THE FRUIT FLY DACUS CUCURBITAE COQUILLETT (DIPTERA, TBYPETIDAE). III. DEVELOPMENT OF A SYNTHETIC MEDIUM FOR D CUCURBITAE LAR-VAE. S S Chawla Panjab Univ Bes Bull (N.S.) 17 (3/4), 243-250 REF Dec 1966 513 EA72 Dacus cucurbitae, Diptera, Insect nutrition,

Insect physiology, Trypetidae. Abstract included. 6514-68 A METHOD FOR INOCULATION OF MOSQUITO LABVAE. T B Clark J Invertebrate Pathol 8(3) 425-427, Sep 1966 421 J826 Culicidae, Immunization, Insect diseases. 6515-68 PYTHIUM SP. (PHYCOMYCETES PYTHIALES) PATHOGENIC TO MOSQUI-TO LARVAE. T B Clark W R Kellen J E Lindegren R D Sanders J Invertebrate Pathol 8(3) 351-354, 8 REFS. Sep 1966 421 J826 Biological control (insects), Culicidae, Entomogenous fungi. 6516-68 EVIDENCE OF THE OVERSUMMERING OF THE GREENBUG IN THE TEXAS PANHANDLE. N E Daniels J Econ Entomol 53(3) 454-455, BIBL., TABS. E Daniels Jun 1960 421 J822 Grasses, Hibernation, Texas, Toxoptera. 6517-68 PERSISTENCE OF A GBANULOSIS VIRUS OF PIERIS BRASSICAE ON CABBAGE LEAVES. W A L David B O C Gardiner J Invertebrate Pathol 8(2) 180-183, 6 REFS., 3 TABS. Jun 1966 421 J826 Cabbage, Granuloses. 6518-68 THE DESIGNATION OF CHEMICALS IN TERMS OF THE RESPONSES THEY ELICIT FROM INSECTS. V G Dethier L B Browne C N Smith J Econ Entomol 53(1) 134-136, BIBL. Feb 1960 421 J822 Chemicals, Insects, Nomenclature. 6519-68 THE INFLUENCE OF ENVIRONMENTAL AND NUTRITIONAL PACTORS ON GBOWTH AND CASTE DETERMINATION OF FEMALE HONEY BEES. Dietz A Dietz Diss Abstr Sect B 27 (12,PT-1), 4599B-4600B Jun 1967 25055.049D53 Apis mellifera, Environment, Insect morphology, Insect nutrition, Insect physiology, Royal jelly. 6520-68 NEUROSECRETORY SYSTEM OF HETEBOPTERA (HEMIPTERA) AND A ROLE OF THE AORTA AS A NEUROHAEMAL ORGAN. G S Dogra Nature 215 (5097), 199-201 REF 08 Jul 1967 472 N21 Aorta, Heteroptera, Insect physiology, Nervous system. 6521-68 MOUTBPARTS OF THE BITING AND BLOOD-SUCKING TYPE IN TANTDEBIDAE AND CHIRONOMIDAE (DIPTERA). J A Downes D H Colless Nature 214 (5095), 1355-1356, REF 24 Jun 1967 472 N21 Chiromomidae, Insect physiology, Mouth parts, Tanyderidae. 6522-68 PATBOLOGY OF A NUCLEAB POLYHEDROSIS VIRUS OF THE CABBAGE LOOPER, TRICHOPLUSIA NI (BUBNEB). E L Drake F L MCEwen J Invertebrate Pathol 1 (3) 281-293, 12 REFS., 2 TABS. Oct 1959 421 J826 Polyhedroses, Trichoplusia. 6523-68 MORPHOLOGICAL AND PHYSIOLOGICAL DISTINCTION BETWEEN TWO POP-MORPHOLOGICAL AND PHISIOLOGICAL DISTINCTION BELT ULATIONS OF THE FEACE-POTATO APBID. V F Eastop G E Russell Nature 215 (5100), 514-515 29 Jul 1967 472 N21 Aphididae, Insect morphology, Insect physiology, Insecticide resistant insects, Myzus persicae. HEMEROCAMPA PSEUDOTSUGATA MCDUNNOUGB, A NEW HOST FOR BEAUVERIA BASSIANA (BALSAMO) VUILLEMIN. # E Eslyn
J Invertebrate Pathol 1(4) 434-435 Dec 1959 421 J826

PAGE

4

10 6545-68

Biological control (insects), Entomogenous fungi, Lymantriidae. 6525-68 SILICCN CONTENT OF INTACT NUCLEAR POLYBYDRA FROM THE CORN EARWORM, HELIOTHIS ZEA. Z E Estes & M Faust J Invertebrate Pathol 8(2) 145-149, 6 REFS. Jun 1966 421 J826 Heliothis zea, Silicon. 6526-68 CONTENT OF NUCLEIC ACID IN INTACT NUCLEAR POLYHEDRAL BODIES ISOLATED FROM VIRUS-INFECTED BEET ARMYWORMS SPODOPTERA EXI-GUA (LEFIDOPTERA NOCTUIDAE). R M Faust J Invertebrate Pathol 8(2) 273-274 Jun 1966 421 J826 Noctuidae, Nucleic acids, Polyhedroses. 6527-68 SILICCN CONTENT OF THE PARASPORA CRYSTAL OF SEVERAL CRYTALLIFEROUS BACTERIA. R M Faust Z E Estes J Invertebrate Pathol 8(2) 141-144, 9 REFS., 2 TABS. Jun 1966 421 J826 Bacteria, Insect diseases, Silicon. 6528-68 LABORATCRY STUDIES ON THE REARING OF APHIDIUS SMITBI (HYMENOPTERA, BRACONIDAE) AND ITS PARASITISM OF ACYTHOSI-PHON PISUM (HCMOPTERA, APHILIDAE). P M Fox B C Pass R Thurston Entomol Soc Amer Ann 60 (5), 1083-1087 Sep 1967 420 EN82 Acyrthosiphon pisum, Aphidius smithi, Insect rearing, Parasitism. Abstract included. 6529-68 THE EFFECT OF FORAGING BEHAVIOR OF MOVING HONEY BEE COLONIES TO CROPS EEFORE OR AFTER FLOWERING HAS BEGUN. J B Free N W Free S C Jay J Econ Entomol 53(4) 564-566, BIBL. Aug 1960 421 J822 Apis mellifera, Flowering, Forage plants, Insect behavior. 6530-68 FUNGUS INFECTION OF INSECTS VIA THE ALIMENTARY TRACT. B P Gabriel J Invertebrate Pathol 1(4) 319-330, 11 REFS., 2 TABS. Dec 1959 421 J826 Bombyx mori, Entomogenous fungi, Moths. 6531-68 BEHAVIOURAL RESPONSES TO CONTACT WITB DDT IN ANOPHELES ATROPARVUS. J L Gerold J J Laarman Nature 215 (5100), 518-520 29 Jul 1967 472 N21 Anopheles atroparvus, DDT , Insect behavior. 6532-68 PRELIMINARY REPORT ON THE LARVAL DEVELOPMENT OF THE BORN FIL HAEMATOBIA IRRITARS, IN FECES FROM CATLE GIVEN FRAC-TIONS OF A COMMERCIAL PREPARATION OF BACILLUS THURINGIEN-SIS. R E Gingrich J L Eschle J Invertebrate Pathol 8(2) 285-287 Jun 1966 421 J826 Bacteria, Haematobia. 6533-68 AMOEBA CISEASE OF THE HONEY BEE, APIS MELLIFERA LINNAEUS, AND AN ATTEMPT AT ITS CHEMICAL CONTROL. G Giordani J Invertebrate Pathol 1(3) 245-269, 31 REFS., 8 TABS. Oct 1959 421 J826 Apis mellifera, Bee diseases, Furazolidone, Protozoa. 6534-68 EFFECT OF TEMPERATURE ON THE SUSCEPTIBILITY OF GRUBS OF TROGODERMA GRANARIUM EVERTS TO PYRETBRINS. G K Girish B K Rai Indian J Entomol 28 (3), 401-404 REF Sep 1966 420 IN23 Pyrethrum, Temperature, Trogoderma granarium.

6535-68 LABORATORY SELECTION OF NORMAL AND CHLORDANE-RESISTANT GERMAN COCKROACHES FOR RESISTANCE TO MALATHION AND DIAZINON. J McD Grayson J Econ Entomol 53(2) 200-203, BIBL. 202-203 Apr 1960 421 J822 Blattella germanica, Chlordane, Diazinon, Insecticide resistant insects, Malathion. 6536-68 PATHOGENICITY OF SPICARIA RILEYI TO PSEUDOPLUSIA INCLU-DENS. R T Gudauskas T D Canerday J Invertebrate Pathol 8(2) 277 Jun 1966 421 J826 Entomogenous fungi, Insect diseases, Pseudoplusia. 6537-68 A PRELIMINARY ACCOUNT OF THE MEIOTIC MECHANISM IN NINETEEN SPECIES OF THE INDIAN MANTIDS. M T. Gupta Panjab Univ Res Bull (N.S.) 17 (3/4), 421-422 Dec 1966 513 EA72 Mantids, Meiosis. 6538-68 THE FUNGUS ENTOMOPHIHORA ERUPTA (DUSTAN) ATTACKING TEE BLACK GRASS BUG, IRBISIA SOLANI (HEIDEMANN) (HEMIPTERA, MIRIDAE), IN CALIFORNIA. I M Ball J Invertebrate Pathol 1(1) 48-51, 2 REFS. May 1959 421 J826 Entomogenous fungi, Entomophthora, Irbisia, Miridae. 6539-68 THE SUSCEPTIBILITY OF THE HOUSE FLY, MUSCA DOMESTICA LINNAEUS, TO BACILLUS THURINGIENSIS VAR. THURINGIENSIS BERLINER. I M Ball K Y Arakawa J Invertebrate Pathol 1(4) 351-355, 1 REF., 2 TABS. Dec 1959 421 J826 Bacteria, Inclusion bodies, Insect diseases, Musca domestica. 6540-68 A MODIFIED AZAN STAINING TECHNIQUE FOR INCLUSION BODY VIRUSES. J J Hamm J Invertebrate Pathol 8(1) 125-126 Mar 1966 421 J826 Culture media, Polyhedroses. 6541-68 SOME EFFECTS OF X-RADIATION ON LARVAE OF GALLERIA MELLO-NELLA. J C Barshbarger B S Moore J Invertebrate Pathol 8(2) 277-279 Jun 1966 421 J826 Galleria, X-rays. 6542-68 CONTROL OF THE ORIENTAL RAT FLEA WITH SYSTEMIC INSECTICIDES FED TO RATS. T L Barvey J Econ Entomol 53(1) 167-168, BIBL. Feb 1960 421 J822 Dimethoate, Dowco 109, Phosphoramidothioic acid, Rats, Ronnel. 6543-68 THE SITE OF ACTION OF CRYSTALLIFEROUS BACTERIA IN LEPIDOP-TERA LARVAE. A M Heimpel T A Angus J Invertebrate Pathol 1(2) 152-170, 14 EEFS., 1 TAB. Aug 1959 421 J826 Bacteria, Insect diseases, Moths. 6544-68 A NEW NUCLEAR POLYBEDROSIS OF THE CABBAGE LOOPER, TRICHO-PLUSIA NI. A M Heimpel J R Adams J Invertebrate Pathol 8(3) 340-346, 9 REFS. Sep 1966 421 J826 Polyhedroses, Trichoplusia. 6545-68 EXPOSURE OF WHITE MICE AND GUINEA PIGS TO THE NUCLEAR-POLYHEDROSIS VIRUS OF THE CABBAGE LOOPER, TRICHOPLUSIA NI.

A M Beimpel

10 6546-68 J Invertebrate Pathol 8(1) 98-102, 2 REFS. Mar 1966 421 J826 Guinea pigs, Mice, Polyhedroses. 6546-68 A CRYTALLIFEROUS FACTERIUM ASSOCIATED WITB A BLISTER DI-SEASE IN THE EARTHWORM EISENIA FOETIDA (SAVINGY). A M Heimpel A CRII J Invertebrate Pathol 8(3) 295-298. 5 REFS. Sep 1966 421 J826 Earthworms, Insect diseases. 6547-68 THE ISOLATION OF A POLYHEDROSIS VIRUS FROM A GRASSBOPPER. J E Henry J W Jutila J Invertebrate Pathol 8(3) 417-418 Sep 1966 421 J826 Grasshoppers, Polyhedroses. 6548-68 FURTHER STUDIES ON THE ISOLATION AND CRYSTALLIZATION OF IN-SECT CYTOPLASMIC VIRUSES. G J Hills K M Smith J Invertebrate Pathol 1(2) 121-128, 7 REFS. Aug 1959 421 J826 Insect diseases, Polyhedroses. 6549-68 LABORATORY EVALUATION OF SEVERAL INSECTICIDES AGAINST CHRYSOPS LARVAE. R A Hoffman J Econ Entomol 53(2) 262-263, BIBL. 262-263 Apr 1960 421 J822 Larvae, Lindane, Parathion. 6550-68 HISTOLOGICAL OBSERVATIONS ON THE DEVELOPMENT OF CRYSTALLINE INCLUSIONS OF THE RICKETTSIAL DISEASE OF TIPULA PALUDOSA MEIGEN. A Huger A nugel J Invertebrate Pathol 1(1) 60-66, 6 REFS. May 1959 421 J826 Insect histology, Rickettsial diseases, Tipulidae. 6551-68 A VIRUS DISEASE OF THE INDIAN RHINOCEHOS BEETLE, OBYCTES RHINOCEROS (LINNAHUS), CAUSED BY A NEW TYPE OF INSECT VIRUS, BHABDICNVIKUS ORYCTES GEN. N., SP. N.. A M Huger Mar 1966 421 J826 Coleoptera, Insect diseases. 6552-68 SEROLOGICAL STUDIES OF THE CYTOFLASMIC- AND NUCLEAR-POLYBEDHOSIS VIRUSES OF THE SILKWCRM, BONBYX MORI. T Bukuhara Y Hasaimoto J Invertebrate Pathol 8 (2) 234-239, 9 REFS., 4 TABS. Jun 1966 421 J826 Bombyx mori, Culture media, Polyhedroses. 6553-68 STUDIES OF TWO STRAINS OF CYTOPIASMIC-POLYHEDBOSIS VIRUS. T Hukuhara Y Hashimoto J Invertebrate Pathol 8(2) 184-192, 18 REFS., 2 TABS. Jun 1966 421 J826 Bombyx mori, Polyhedroses. 6554-68 HISTOFATHOLOGICAL CBANGES WITH AGE IN THE PLIGHT MUSCLES OF THE APPICAN MOSQUITO, ERETMAPODITES CHRYSOGASTER. A R Hylton J Invertebrate Pathol 8(1) 75-78, 5 REFS., 2 TABS. Mar 1966 421 J826 Aging, Culicidae. 6555 - 68EFFECTS OF AGE ON MORTALITY OF HELIOTBIS ZEA AND HELIOTHIS VIRESCENS LARVAE EXPOSED TO A NUCLEAR POLYHEDEOSIS VIRUS. C M Ignoffo J Invertebrate Pathol 8(2) 279-282, 1 TAB. Jun 1966 421 J826 Heliothis zea, Polyhedroses. 6556-68 A CYTOPLASMIC POLYHEDBOSIS VIRUS, SMITHIAVIBUS PECTINOPHO-RAE SP. N. OF THE PINK BOLLWORM, PECTINOPHORA GOSSYPIELLA (SAUNDERS). M Ignoffo J R Adams J Invertebrate Pathol 8(1) 59-66, 33 REFS., 3 TABS. PAGE 6

Mar 1966 421 J826 Heliothis zea, Pectinophora, Polyhedroses. 6557-68 THE EFFECTS OF CHEMICAL INSECTICIDES AND INSECTICIDAL ADJU-VANTS OF A HELIOTBIS NUCLEAR POLYHEDROSIS VIRUS. C M Ignoffo E L Montoya J Invertebrate Pathol 8(3) 409-412, 18 REFS., 3 TAES. Sep 1966 421 J826 Carbaryl, DDT , Endrin, Heliothis zea, Methyl parathion, Polyhedroses. 6558-68 EFFECTS OF TEMPERATURE ON MORTALITY OF HELIOTHIS ZEA LARVAE EXPOSED TO SUBLETHAL DOSES OF A NUCLEAR POLYHEDROSIS VIEUS. C M Ignoffo J Invertebrate Pathol 8(2) 290-292, 2 TABS. תנוך. 1966 421 J826 Heliothis zea, Insect temperature, Mortality, Polyhedroses. 6559-68 THE RELATION OF PH TO THE ACTIVITY OF INCLUSION BODIES OF A HELIOTHIS NUCLEAR POLYHEDROSIS. C M Ignoffo C Garcia J Invertebrate Pathol 8(3) 426-427, 1 TAB. Ser 1966 421 J826 Beliothis zea, Polyhedroses. 6560-68 A DETAILED MORPHOLOGICAL STUDY OF THE EXTERNAL AND INTERNAL GENITAL ORGANS OF PEMALE MELANAGEOMYZA OBTUSA (MALLOCH), A SEEICUS PEST OF CAJANUS INDICUS L. (AGROMYZIDAE, DIP-TERA). I M Ipe Indian J Entomol 28 (3), 287-298 REF Cajanus indicus, Insect morphology, Melanagromyza obtusa, Reproductive organs. 6561-68 NOTE ON THE BIOLOGY OF ACEAEA BONASIA FABRICIUS FROM EAST-ERN NIGERIA (LEPIDOPTERA, NYMPHALIDAE M L Jerath Panjab Univ Res Bull (N.S.) 17 (3/4), 227-231 Dec 1966 513 EA72 Acraea bonasia, Insects, Jute, Sweetpotatoes. Abstract included. 6562-68 MECHANISM OF FOOD TRANSPORT IN CATTLE-TICK, BYALOMMA AEGYP-TIUM. K C Kanwar L Malik Panjab Univ Res Bull (N.S.) 17 (3/4), 423-424 Dec 1966 513 E&72 Cattle, Digestion, Hyalomma aegyptium. 6563-68 THE SPIRAL THREAD. U Kanwar Panjab Univ Res Bull (N.S.) 17 (3/4), 409-411 Dec 1966 513 EA72 Chelonethida, Cytology, Diplotemnus insolitus, Spermatozoa, Spiral thread. 6564-68 TRANSOVABLAN THANSMISSION OF SOME TBELOBANIA (NOSEMATIDAE MICROSPORIDIA) IN MOSQUITOES OF CALIFOENIA AND LOUISIANA. W E Kellen H C Chapman T B Clark J E Lindegren J Invertebrate Pathol 8(3) 355-359, 7 REFS., 2 TABS. Sep 1966 421 J826 Culicidae, Insect diseases. 6565-68 THE BIOLOGICAL IMPACT OF THE CBECKERED BEETLES (COLEOPTERAO CLERIDAE) ON POPULATIONS OF IPS BARK BEETLES (COLEOPTERAO SCOLYTIDAE). W E King Diss Abstr Sect B 27 (12,PT.1), 4606B Jun 1967 Z5055.U49D53 Insect biology, Ips avulsus, Ips grandicollis, Scolytidae. 6566-68 MORTALITY AND PERTILITY RESPONSE OF MUSCA DOMESTICA LIN-NAEUS TO CERTAIN KNOWN MUTAGENIC OR ANTI-TUMOB AGENTS. J B Kissam Diss Abstr Sect B 27 (12,PT.1), 4436B-4437B Jun 1967 Z5055.049D53 Antimetabolites, Chemical control (insects), Chemosterilants, Fertility, Mortality, Musca domestica,

6567-68 STUDIES ON LIPIDS IN THE HEMOLYMPB OF THE SILKWORM, BOMBYX MORI, JURING THE CCURSE OF NUCLEOPOLYHEDROSIS. T Komano M Bimeno Y Ohno K Onodera J Invertebrate Pathol 8(1) 67-74, 24 REFS. Mar 1966 421 J826 Bombyx mori, Folyhedroses. 6568-68 ON NOSEMA HELIOTHIDIS LUTZ AND SPLENDOR, A MICROSPORIDIAN PARASITE OF BELICTHIS ZEA (BODDIE) AND HELIOTHIS VIRUSCENS (PABRICUS) (LEPIDOPTERA, PHALAENIDAE). J P Kramer J Invertebrate Pathol 1(3) 297-303, 7 REFS. Oct 1959 421 J826 Beliothis, Heliothis zea, Insect diseases. 6569-68 ON THE PROBLEM OF CRYSTALS WITH RICKETTSIAL INFECTIONS. A Kreig J Invertebrate Pathol 1(1) 95 1959 421 J826 Inclusion bodies, Insect diseases, Rickettsial diseases. 6570-68 RELATIONSHIP BETWEEN METABOIISM AND DIFFERENTIAL TOXICITY IN INSECTS AND MICE OF DIAZINON, DIMETBOATE, PARATBION, AND ACETHION. B R Krueger R D O Brien W C Dauterman J Econ Entomol 53(1) 25-31, BIBL. 30-31, TABS. Feb 1960 421 J822 Acethion, Diazinon, Dimethoate, Insecticide resistant insects, Insects, Metabolism, Mice, Musca domestica, Parathion, Periplaneta, Periplaneta americana, Toxicology. 6571-68 A MICROSFORIDIAN, TBELOHANIA SP., IN PIERIS RAPAE. P M Laigo J D Paschke J Invertebrate Pathol 8(2) 269-270 Jun 1966 421 J826 Bacteria, Insect diseases, Fleris. 6572-68 VARIATIONS IN TOTAL HEMOCYTE COU<sup>®</sup>TS AS INDUCED BY A NOSEMOSIS IN THE CABBAGE LOOPER, TRICBOPLUSIA NI. J Invertebrate Pathol 8 (2) 175-179, 7 REFS., 1 TAB. Jun 1966 421 J826 Bacteria, Blood cells, Insect diseases. 6573-68 FIAGELLATED PROTOZOA (TRYPANOSOMIDAE) IN THE BONEY BEE, APIS MEILIFERA, IN AUSTRALIA. D P Langridge J Invertebrate Pathol 8(1) 124-125 Mar 1966 421 J826 Apis mellifera, Insect diseases, Protozoa. 6574-68 EFFECT OF DDT RESISTANCE ON THE DEVELOPMENT OF MALATHION BESISTANCE IN HOUSE FLIES. G C LaBrecque B G Wilson J Econ Entomol 53(2) 320-321, BIBL. Apr 1960 421 J822 DDT , Malathion, Musca domestica. 6575-68 PRELIMINARY LABORATORY RESULTS ON THE SUSCEPTIBILITY OF AEDES AEGYPTI (LINNAEUS) TO BACILLUS TBURINGIENSIS BER-LINER. J N Liles P B Dunn J Invertebrate Pathol 1(3) 309-310, 1 TAB. Oct 1959 421 J826 Aedes aegypti, Bacteria, Insect diseases. 6576-68 NOSEMA LEPTOCORIDIS SP. N., MICROSPORIDIAN PARASITE OF LEPTOCOFIS TRIVITTATUS (SAY) (HEMIPTERA). J J Lipa J Invertebrate Pathol 8(2) 250-251 Jun 1966 421 J826 Insect diseases, Parasitism. 6577-68 NOSEMA HIPPODAMIAE N. SP., A MICROSPORIDIAN PARASITE OF BIPPODAMIA CONVERGENS GUERIN (COLEOPTERA, COCCINELLIDAE). J J Lipa E A Steinhaus

Mutagens.

J Invertebrate Pathol 1(3) 304-308 Oct 1959 421 J826 Coccinellidae, Insect diseases, Protozoa. 6578-68 MISCELLANEOUS OBSERVATIONS ON PROTOZOAN INPECTIONS OF NEPA CINNEREA LINNAEUS INCLUDING DESCRIPTIONS OF TWO PREVIOUSLY UNKNOWN SPECIES OF MICROSPORIDIA, NOSEMA BIALOVIESIANAE SP. N. AND TBELOHANIA NEPAE SP.N. J L Lipa J Invertebrate Pathol 8(2) 158-166, 14 REFS., 1 TAB. Jun 1966 421 J826 Insect diseases, Protozoa. 6579-68 DDT-DEBYDROCHLORINASE III. SOLUBILIZATION OF INSECTICIDES BY LIPOPROTEIN. H Lipke C W Kearns J Econ Entomol 53(1) 31-35, BIBL. 34-35 Feb 1960 421 J822 DDT, DDT-DEBYDRO DDT-DEBYDROCBLORINASE , Lipovitellin, Musca domestica, Solubilization tecnique. 6580-68 THE RELATION BETWEEN OXYGEN CONSUMPTION AND BACTERIAL INFEC-TION IN SAWFLIES. O Lysenko K Slama J Invertebrate Pathol 1(2) 184-188, 3 REFS., 1 TAB. Aug 1959 421 J826 Bacteria, Insect diseases, Oxygen. 6581-68 EXPERIMENTS ON PROLONGATION OF THE LIFE OF MOSQUITO LARVAE BY UNDERFEEDING. S Marcovitch J Econ Entomol 53(1) 169, BIBL. Feb 1960 421 J822 Culicidae, Feeding, Insecticides, Larvae, Toxicology. 6582-68 HYPOPROTEINENTA IN A NOCTIED LARVA DURING THE COURSE OF A GRANULOSIS. M E Martignoni J E Milstead J Invertebrate Pathol 8(2) 261-263 Jun 1966 421 J826 Granuloses, Noctuidae. 6583-68 MORPHOLOGY OF THE ALIMENTARY CANAL AND ASSOCIATED GLANDS OF THE MATURE LARVA OF ACHAEA JANATA L. (LEPIDOPTERA, NOC-TUIDAE). L M L Mathur Indian J Entomol 28 (3), 318-331 REF Sep 1966 420 IN23 Achaea janata, Glands (insects), Insect morphology. 6584-68 BEAUVERIA DENSA, PATHOGENIC FOR THE LARVAE OF CHILO ZONELLUS. S B Mathur R P Srivastava B R S Rao J Invertebrate Pathol 8(2) 274-276, 4 TABS. Jun 1966 421 J826 Chilo, Entomogenous fungi, Insect diseases. 6585-68 RECORD OF NEMATODES PARASITISING CHILO ZONELLUS SWINHOE STEM BORER OF MAIZE. S B Mathur R P STivastava B R S Rao Indian J Entomol 28 (3), 414-415 Sep 1966 420 IN23 Sep 1966 420 IN23 Chilo zonellus, Corn, Nematodes, Neoaplectana chresina, Parasitism. 6586-68 TRANSMISSION OF TUMORS IN LOCUSTA MIGRATORIA LINNAEUS BY MUCLEIC ACID EXTRACTED FROM THE TUMORS. G Matz J Weil P Joly J Ebel J Invertebrate Pathol 8(1) 8-13, 10 REFS., 4 TABS. Mar 1966 421 J826 Acrididae, Insect diseases. 6587-68 THE EFFECT OF INSECTICIDES ON TRANSAMINATION IN TH AMERICAN COCKROACB. J W McAllan A W A Brown J Econ Entomol 53(1) 166-167, BIBL. Feb 1960 421 J822 DDT, Endrin, Insecticides, Malathion, Periplaneta, Sodium cyanide, Sodium orthoarsenate, Toxaphene, Transamination.

6588-68 MICROEIAL CONTROL OF TWO CAEBAGE INSECTS. F L McEwen G E L Hervey J Invertebrate Pathol 1(1) 86-94, 10 REFS., 4 TABS. 1959 421 J826 Biological control (insects), Trichoplusia. 6589-68 BACTERIA AND FUNGI ASSOCIATED WITH DEAD BOLL WEEVILS (AN-THONOMUS GRANDIS) IN A NATURAL POPULATION. R E MCLaughlin M R Bell S D Veal J Invertebrate Pathol 8(3) 401-408, 14 REFS., 5 TABS. Sep 1966 421 J826 Anthonomus grandis, Bacteria, Entomogenous fungi, Insect diseases. 6590-68 MEMBRACIDAE ATTRACTED TO BLACK LIGHT. MEMBRACIDAE ATTRACTED TO BLACK LIGHT. J T Medler P & Smith J Econ Entomol 53(1) 173-174, BIBL. Feb 1960 421 J822 Coleoptera, Corixidae, Equipment, Lepidoptera, Light traps, Membracidae, Trichoptera. 6591-68 BIONOMICS OF HEMITHEA TRITONARIA WALKER (LEPIDOPTERA, GEOMETRIDAE), A PEST OF MOGHANIA MACROPHYLLA (WILLD) O KTZE. B P Mehra B N Sah Indian J Entomol 28 (3), 345-350 Sep 1966 420 IN23 Hemithea tritonaria, Insect biology, Insect pests, Moghania macrophylla. 6592-68 ESTABLISHMENT OF AN INSECT CELL STRAIN PERSISTENTLY INFECTED WITH AN INSECT VIRUS. Mitsuhashi Nature 215 (5103), 863-864 19 Aug 1967 472 N21 Blood, Cells, Insects, Tissue culture, Viruses. 6593-68 FLOW RELATIONSHIPS FOR HEMIPTEROUS STYLETS. T E Mittler Entomol Soc Amer Ann 60 (5), 1112-1114 Sep 1967 420 EN82 Aphididae, Hemiptera, Stylets. 6594-68 THE LIFE HISTORY AND THE MORPHOLOGY OF THE EARTHWORM MITE. UROACTINIA ANCHOR (TROUESSART, 1902) (ACARINAO UROPODIDAE) WITH PRELIMINARY ETHNOLOGICAL STUDY OF BEHAVIOR. T Miura Diss Abstr Sect B 27 (12,PT.1), 4437B-4438B Jun 1967 25055.049D53 Earthworms, Metamorphosis, Mites. 6595-68 SUCCINOXIDASE ACTIVITY IN TWO SPECIES OF BRACON (HYMENOP-TERA, BRACONDAEL. T J Mizianty Entomol Soc Amer Ann 60 (5), 1092-1094 Sep 1967 420 EN82 Bracon hebetor, Bracon serinopae, Iodophenyl-3-nitrophenyl-5-phenyltetrazolium chloride, 2-p-,\* Succinoxidase, Triphenyltetrazolium chloride. Abstract included. 6596-68 LABORATORY TECHNIQUE AND APPARATUS FOR TESTING VIRUSES APPLIED AS DUSTS. E L Montoya C M Ignoffo J Invertebrate Pathol 8 (2) 251-254, 1 TAB. Jun 1966 421 J826 Biological assay, Heliothis zea, Insect diseases, Insecticides. 6597-68 97-68 A PEEDING STIMULANT TO INCREASE EPPECTIVENESS OF, AND A FIELD TEST WITH, A NUCLEAR POLYHEDROSIS VIRUS OF HELIOTHIS. E L Montoya C M Ignoffo R L McGarr J Invertebrate Pathol 8 (3) 320-324, 9 REFS., 3 TABS. Sep 1966 421 J826 Feed additives, Heliothis zea, Polyhedroses. 6598-68 RNA CHANGES IN INSECT TISSUE WITH A NUCLEAR-POLYHEDROSIS VIRUS. O N Morris

J Invertebrate Pathol 8(1) 35-37, 13 REFS. Mar 1966 421 J826 Polyhedroses. 6599-68 INCORPORATION OF RADIOACTIVE URIDINE INTO THE RNA OF THE LEPIDOPTERAN BARATHRA BRASSICAE. O N Morris J Invertebrate Pathol 8(2) 259-261 Jun 1966 421 J826 Autoradiography, Barathra, Insect diseases, Ribonucleic acid, Uridine. 6600-68 A SIMPLIFIED PURIFICATION TECHNIQUE FOR PARASPORAL INCLU-SIONS FROM CERTAIN VARIETIES OF BACILLUS THURENGIENSIS. E D Murray E Y Spencer J Invertebrate Pathol 8(3) 418-420 Sep 1966 421 J826 Bacteria, Culture media. 6601-68 THE EFFECT OF INTRASPECIFIC AND INTERSPECIFIC INSEMINATION ON FECUNDITY IN DROSOPHILA MALERKOTLIANA AND DROSOPHILA BIPECTINATA. R D Narda Panjab Univ Res Bull (N.S.) 17 (3/4), 417-419 Dec 1966 513 EA72 Artificial insemination, Drosophila bipectinata, Drosophila malerkotliana, Fertility. 6602-68 STORAGE OF QUEEN HONEY BEES, APIS MELLIFERA (HYMENOPTERA, APIDAE), IN SOLITARY CONFINEMENT. E V Nelson W C Roberts Entomol Soc Amer Ann 60 (5), 1114-1115 Sep 1967 420 EN82 Queen bees. 6603-68 NJ-68 BIOLOGY OF THE CONVERGENT LADY BEETLE WHEN FED A SPOTTED ALFALPA APHID DIET. M W Nielson W E Currie J Econ Entomol 53(2) 257-259, BIBL., TABS. Apr 1960 421 J822 Feeding. 6604-68 EVIDENCE OF SEX ATTRACTANT IN FEMALE DYSDERCUS CINGULATUS FABR. Z Osmani M B Naidu Indian J Exp Biol 05 (1), 51 Jan 1967 442.8 IN2 Sex attractants. 6605-68 THE PREE FATTY ACIDS AND NEUTRAL LIPIDS OF THE CUTICULAR WAX OF THE MORMON CRICKET, ANABRUS SIMPLEX, HALD. J M Padmore Diss Abstr Sect B 27 (12,PT.1), 4267B Jun 1967 25055.049D53 Anabrus simplex, Cuticle, Fatty acids, Lipids, Waxes. 6606-68 STRUCTURE AND METAMORPHIC CHANGES IN THE FAT BODY OF CALLO-SOBRUCHUS MACULATUS (F.) (BRUCHIDAE, COLEOPTERA). H R Pajni Panjab Univ Res Bull (N.S.) 17 (3/4), 315-317 Bruchidae, Callosobruchus maculatus, Fat body. Abstract included. 6607-68 MORPHOLOGICAL IDENTIFICATION OF VIRUS-LIKE PARTICLES IN THE CORN LEAF APHID, RHOPALOSIPHUM MAIDIS (FITCH). W B Parrish J D Briggs J Invertebrate Pathol 8 (1) 122-123 Mar 1966 421 J826 Insect diseases, Rhopalosiphum. 6608-68 THE PATHOLOGY OF A NUCLEAR POLYHEDROSIS OF RACHIPLUSIA-OU-(GUENEE) (LEPIDOPTERA) NOCTUIDAE). J D Paschke H A Sweet J Invertebrate Pathol 8(1) 1-7, 11 REFS., 1 TAB. Mar 1966 421 J826

Geometridae, Insect diseases.

10 6588-68

1

6609-68 THE TOXICITY OF EXTRACTS FROM FOULBROOD SCALE RESIDUES FOR HONEY-BEE LARVAE MAINTAINED IN-VITRO. N G Patel T A Gochnauer J Invertebrate Pathol 1(2) 190-192, 1 TAB. Aug 1959 421 J826 Bee diseases. 6610-68 INVERIEERATE PATHOLOGY, CYTOLOGY, AND DEVELOPMENT. C Payan R Easile J Invertebrate Pathol 8(1) 131-132 Mar 1966 421 J826 Diptera, Insect diseases, Insect morphology. 6611-68 POLLINATION OF RED CLOVER IN MINNESOTA. A G Peterson E Furgala F G Holdaway J Econ Entonol 53(4) 546-550, BIBL. Aug 1960 421 J822 Apis mellifera, Pollination, Red clover, Sweetclover. 6612-68 OCCURRENCE OF MITE VARROA JACOBSONI OUDEMANS IN BROOD CELLS OF RONEY BEE, APIS INDICAP. K G Phadke D S Bisht R B P Sinha Indian J Entomol 28 (3), 411-412 Sep 1966 420 IN23 Honeycombs, Insect diseases, Mites, Varroa jacobsoni. 6613-68 THE ROUSE CRICKET, ACHETA DOMESTICUS, AND THE HOUSE FLY, MUSCA DOMESTICA, AS A MODEL FREDATOR-PREY SYSTEM. D Pimentel F Cranston J Econ Entomol 53(1) 171-172, BIBL. Feb 1960 421 J822 Acheta, Insect behavior, Musca domestica, Predaceous insects. 6614-68 A NEMATCHE PARASITE OF THE ALFALFA WEEVIL (RYPERA POSTICA (GYLL.)). G O Poinar Jr G G Gyrisco J Econ Entomol 53(1) 178-179, PI. Feb 1960 421 J822 Hypera, Larvae, Nematodes, Parasitism. 6615-68 TWO NEW SPECIFS OF PARASITES REARED FROM STCMOPTERYX NERTE NERTERIA (MEYRICK) (LEFIDOPTERA, GELECHIDAE). B R S Rao A K Sharma Indian J Entomol 28 (3), 299-304 Sep 1966 420 IN23 Arachis hypogea, Parasitic insects, Stomopteryx nerteria. 6616-68 DISPERSAL OF VIABLE ALGAE AND PROTOZOA BY HORSE FLIES AND MOSQUITOES (DIFTERA, TABANIDAE, CULICIDAE). D L Revill K W Stewart E E Schlichting Entomol Soc Amer Ann 60 (5), 1077-1081 REF Algae, Musca domestica, Protozoa, Tabanidae. Abstract included. 6617-68 A CONOPID FLY PARASITE FOUND IN THE HONEY BEE. S M Riedel H Shimanuki J Invertebrate Pathol 8(2) 272-273, 1 TAB. Jun 1966 421 J826 Apis mellifera, Bee diseases, Diptera. 6618-68 TOXINS FROM THE ENTOMOGENOUS FUNGUS METARRHIZIUM ANISOPLIAE I. PRODUCTION IN SUEMERGED AND SUEPACE CULTURES, AND IN INORGANIC AND ORGANIC NITROGEN MEDIA. D W Roberts J Invertebrate Pathol 8(2) 212-221, 25 REFS., 1 TAB. Jun 1966 421 J826 Biological assay, Entomogenous fungi, Galleria, Insect diseases. 6619-68 TOXINS FROM THE ENTOMOGENOUS FUNGI METARRHIZIUM ANISOPLIAE. II. SYMFTOMS AND DETECTION IN MCRIBUND HOSTS. D W Roberts J Invertebrate Pathol 8(2) 222-227, 8 REFS., 2 TABS. Jun 1966 421 J826 Bombyx mori, Entoncgenous fungi, Galleria, Insect diseases.

6620-68 THE VENOM OF THE MUD-DAUBER WASP SCELIPHRON CAEMENTARIUM. W Rosenbrook Diss Abstr Sect B 27 (12,PT.1), 4325B Jun 1967 25055.049D53 Hymenoptera, Sceliphron caementarium, Venoms. 6621-68 GROWTH AND SPORULATION OF SUBMERSED CULTURES OF THE FUNGUS BEAUVERIA BASSIANA IN VARIOUS MEDIA. BEAUVERIA DASSIANA IN VARIOUS USERN. A Samsinakova J Invertebrate Pathol 8(3) 395-400, 11 REFS., 2 TABS. Sep 1966 421 J826 Culture media, Entomogenous fungi. 6622-68 TESTING OF PESTICIDES AGAINST CABBAGE APHID, BREVICORYNE BRASSICAE LINN. P Sarup S Wadhwa D S Singh R Lal Indian J Entomol 28 (3), 369-374 Sep 1966 420 IN23 Chemical control (insects), Pesticides, Toxicology. 6623-68 POSTEMBRYONIC DEVELOPMENT OF THE OPTIC GANGLIA IN BOMBYX MORI. R C Satija S Kaur Panjab Univ Res Bull (N.S.) 17 (3/4), 297-304 REF Dec 1966 513 EA72 Bombyx mori, Optic nerve. Abstract included. 6624-68 POSTEMBRYONIC DEVELOPMENT OF THE BRAIN IN BOMBYX MORI. R C Satija S Kaur Panjab Univ Res Bull (N.S.) 17 (3/4), 353-365 REF 1966 513 EA72 Dec Bombyx mori, Brain, Insect physiology. Abstract included. 6625-68 HISTOLOGICAL STUDIES ON TRE DEUTOCEREBRUM OF POECILOCERUS PICUS F (ORTHOPTERA) AND MANTIS RELIGIOSA L (DICTYOP-TERA). Panjab Univ Res Bull (N.S.) 17 (3/4), 233-235 Dec 1966 513 EA72 Cytology, Deutocerebrum, Mantis religiosa, Poecilocerus pictus. Abstract included. 6626-68 SUSCEPTIBILITY OF NINE INSECT SPECIES TO INFECTION BY BA-CILLUS THURINGIENSIS VAR. THURINGIENSIS. M U Shaikh F O Morrison J Invertebrate Pathol 8(3) 347-350, 6 REFS., 4 TABS. Sep 1966 421 J826 Insect diseases, Insects. 6627-68 AN ARTIFICIAL OVIPOSITIONAL SITE FOR SOME HETEROPTERA THAT INSERT THEIR EGGS INTO PLANT TISSUE. J T Shimizu K S Hagen Entomol Soc Amer Ann 60 (5), 1115-1116 Sep 1967 420 EN82 Anthocoris antevolens, Insect eggs, Lygus hesperus, Nabis americoferus, Orius tristicolor, Ovipositors. 6628-68 BIOLOGY AND EVALUATION OF CERTAIN PREDATORS OF THERIOAPHIS MACULATA (BUCKTON). R G Simpson C C Burkhardt J Econ Entomol 53 (1) 89-94, BIBL., TABS., PL. Feb 1960 421 J822 Aphididae, Biology, Hippodamia convergens. 6629-68 FIRST RECORDS OF HYMENOPTEROUS PARASITES OF YELLOW SCALE OF COTTON CEROCOCCUS HIEISCI GREEN (HOMOPTERA, COCCIDAE). Y Singh O A Abbasi Indian J Entomol 28 (3), 413-414 Sep 1966 420 IN23 Cerococcus hibisci, Cotton, Hymenoptera, Parasitism. 6630-68 HISTOLOGY OF THE BRAIN OF LABIDURA RIPARIA (PALLAS) DER-MAPTERA) -C L Singla S P Sharma Panjab Univ Res Bull (N.S.) 17 (3/4), 267-276 REF Dec 1966 513 EA72

PAGE

9

10 6631-68 Brain, Dermaptera, Labidura riparia. Abstract included. 6631-68 A SUBSTANCE IN SOME COMMERCIAL PREPARATIONS OF BACILLUS A SUBSTANCE IN SOME COMPACTAL FREMANTONS OF BALLUS THURINGIENSIS VAR. THURINGIENSIS TOXIC TO SAWFLY LARVAE. W A Smirnoff L Berlinguet J Invertebrate Pathol 8 (3) 376-381, 17 REFS., 6 TABS. Sep 1966 421 J826 Insect diseases, Ienthredinidae, Thuricide. 6632-68 THELOHANIA PRISTIPHORAE SP. N., A MICROSPORIDIAN PARASITE OF THE LARCH SAWFLY, PRISTIPHORA FRICHSONII (HYMENOPTERA TENTHRECINIDAE. W A Smirnoff J Invertebrate Pathol 8 (3) 360-364, 1 REF., 1 TAB. Sep 1966 421 J826 Insect diseases, Pristiphora. 6633-68 ACTION OF DDT AT AN INSECT SYNAPSE. T Smith Jr J Econ Entcmol 53(1) 170-171, BIBL. Peh 1960 421 J822 DDT , Insects, Periplaneta, Synapses. 6634-68 PATHOGENICITY OF EXTERNALLY CCCURRING FUNGI TO RETICULITER-MES FLAVIPES. J Invertebrate Pathol 8(2) 266-267, 1 TAB. Jun 1966 421 J826 Biological control (insects), Fungi, Termites. 6635-68 OBSERVATIONS ON THE BIOLOGY OF PSOROPHORA CYANESCENS. W E Snow E Pickard J L Hawkins J Econ Entomol 53(4) 619-621, BIBL. Aug 1960 421 J822 Biology, Insect behavior, Psorophora. 6636-68 TETRAHYMENA SF. PARASITIC IN THE LARVAE OF CHILO ZONELLUS (SWINHOE) . (Swinnes). R P Srivastava S B Mathur B R S Rao Indian J Entomol 28 (3), 365-368 REP Sep 1966 420 IN23 Chilo zonellus, Parasitism, Tetrahymena. 6637-68 POSSIBLE VIRUS DISEASE IN THE EUROPEAN RED MITE. E A Steinhaus J Invertebrate Fathol 1(4) 435-437 Dec 1959 421 J826 Insect diseases, Panonychus. 6638-68 A CYTOPIASMIC POLYHEDROSIS OF THE ALPALPA CATERPILLAR. E A Steinhaus J P Dineen J Invertebrate Pathol 1(2) 171-183, 7 REFS. Aug 1959 421 J826 Colias, Polyhedroses. 6639-68 THE BIOLOGICAL EVALUATION OF SPRAY ADDITIVES AND SOLVENTS WITB BLATTELLA GERMANICA (LINN) AND PERIPLANETA AMERICANA (LINN.). (LINN.). P D Sterling Diss Abstr Sect B 27 (12,PT.1), 4611B Jun 1967 25055.U49D53 Biological assay, Blattella germanica, Diazinon, Insect repellents, Insecticide additives, Periplaneta americana, Solvents, Spraying, Theses. 6640-68 THE UTILIZATION OF BACILLUS THURINGIENSIS BERLINER AS A BIOTIC INSECTICIDE TO SUPPRESS THE ALPALPA CATERPILLAR. V M Stern I M Hall G D Peterson J Invertebrate Pathol 1(2) 142-151, 11 REFS., 3 TABS. Aug 1959 421 J826 Bacillus thuringiensis, Bacteria, Biological control (insects), Colias, Colias eurytheme. 6641-68 MOTILE STREPTOCOCCI FROM THE DESERT LOCUST, SCHISTOCERCA GREGARIA. J P Stevenson J Invertebrate Pathol 8(2) 258-259 Jun 1966 421 J826 PAGE 10

Bacteria, Schistocerca. 6642-68 AN INFECTION OF THE DESERT LOCUST, SCHISTOCERCA GREGARIA FORSKAL WITH A NONCHROMOGENIC STRAIN OF SERRATIA MARCESCENS BIZIO. J P Stevenson J Invertebrate Pathol 1(2) 129-141, 8 REFS., 6 TABS. Aug 1959 421 J826 Polyhedroses, Schistocerca, Schistocerca gregaria. 6643-68 THE NORMAL BACTERIAL FLORA OF THE ALIMENTARY CANAL OF LABOR-ATORY STOCKS OF THE DESERT LOCUST, SCHISTOCERCA GREGARIA FORSKAL. J P Stevenson J Invertebrate Pathol 8(2) 205-211, 14 REFS., 3 TABS. Jun 1966 421 J826 Bacteria, Insect physiology, Schistocerca. 6644-68 EPIZOOTIOLOGY OF A DISEASE OF THE DESERT LOCUST, SCHISTOCERCA GREGARIA (PORSKAL), CAUSED BY NONCHROMOGENIC STRAINS OF SERRATIA MARCESCENS BIZIO. J P Stevenson J Invertebrate Pathol 1(3) 232-244, 16 REFS. Oct 1959 421 J826 Bacteria, Insect diseases, Schistocerca. 6645-68 INFECTION OF THE GARDEN SYMPHYLAN, SCUTIGERELLA IMMACULATA WITH TBE DD-136 NEMATODE. K G Swenson J Invertebrate Pathol 8(1) 133-134 1966 421 J826 Biological control (insects), Scutigerella. 6646-68 DESCRIPTIONS AND CHARACTERISTICS OF A NUCLEAR POLYHEDROSIS VIRUS AND A GRANULOSIS VIRUS OF THE ARMYWORM, PSEUDALETIA UNIPUNCTA (HAWORTH) (LEPIDOPTERA, NOCTUIDAE). Y Tanada J Invertebrate Pathol 1(3) 197-214, 16 REFS., 5 TABS. Oct 1959 421 J826 Granuloses, Polyhedroses, Pseudaletia. 6647-68 SYNERGISM BETWEEN TWO VIRUSES OF THE ARMYWORM, PSEUDALETIA UNIPUNCTA (BAWORTB) (LEPIDOPTERA, NOCTUIDAE). Y Tanada J Invertebrate Pathol 1(3) 215-231, 8 REFS., 7 TABS. Oct 1959 421 J826 Granuloses, Polyhedroses, Pseudaletia. 6648-68 VIRULENCE OF SPECIES AND STRAINS OF MILKY DISEASE BACTERIA IN THE EUROPEAN CHAPER, AMPHIMALLON MAJALIS (RAZOUMOWSKY). H Tashiro K H Steinkraus J Invertebrate Pathol 8(3) 382-389, 8 REFS., 4 TABS. Sep 1966 421 J826 Amphimallon, Milky disease. 6649-68 THERMAL INHIBITION OF CERTAIN POLYBEDROSIS VIRUS DISEASES. C C Thompson J Invertebrate Pathol 1(2) 189-190 Aug 1959 421 J826 Heat, Heliothis zea, Polyhedroses, Trichoplusia. 6650-68 ON THE PATHOGENESIS OF SIMULTANEOUS VIRUS INFECTIONS IN IN-SECTS. C Vago J Invertebrate Pathol 1(1) 75-79, 12 REFS. May 1959 421 J826 Insect diseases, Pieris, Polyhedroses. 6651-68 ORAL INFECTION OF SECOND-INSTAR NYMPBS OF SCBISTOCERCA GREGARIA BY METARRHIZIUM ANISOPLIAE. K H Veen J Invertebrate Pathol 8(2) 254-256 Jun 1966 421 J826 Entomogenous fungi, Schistocerca. 6652-68

A SELECTIVE MEDIUM FOR THE ISOLATION OF BEAUVERIA TENELLA AND OF METARRBIZIUM ANISOPLIAE. K H Veen P Ferron

10 6671-68

J Invertebrate Pathol 8(2) 268-269 6663-68 Jun 1966 421 J826 Culture media. 6653-68 STUDIES OF WATER CONSERVATION IN COCKBOACBES. IIsW T. B Diss Abstr Sect B 27 (12, PT. 1), 4253B Jun 1967 25055.049D53 Blattidae, Insect physiology, Periplaneta americana, Water. 6654-68 THE EFFECTS ON HOUSE FLIES OF ADDING WHEAT GERM AND CORN OILS TO FLY MEDIA. G W Ware A C Terranova J Econ Entomol 53(2) 325-326, BIBL. Apr 1960 421 J822 Corn, Musca domestica, Oils, Vitamin e, Wheat germ. 6655-68 THE PENETRATION OF PIPERONYL BUTOXIDE AS A SYNERGIST AND AS AN ANTAGONIST IN MUSCA DOMESTICA L. G W Ware J Econ Entomol 53(1) 14-16, BIBL. Feb 1960 421 J822 Carbaryl, Malathion, Musca domestica, Piperonyl butoxide. 6656-68 THE INFLUENCE OF SELECTION PRESSURE ON THE DEVELOPMENT OF RESISTANCE IN POPULATIONS OF TETRANYCHUS TELARIUS (L.). J Econ Entomol 53(1) 80-84, BIBL., TABS. Feb 1960 421 J822 Drosophila, Insecticide resistant insects, Musca domestica, Parathicn. 6657-68 EFFECTS OF HETEROGENEOUS DISTRIBUTION AND CODISTILLATION ON THE RESULTS OF TESTS WITE DET AGAINST MOSQUITO LARVAE. D E Weidhaas C H Schmidt M C Bowman J Econ Entomol 53(1) 121-125, BIBL. 124-125, TABS. Feb 1960 421 J822 Culicidae, Dieldrin, Distillation, DDT, Larvae, Lindane, Malathion, Mortality, Parathion. 6658-68 TOXICOLOGICAL ACTION OF DDT ON THREE SPECIES OF MOSQUITO LARVAF. E Weidhaas C H Schmidt D J Econ Entomol 53(1) 106-110, BIBL. 109-110 Feb 1960 421 J822 Aedes, Anopheles, Culicidae, DDT , Larvae, Toxicology. 6659-68 OXYGEN CONCENTRATION IN LARVAL HEMOLYMPH OF THE JAPANESE BEETLE, POPILLIA JAPONICA, INFECTED WITH BACILLUS DOPILLIAE. B A Weiner W F Kwolek G St. Julian H B Hall R W Jackson J Invertebrate Pathol 8(3) 308-313, 9 REFS., 3 TABS. Sep 1966 421 J826 Insect diseases, Popillia. 6660-68 A NEWLY DESCRIBED VIRUS OF THE WINTER MOTE, OPEROPHTHERA BRUMATA HIIENER (LEFIDOPTERA, GEOMETRIDAE). J Weiser C Vago J Invertebrate Pathol 8(3) 314-319, 6 REFS. Sep 1966 421 J826 Insect diseases, Cperophtera. 6661-68 STUDIES ON OVARIAN STRUCTURE, FUNCTION AND GROWTH IN ADULT DROSOFHILA FSEUDO-OESCURA. M F Wolfsberg Diss Abstr Sect B 27 (12,PT.1), 4253B-4254B Jun 1967 25055.049D53 Drosophila pseudoobscura, Insect anatomy, Insect physiology, Ovaries. 6662-68 A TECHNIQUE USEFUL IN COMPARING PONDER-POST BEETLE POPULATIONS IN THE SUBSTRUCTURES OF BUILDINGS. C G Wright J Econ Entomol 53(2) 329-330, PL. Apr 1960 421 J822 Coleoptera, Lyctidae.

LIGHT MICROSCOPY OF THE VIROGENIC STROMATA OF CYTOPOLYBEDRO-SES. 'N Xeros J Invertebrate Pathol 8(1) **7**9-87, 20 REFS. 1966 421 J826 Caterpillars, Microscopy, Polyhedroses. 6664-68 THE CHROMOSOMES AND VIROGENIC STROMA IN THE NUCLEARPOLYBE-DROSIS OF TIPULA POLUDOSA. N Xeros J Invertebrate Pathol 8(2) 240-249, 11 REFS., Jun 1966 421 J826 Polyhedroses. 6665-68 THE REPRODUCTIVE SYSTEM OF THE PINK SUGARCANE MEALYBUG, SACCBARICOCCUS SACCHARI COCKERELL (BOMOPTERA, PSEUDOCOCIDAE. R L Yadawa Indian J Entomol 28 (3), 351-358 REF Sep 1966 420 IN23 Reproductive organs, Saccharicoccus sacchari, Sugarcane. 6666-68 NATURAL IMMUNITY OF THE BUG TRIATOMA INFESTANS TO THE PRO-TOZOAN TRYPANOSOMA RANGELI. J Invertebrate Pathol 8(3) 420-424, 3 TABS. Sep 1966 421 J826 Innunity, Insect diseases, Parasitism, Triatoma.

# Genetics

6667-68

SELECTION RESPONSE AND GENETICS OF PARATEION RESISTANCE IN THE PACIFIC SPIDER MITE, TETRANYCHUS PACIFICUS. L & Andres T Prout J Econ Entomol 53(4) 626-630, TABS. Aug 1960 421 J822 Aramite, Insect genetics, Parathion, Tetranychus. 6668-68 EFFECTS OF X-BAYS, TRYPTOPHAN METABOLITES, AND EYE COLOR MUTANTS ON THE TUMOR-SUPPRESSOR SYSTEM IN DROSOPHILA MELAN-OGASTER. G T Brooks Diss Abstr Sect B 27 (12,PT.1), 4597B Jun 1967 25055.049D53 Drosophila melanogaster, Eyes, Insect genetics, Insect mutation, Metabolites, Neoplasms, Theses, Tryptophan, X-rays. 6669-68 CORRELATION BETWEEN SPERM REDUNDANCY AND CHIASMA FREQUENCY. J Cohen Nature 215 (5103), 862-863 19 Aug 1967 472 N21 Chromosomes, Cytology, Insect genetics, Schistocerca, Spermatogenesis. 6670-68 BREEDING PIERIS ERASSICAE APPARENTLY FREE FROM GRANULOSIS VIRUS. W A L David B O C Gardiner J Invertebrate Pathol 8(3) 325-333, 21 REFS., 1 TAB. Sep 1966 421 J826 Breeding, Granuloses, Pieris. 6671-68 CYTOLOGICAL AND AUTORADIOGRAPBIC STUDIES ON SCIARA COPRO-PBILA SALIVARY GLAND CBROMOSOMES. N Gabrusewycz-garcia Diss Abstr Sect B 27 (12,PT.1), 4246B

Jun 1967 Z5055.049D53 Autoradiography, Chromosomes, Cytology, Salivary glands (insects), Sciara coprophila.

10 6672-68

6672-68 USE OF INSECTS FOR THEIR OWN DESTRUCTION. E F Knipling J Econ Entomol 53(3) 415-420, BIBL., TABS. Jun 1960 421 J822 Callitroga, Chemical control (insects), Gamma rays, Sterilization. 6673-68 GENETIC VARIATION IN A TWO-SPOTTED SPIDER MITE, TETRANYCHUS URTICAE, POPULATION PLATEAUED BY DIRECTED SELECTION (ACARI-NA, TETRANYCHOIDAE). W D Mcenroe Entomol Soc Amer Ann 60 (5), 1081-1083 Sep 1967 420 EN82 Insect genetics, Tetranychus urticae. Abstract included. 6674-68 PACHAGE AND SECONDARY NONDISJUNCTION IN FEMALES OF DROSO-PHILA MELANOGASTER HOMOZYGOUS FOR X CHROMOSOME INVERSIONS. J R Merriam Diss Abstr Sect B 27 (12,PT.1), 4248B-4249B Jun 1967 25055.U49D53 Chromosomes, Drosophila melanogaster, Insect genetics. 6675-68 KARYOLOGICAL STUDIES ON THE INDIAN SPIDERS. VI. CHROMO-SOME NUMBER AND SEX-DETERMINING MECHANISM IN THE FAMILY ARANEIDAE) . O P Mittal Panjab Univ Res Eull (N.S.) 17 (3/4), 335-351 REP Dec 1966 513 EA72 Araneidae, Chromosomes, Sex determination. Abstract included. A PRELIMINARY REPORT ON MUTATIONS IN THE HOUSE PLY. R L Sullivan T Hirovoshi 6676-68 R L Sullivan T Hiroyoshi J Econ Entomol 53(2) 213-215, BIBL. Apr 1960 421 J822 DDT , Drosophila, Insect mutation, Musca domestica. 6677-68 COLONIZATION AND ERODUCTION OF A DIELDRIN-RESISTANT STRAIN OF ANOPEELES QUADRIMACULATUS SAY. H B Weinburgh R W Fay J Econ Entomol 53(1) 101-103, BIBL., TABS. Pob 106, 021 JC Peb 1960 421 J822 Anopheles, Dieldrin, Insect genetics, Insecticide resistant insects.

6681-68 INFECTIVITY OF TRYPANOSOMA RHODESIENSE TO TSETSE FLIES FED THROUGH ANIMAL MEMBRANES. A S Mshelbwala Nature 215 (5099), 441 Jul 1967 472 N21 Disease transmission, Glossinia palpalis, Trypanosoma rhodesiense. 6682-68 SCREENING TESTS WITH SYNTHETIC COMPOUNDS AS SYNERGISTS FOR HOUSE FLY SPRATS. P G Piquett W A Gersdorff B H Alexander J Econ Entomol 53(2) 299-301, BIBL. Apr 1960 421 J822 April 1966 42, 8622 Acetaldehyde, Butyl 2-methyl-3-(3,4-methylenedioxyphenyl) propyl acid, Musca domestica, Piperonyl butoxide, Spraying. 6683-68 BUSHBUSH, IERI AND LUKUNI VIBUSES, THREE UNRELATED NEW AGENTS ISOLATED FROM TRINIDADIAN FOREST MOSQUITOES. L Spence C R Anderson T H Aitken W G Downs Soc Exp Biol Med Froc 125 (1), 45-50 REF May 1967 442.9 SO1 Bushbush virus, Culicidae, Forests, Ieri virus,

6684-68 POLYHEDROSES IN NEUROPTEROUS INSECTS. K M Smith G J Hills C F Rivers J Invertebrate Pathol 1(4) 431-434 Dec 1959 421 J826 Insect diseases, Neuroptera, Polyhedroses.

Lukuni virus.

# **Medical Entomology**

6678-68 CONTROL OF THE TROFICAL RAT MITE. W Ebeling J Econ Entomol 53(3) 475-476, BIBL., PL. Jun 1960 421 J822 Human engineering, Insecticides, Ornithonyssus. 6679-68 METHYLENEDIOXYPHENYL DERIVATIVES AS SYNERGISTS FOR CARBAMATE INSECTICIDES ON SUSCEPTIBLE, DDT-, AND PARATHION-RESISTANT HOUSE-FLIES. HOUSE-FILES. M E Blaefrawi R Miskus V Sutcher J Econ Entomol 53(2) 231-234, BIBL., TABS. Apr 1960 421 J822 Carbaryl, DDT, Insecticide resistant insects, Musca domestica, Parathion. 6680-68 COMPARATIVE VALUE OF SOME SYNTHETIC COMPOUNDS AS SYNERGISTS WITH BARTHEIN IN HOUSE FIX SPRAYS. W A Gersdorff F G Piquett S I Gertler B H Alexander J Econ Entomol 53(2) 282-285, BIBL. Apr 1960 421 J822 Barthrin, Chloropiperonyl chrysanthemumate, Musca domestica, Piperonyl butoxide.

# **20 CROP PROTECTION**

6685-68 REPORT AND ABSTRACTS OF THE 1963 ANNUAL MEETING OF THE PCTOMAC DIVISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY. Phytopathology 53(7) 745-748 Jul 1963 464.8 P56 Phytopathology, Plant diseases. 6686-68 HHC TRANSLOCATION FROM TREATED SOIL AND THE EFFECT ON GROWTH CF HED CLOVER. C L Hrass G W Ware J Econ Entomol 53(1) 110-113, HIBL. 112-113, PL. Feb 1960 421 J822 Benzine hexachloride, Plant growth inhibitors, Red clover, Seed germination, Soils. 6687-68 POTENTIAL USE OF DYLOX AND CTHER INSECTICIDES IN A CONTROL PROGRAM FOR FIELD CROP PESTS IN CALIFORNIA. H T Reynolds V H Stern T R Fukuto G D Peterson Jr J Econ Entomol 53 (1) 72-78, BIEL. 77-78, TAES. Feb. 1960 421 J822 Alfalfa, Arthropoda, California, Cotton, Nematodes, Trichlorfon. 6688-68 DISTRIBUTION AND SORPTION OF LIQUID FUMIGANTS APPLIED TO WHEAT BY RECIRCULATION. WHEAT BY RECIRCULATION. W K Whitney E E Kenaga J Econ Entomol 53(2) 259-261, BIHL., PL. Apr 1960 421 J822 Carbon disulfide, Carbon tetrachloride, Ethylene dibromide, Ethylene dichloride, Fumigants, Recirculation, Wheat.

# Diseases

6689-68 REPORT AND AESTRACTS OF THE 1963 ANNUAL MEETING OF THE PACIFIC DIVISION OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY. Phytopathology 53(10) 1137-1145 Oct 1963 464.8 F56 Phytopathology, Plant diseases, Reference materials, Reports. 6690-68 ABSTRACTS OF PAPERS ACCEPTED FOR PRESENTATION AT THE FIFTY-FIFTH ANNUAL MEETING OF THE AMERICAN PHYTOPATHOLOGICAL

FIFTE ANNUAL MEETING OF THE AMERICAN PHYTOPATHOLOGICAL SOCIETY, AMEERST, MASS., AUGUST 26, 27, 28, 29, 1963. Phytopathology 53(8) 869-894 Aug 1963 464.8 P56 Abstracts, Phytopathology, Reports, Societies.

6691-68

SYMPOSIUM ON REQUIREMENTS AND INTERPRETATIONS OF FIGHETECROLOGICAL CHSERVATIONS. INVITATIONAL FAPERS PRESENTED AT THE FIFTY-FOURTH ANNUAL MEETING OF THE MAERICAN PHYTOPATHOLOGICAL SOCIETY. CORVALLIS, OREGON, AUGUST 26-29, 1962. Phytopathology 53 (10) 1198-1216 Oct 1963 464.8 P56 Hiometeorology, Epidemiology, Phytopathology, Symposia.

6692-68

SYMPOSIUM ON ROOT DISEASES OF FOREST TREES. INVITATIONAL FAFERS PRESENTED AUGUST 27, 1962, AT THE FIFTY-FOURTH ANNUAL MEETING OF THE AMERICAN PHYTOPATHOLOGICAJ-SOCIETY AT CORVALLIS, OREGON. Phytopathology 53 (10) 1120-1136 Oct 1963 464.8 P56

Roots, Symposia, Trees. 6693-68 SHORT-STEM CONDITION IN LAMBERT CHERRIES. M M Afanasiev Phytopathology 53 (10) 1137 Oct 1963 464.8 P56 Cherries, Stems. 6694-68 VARIETAL RESISTANCE TO CLOVER ROT IN WHITE CLOVER. D T A Aldrich D A Doling Nature 214 (5091), 946-947 27 May 1967 472 N21 Clover, Fungus diseases (plants), Plant disease resistance, Rot, Sclerotinia trifoliorum. 6695-68 SOME EFFECTS OF SUPPLYING BENZYLADEMINE TO LEAVES AND PLANTS SOME EFFECTS OF SUPPLYING BENZYLADEMINE TO LEAVES AN INOCULATED WITH VIRUSES. H S Aldwinckle I W Selman Ann Appl Hiol 60 (1), 49-58 REF Aug 1967 442.8 AN72 Aztec tobacco, Benzyladenine, Kidney beans, Leaves, Virus diseases (plants). 6696-68 COMPARISON OF STRAINS OF PRUNUS NECROTIC RINGSPOT AND PRUNE DWARF VIRUSES WITH VIRUSES OF THE PFEFFINGER (RASP LEAF) TYPE. W R Allen Phytopathology 53(12) 1436-1442, HIHL., PL. Dec 1963 464.8 P56 Necrotic ring spot (prunus), Prune dwarf (plums), Prunes, Rasp leaf (prunus). 6697-68 THE ROLE OF LEAF MICROFLORA ON EPIDEMIOLOGY OF THE NORTHERN LEAF HLIGHT OF CORN. A Asare-Nyako Diss Abstr Sect H 27 (12,PT.1), 4206H-4207H Jun 1967 Z5055.U49D53 Corn, Epidemiology, Fungus diseases (plants), Helminthosporium turcicum, Leaves, Microorganisms, Northern leaf blight (corn). 6698-68 SOURCES OF RESISTANCE TO HALO HLIGHT IN PHASEOLUS VULGARIS. J R Haggett W A Frazier J R Haggett W A Frazier Plant Dis Rep 51(8)0 661-665 REF Aug 1967 1.9 P69P Bacterial diseases (plants), Heans, Crop varieties, Halo blight (beans), Plant disease resistance, Pseudomonas phaseolicola. Field and greenhouse tests for resistance to halo blight (Pseudomonas phaseolicola) demonstrated wide differences between commercial cultivars and breeding lines developed for other purposes, the possible value of halo blight re-sistance in lines bred for resistance to bean yellow mosaic virus, Fusarium root rot, and/or rust is discussed. 6699-68 THE INFLUENCE OF VARIOUS NITROGEN COMPOUNDS ON SEXUAL REPRODUCTION IN HYPOMYCES SOLANI F. CUCURHITAE. Haker M Wenke S M Hix Phytopathology 53(10) 1137 Oct 1963 464.8 P56 Proposition Burneycon Mitrogen Deconduction Fusarium, Hypomyces, Nitrogen, Reproduction. 6700-68 SYNTHESIS OF TOHACCO MOSAIC VIRUS FORMS IN NUCLEUS AND CYTOPLASM. J G Hald Phytopathology 53(10) 1137 Oct 1963 464.8 P56 Cell nucleus, Cytoplasm, Mosaic (tobacco), Tobacco. 6701-68 PREVALENCE OF ERWINIA AMYLOVORA IN APPLE BUDS AS DETECTED PREVALENCE OF ERWINIA AMYLOVORA IN APPLE BUDS AS DETECTED BY PHAGE TYPING. C H Baldwin Jr R N Goodman Phytopathology 53(11) 1299-1303, HIHL. 1302-1303, TAHS., PL. Nov 1963 464.8 P56 Apples, Bacteriophages, Erwinia. 6702-68 BEHAVIOR OF PHOMA HERBARUM VAR. MEDICAGINIS ON RESISTANT

BEHAVIOR OF PHOMA HERHARUM VAR. MEDICAGINIS ON RESISTANT AND SUSCEPTIBLE SPECIES OF MEDICAGO. E E Hanttari R D Wilcoxson

20 6703-68 Phytopathology 53(10) 1233-1234, BIBL., PL. oct 1963 464.8 P56 Alfalfa, Phoma, Plant disease resistance, Spring black stem (alfalfa). 6703-68 STUDIES ON LEVELS OF REDUCING SUGARS AND HYDROLYTIC ENZYMES IN RELATION TO BOTRYTIS HEAD ROT ON SAFFLOWER. I Barash J M Klijiewicz T Kosuge Phytopathology 53(10) 1137-1138 Oct 1963 464.8 E56 Botrytis, Enzymes, Safflower, Sugar. 6704-68 INFLUENCE OF BOST AND NONHOST PLANTS UPON POPULATIONS OF THIELAVIOPSIS BASICOLA IN SOIL. D F Bateman Phytopathology 53 (10) 1174-1177, BIBL., PL. Oct 1963 464.8 P56 Beans, Population, Rhizosphere, Soils, Thielaviopsis. 6705-68 FOMES ANNOSUS. R V Bega Phytopathology 53(10) 1120-1123, BIBL. 1122-1123, PL. Oct 1963 464.8 P56 Abies, Cupressus, Fomes, Picea. 6706-68 INHERITANCE OF STEM RUST RESISTANCE IN TWO WBEAT VARIETIES, MARÇUIS AND KOTA. MARQUIS ARL NOTA. L A Berg F J Gough N D Williams Phytogathology 53(8) 904-908, BIBL. 907-908, TABS., PL. Aug 1963 464.8 P56 Beredity, Plant disease resistance, Stem rust (wheat), Wheat. 6707-68 INFLUENCE OF PRATYLENCHUS PENETRANS ALONE AND IN COMBINATION WITH VERTICILLIUM ALBO-ATRUM ON GROWTE OF PEPPERMINT. C B Bergeson Phytopathology 53(10) 1164-1166, BIBL., TABS. Oct 1963 464.8 P56 Growth factors, Mentha piperita, Pratylenchus, Verticillium. 6708-68 ENVIRCHMENTAL AND CTHER FACTORS INFLUENCING DEVELOPMENT OF SOUTHWESTERN COTTON RUST (PUCCINIA STAKMANII). L M Blank C R Leathers Phytopathology 53(8) 921-928, BIBL., PL. Aug 1963 464.8 P56 Cotton, Environment, Puccinia, Southwestern cotton rust. 6709-68 GROWTE AND SURVIVAL OF THE PATECGEN CAUSING RUSSET SCAE ON POTATCES. K E Bohnenblust Diss Abstr Sect B 27 (12,PT.1), 4207B Jun 1967 Z5055.U49D53 Antibiotics, Plant diseases, Potatoes, Russet scab (potatoes). 6710-68 SUSCEPTIBILTY OF GOSSYPIUM ARBOREUM AND GOSSYPIUM HIRSUTUM TO SEEDLING ANTBRACNOSE. R Bollenbacher N D Fulton Plant Dis Rep 51 (8)0 632-636 REF Aug 1967 1.9 P69P Plant Dis Rep 51 (8)0 632-636 REF Aug 1967 1.9 F69P Anthracnose (cotton), Colletotrichum gossypii, Cotton, Fungus diseases (plants), Plant disease resistance. University of Arkansas Department of Plant Pathology, Fayettville, cooperating. Variety Nanking of Gossypium arboreum and 20 varieties of Gossypium hirsutum were tested in artificially-inoculated sand in the greenhouse for susceptibility to seedling an-thracnose. the cotton varities were assayed with both a highly pathogenic and a moderatly pathogenic isolate of the causal fungus Colletotrichum gossypii. all varieties of G hirsutum were extremely susceptible to the highly viru-lent strain, but Nanking was very resistant to both iso-lates. most eastern United States varieties of G hirsutum were also very susceptible to the moderately pathogenic strain of the fungus, but a few of them were slightly tolerant. nearly all of the Acala varieties were moderately pathogenic isolate.

moderately moderately PAGE 14 6711-68 VANCOMYCIN PREVENTS CROWN GALL. A M Boyle R M Price Phytopathology 53(11) 1272-1275, BIBL. 1274-1275 Nov 1963 464.8 P56 Crown galls, Roots, Rosa, Tomatoes, Vancomycin. 6712-68 INTERNALLY INFECTED SEED AS A SOURCE OF INOCULUM FOR THE PRIMARY CYCLE OF BACTERIAL BLIGHT OF COTTON. L A Brinkerhoff R E Hunter Phytopathology 53(12) 1397-1401, BIBL., TABS., PL. Dec 1963 464.8 P56 Angular leafspot (cotton), Cotton, Seeds, Xanthomonas. 6713-68 COLD-INDUCED DORMANCY AND ITS REVERSAL IN UREDOSPORES OF PUCCINIA GRAMINIS TRITICI. K R Bronfield Phytopathology 53(7) 745 Jul 1963 464.8 P56 Cold, Plant dormancy, Puccinia, Uredospores. 6714-68 A FUNGUS LEAFSPOT OF ENGLISH HOLLY (ILEX AQUIFOLIUM). W M BIOWN JI Phytopathology 53(10) 1138 Oct 1963 464.8 P56 Ilex, Leaf spot (ilex aquifolium). 6715-68 INFECTION OF SPRUCE SEEDLINGS BY CYLINDROCLADIUM SCOPARIUM. W M Bugbee N A Anderson Phytopathology 53(11) 1267-1271, BIBL., PL. Nov 1963 464.8 P56 Calcium copper chloride, Cylindrocladium, Ferbam, Folpet, Picea, Seedlings. 6716-68 716-68 THE ROLE OF DROSOPHILA MELANOGASTER IN TH EPIPHYTOLOGY OF GEOTRICEUM, RHIZOPUS, AND CTHER FRUIT HOTS OF TOMATO. E E Butler C E Bracker Jr Phytopathology 53(9) 1016-1020, BIBL., TABS. Sep 1963 464.8 E56 Drosophila melanogaster, Geotrichum, Rhizopus, Rot (tomatoes), Tomatoes. FIELD EXPERIMENTS ON SUGAR-BEET DOWNY MILDEW (PERONOSPORA FARINOSA) . M J Byford Ann Appl Biol 60 (1), 97-107 REF Aug 1967 442.8 AN72 Chemical control (plant diseases), Downy mildew (sugar beets), Peronospora farinosa, Sugar beets. 6718-68 78-68 RAPID-INDEX METHODS FOR EXOCORTIS OF CITEUS. E G Calavan E F Frolich J B Carpenter C N Roistacher Phytopathology 53(10) 1138 Oct 1963 464.8 P56 California, Citrus, Exocortis (citrus), Indexing. 6719-68 SEMEIOGRAPHY OF FUSARIUM WILT OF TOMATO. H L Chambers M E Corden Phytopathology 53(9) 1006-1010, BIBL., PL. Sep 1963 464.8 P56 Fusarium, Tomatoes, Wilt (tomatoes). 6720-68 EXTERNAL SYMPTOMS GIEMSA-STAINABLE CELL INCLUSIONS ASSOCIATED WITH VIRUS INFECTION IN CACTI. M Chessin R A Solberg P C Fischer Phytopathology 53(8) 988-989, BIBL., PL. Aug 1963 464.8 P56 Chenopodium, Giemsa, Inclusion bodies, Mammillaria. 6721-68 MOISTURE SENSITIVITY, MECHANICAL INJURY AND GIBBERELLIN TREATMENT OF BETA VULGARIS SEEDS. R S Chetram W Heydecker Nature 215 (5097), 210-211 08 Jul 1967 472 N21 Beets, Gibberellins, Humidity, Injuries, Seed treatment.

20 6741-68

6722-68 6733-68 PCRIA WEIRII ROOT ROT. T W Childs Phytopathology 53(10) 1124-1127, PL. Oct 1963 464.8 P56 Poria, Pseudotsuga, Root rot (pseudotsuga menziesii). 6723-68 PURIFICATION AND PROPERTIES OF EROMEGRASS MOSAIC VIRUS. R B Chiu W B Sill Jr Phytopathology 53 (11) 1285-1291, BIBL. 1290-1291, PL. Nov 1963 464.8 P56 Bromus, Mosaic (bromus), N-butanol, Ribonucleic acid. 6724-68 INFLUENCE OF BEAT-LABILE COMFONENTS OF THE RASPBERRY MOSAIC VIRUS COMPLEX ON GROWTB AND YIELD OF RED RASPBERRIES. R H Ccnverse Phytopathology 53(11) 1251-1254, BIBL., TABS., PL. Nov 1963 464.8 P56 Growth factors, Beat, Mosaic (raspberries), Raspberries. 6725-68 INBERITANCE OF RESISTANCE IN PEPPER TO BACTERIAL SPOT. A A Cook R E Stall Phytopathology 53(9) 1060-1062, BIBL., PL. Sep 1963 464.8 P56 Bacterial spot (redpeppers), Beredity, Piper nigrum, Plant disease resistance, Xanthomonas. 6726-68 A PROBAEILISTIC ANALYSIS OF FUNGUS CONTROL BY FOLIAR APPLI-CATION OF CHEMICALS. J R Cooke Diss Abstr Sect B 27 (12,PT.1), 4363B-4364B Jun 1967 Z5055.U49D53 Chemical control (plant diseases), Fungus diseases (plants), Particle size determination, Pesticide application. 6727-68 A COMFARISON OF FUSARIUM WILT INDICES OF COTTON VABIETIES WITE ROOT-KNOT AND STING NEMATODES AS PREDISPOSING AGENTS. W E Cooper B B Brodie Phytogathology 53 (9) 1077-1080, BIBL. 1079-1080 Sep 1963 464.8 P56 Sep 1963 464.8 P56 Belonolaimus, Cotton, Pusarium, Meloidogyne, Nematodes, 6728-68 INVERSION FRENOMENON INDUCED BY NABAM DERIVATIVES. M E Corden B C Carlstrom W M Brown B K Koolheki Phytopathclogy 53(10) 1138 Oct 1963 464.8 P56 Fungus growth inhibitors, Nabam, Thielaviopsis, Thiram, Verticillium. 1 6729-68 THE FLAT APPLE DISEASE. D L Coyier J A Milbrath PhytoFathclogy 53(10) 1138 Oct 1963 464.8 P56 Apples, Flat apple (apples), Virus diseases (plants). 6730-68 CONTROL OF PEACE BACTERIAL SPOT WITE XANTBOMONAS PRUNI BAC-TEBIOPBAGE. TEBIOFBACE. Phytopathclogy 53(7) 746-747 Jul 1963 464.8 P56 Bacterial spot (peaches), Biological control (plant diseases), Peaches. 6731-68 VARIABILITY IN PATROGENICITY IN THE BACTERIAL BLIGHT PATRO-GEN CF SCYEFANS. E Cross J E Cross Diss Abstr Sect B 27 (12,PT.1), 4208B Jun 1967 25055.049D53 Bacterial blight (soybeans), Bacterial diseases (plants), Pseudcmonas glycinia, Soybeans. 6732-68 EFFECTS OF MELOIDOGYNE SPP. AND TYLENCHORBYNCBUS CLAYTONI ON PEA WILT INCITED BY FUSARIUM OXYSPORIUM F. PISI BACE 1. R A Davis W R Jenkins Phytopathology 53(7) 745 Jul 1963 464-8 P56 Fusarium, Meloidogyne, Plant disease resistance, Soil series, Tylenchorhynchus claytoni, Wilt (peas).

EFFECT OF UREDIOSPORE CONCENTRATION ON DETERMINATION OF RACES OF RUST FUNGI. A D Davison E K Vaughan Phytopathology 53 (10) 1138 Oct 1963 464.8 P56 Taxonomy, Uredinales, Urediospore. 6734-68 PSEUDOMONAS CARYOPBYLLI IN CARNATION. I. RELATION OF SOIL TEMPERATURE TO SYMFTOM EXPRESSION. R S Dickey P E Nelson Phytopathology 53(10) 1237-1238, BIBL., PL. Oct 1963 464.8 P56 Dianthus caryophyllus, Pseudomonas, Soil temperature. 6735-68 TRICBLOROBENZENE AS A SOIL TOXICANT AGAINST FOUR WOOD-DECAY-ING SCIL FUNGI. J D Diller E J Koch Phytopathology 53(7) 745 Jul 1963 464.8 P56 Fungicides, Soil fungi, Trichlorobenzene, Wood destroying fungi. 6736-68 TRANSMISSION OF PSEUDOMONAS SYRINGAE IN PEACE TREES BY BUD PROPAGATION. W M Dowler D B Petersen W h Dowlet D b Petersen Plant Dis Rep 51 (8)0 666-668 Aug 1967 1.9 P69P Bacterial canker (peaches), Bacterial diseases (plants), Dibromo-3-chloropropane, 1,2-, Peaches, Plant budding, Plant disease control, Plant disease transmission, Pseudomonas syringae South Carolina Agricultural Experiment Station, Clemson, cooperating. son, cooperating. Scion buds obtained from an orchard with a high incidence of bacterial canker were budded onto peach seedlings from can-nery stock. about 1200 of these June-budded trees were used to establish two orchards. sixty apparently healthy trees were planted in each orchard for comparison. by the end of the first growing season, 27 percent of the trees from the canker-infested orchard had died as compared with 17 percent of the others. bacteria, morphologically similar to Pseudo-monas syringae, were isolated readily from the first group of trees but rarely from the ;healthy; trees. soil injec-tions of 1,2-dibromo-3-chloropropane during the second grow-ing season resulted in a slight reduction in tree losses the ing season resulted in a slight reduction in tree losses the following year. 6737-68 BOST-PARASITE RELATIONS OF STEMPBYLIUM LEAPSPOT AND STEM CANKER OF BIRDSPOOT TBEFOIL (LOTUS CORNICULATUS). C R Drake Phytopathology 53(9) 1094-1099, BIBL., PL. Sep 1963 464.8 P56 Birdsfoot trefoil, Leaf spot (birds foot trefoil), Stem canker (birdsfoot trefoil), Stemphylium. 6738-68 BEET RING MOTTLE DISEASE. J E Duffus A S Costa Phytopathology 53(12) 1422-1425, BIBL. Dec 1963 464.8 P56 Aphididae, Beets, Ring mottle (beets), Spinach, Sugar beets. 6739-68 A VIRUS-LIKE PARTICLE IN AVON AND FUNDY POTATOES. M M Dwurazna M Weintraub Phytopathology 53(7) 839-842, PL. Jul 1963 464.8 P56 Plant disease transmission, Potatoes, Viruses. 6740-68 BACTEBIAL SPOT OF IVY CAUSED BY XANTBOMONAS BEDEBAE (ARNAUD, 1920, DOWSON 1939, IN NEW ZEALAND. D W Dye New Zeal J Sci 10 (2), 481-485 Jun 1967 514 N482 Bacterial diseases (plants), Eacterial spot (ivy), Hanthomonas hederae, New Zealand. 6741-68 CONTROL OF PENICILLIUM DECAY OF ORANGES WITH CEBTAIN VOLATILE ALIPHATIC AMINES. J W Eckert M J Kolbezen Phytopathology 53(9) 1053-1059, BIBL. 1058-1059, TABL. Sep 1963 464.8 P56 Amines, Ammonia, Ethylamine, Isobutylamine, Isopropylamine,

20 6742-68 N-butylamine, N-propylamine, Oranges, Organic compounds, Penicillium, Sec-butylamine, Tert-butylamine. 6742-68 SYM-DIBROMOTETRACHLOROETHANE - A NEW FUNGISTAT FOR CONTROL OF CITRUS FRUIT DECAY. J W Eckert M J Kolbezen PhytoFathclogy 53(7) 755-761, BIBL. 760-761, TABS., PL. Jul 1963 464.8 P56 Citrus, Dibromotetrachloroethane, symmetrical, DBTCE, Fruit, Fungicides, Penicillium. 6743-68 EFFECT OF ORGANIC FHOSPHOROUS PESTICIDES ON CERTAIN PHYTO-PATHOGENIC FACTERIA. PATHOGENIC FACTERIA. A F El-Helaly M K Abo-el-Dahab F M Zeitoun Phytopathology 53(7) 762-764 Jul 1963 464.8 P56 Bacterial diseases (plants), Bactericides, Chemical control (plant diseases), Phosphorus. EFFECTS OF BARLEY YELLOW DWARF VIRUS ON YIELD OF OATS AS INFLUENCED EY VARIETY, VIRUS STRAIN, AND DEVELOPMENTAL STAGE OF PLANTS AT INOCULATION. R M Endo C M Brown Phytopathology 53(8) 965-968, BIBL. Aug 1963 464.8 P56 Barley, Oats, Yellow dwarf (barley). 6745-68 INFLUENCE OF TEMPERATURE ON RATE OF GROWTH OF FIVE FUNGUS PATHOGENS CF TURFGRASS AND ON RATE OF DISEASE SPREAD. R M Endo Phytopathology 53(7) 857-861, BIBL. 860-861, TABS. Jul 1963 464.8 P56 Jul 1963 464.6 P56 Corticium, Fungus diseases (plants), Fusarium, Grasses, Plant disease resistance, Plant disease transmission, Plant physiology, Plant temperature, Pythium, Rhizoctonia, Sclerotinia, Turf. 6746-68 ANTIFUNGAL PHENOLIC ACIDS IN APPLE FRUITS AFTER INFECTION WITH SCIERCTINIA FRUCTIGENA. C H Fawcett D M Spencer Ann Appl Biol 60 (1), 87-96 REF Aug 1967 442.8 AN72 Apples, Fungicides, Fungus diseases (plants), Phenols, Sclerotinia fructigena. 6747-68 SUPPRESSION OF CORN HEAD SMUT BY IN-FURROW APPLICATIONS OF PENTACHLORCNITROBENZENE. H S Penvick W R Simpson Plant Dis Rep 51(8)0626-628 Aug 1967 1.9 F69P Chemical control (plant diseases), Corn, Fungicides, Chemical control (plant diseases), Corn, Fungicides, Head smut (corn), Pentachloronitrobenzene, Pesticide application, Sphacelotheca reiliana. Furrow treatment with pentachloronitrobenzene (PCNB) indi-cates scue hope for a control over head smut of corn. at 20 lb/acre of PCNB, complete control of head smut was ob-tained in the greenhouse and application rates as low as 5 lb/acre gave scme control in the field. the economics of control and minimal rate of the application will be in-vestigated further in 1967 vestigated further in 1967. 6748-68 POSSIBLE DETRIMENTAL EFFECT OF PYTHIUM ARTOTROGUS ON THE CULTIVATED MUSHROOM. C L Fergus J W Sinden L C Schisler E M Sigel Phytopathology 53(11) 1360-1362, BIBL., PL. Nov 1963 464.8 E56 Mushrooms, Phytopathology, Pythium. 6749-68 THE FUNGOUS FLORA CF NONSUBERIZED ROOTS OF POORLY GROWING THE FUNGUS FLORA OF NONSCELLED CHERRY TREES. P Plicegel K G Farker W F Mai Phytopathology 53 (11) 1368-1369, BIBL. Nov 1963 464.8 P56 Protylenchus. Cherries, Flora, Fungi, Pratylenchus. 6750-68 A SIMPLE METHOD OF MEASURING RATE OF PLANT VIRUS MOVEMENT FROM INOCULATED TOBACCO LEAVES TO STEM TIPS. R E Ford D F Bateman Phytopathology 53(10) 1139 Oct 1963 464.8 P56 Alfalfa, Leaves, Measurement, Potatoes, Tobacco. PAGE 16

6751-68 PHYTOPHTHORA ROOT ROT OF ALFALFA IN MINNESOTA. F I Frosheiser F 1 FFOSAELSEF Plant Dis Rep 51 (8)0 679-681 Aug 1967 1.9 P69P Alfalfa, Fungus diseases (plants), Phytophthora megasperma, Root rot (alfalfa). Root rot (alfalfa). University of Minnesota, Department of Plant Pathology and Physiology, St. Paul, cooperating. Stand depletion due to root rot was observed in several al-falfa fields in Minnesota in 1965. Phytophthora megasperma was isolated from roots of diseased plants. nine of eleven isolates tested were pathogenic on Vernal alfalfa plants in artificially-infested soil. infection was more severe in plants inoculated under 6 weeks old than 12 weeks old. only one field with current season infection was observed in 1966. phytophthora root rot may become a problem of alfalfa in Minnesota in wet areas, or during and following periods of excessive precipitation. 6752-68 GENETICS AND CYTOLOGY OF PHYTOPHTHORA. J Galindo G A Zentmyer Nature 214 (5095), 1356 24 Jun 1967 472 N21 Cytology, Fungus diseases (plants), Genetics, Phytophthora drechsleri. 6753-68 APPROACH GRAFT TRANSMISSION OF TULARE APPLE MOSAIC VIRUS BETWEEN APPLE AND GOMPHRENA GLOBOSA. S M Garnsey Phytopathology 53(10) 1139 Oct 1963 464.8 P56 Apples, Gomphrena, Plant disease transmission, Plant grafting, Tulare mosaic (apples). 6754-68 EVIDENCE FOR TWO DIFFERENT PATHOGENS OF PEANUT POD ROT. K H Garren A m Garren Phytopathology 53(7) 746 Jul 1963 464.8 P56 Calcium sulfate, DBSS , Fungus diseases (plants), Para-dimethylaminobenzenediazo sodium sulfonate, Peanuts, Pentachloronitrobenzene, Pod rot (peanuts), Pythium, Rhizoctonia. 6755-68 VARIATION IN SUSCEPTIBITY TO SCLEROTIUM ROLFSII AMONG PEA-NUT VARIETIES. K H Garren Phytopathology 53(7) 746 Jul 1963 464.8 P56 Crop varieties, Peanuts, Plant disease resistance, Sclerotium, Stem rot (peanuts). 6756-68 756-68 RESISTANCE TO POWDERY MILDEW IN GRAPEVINES RELATED TO OSMOTIC VALUE AND ASSOCIATED PACTORS. A C Goheen W C Schnathorst Phytopathology 53(10) 1139 Oct 1963 464.8 P56 Grapes, Osmosis, Plant disease resistance, Powdery mildew (grapes). 6757-68 AN APPARENT STRAIN OF TOBACCO RATTLE VIRUS ASSOCIATED WITH A AN APPARENT STRAIN OF TOBACCO RATTLE VIRUS . YELLOW SPOTTING OF LETTUCE. A H Gold R Grogan R Bardin Phytopathology 53 (10) 1139 Oct 1963 464.8 P56 Lettuce, Rattle disease (tobacco), Tobacco, Yellow spotting (lettuce). 6758-68 THE RESPONSE TO TEMPERATURE OF CABBAGE VIRUS A INFECTION IN NICOTIANA GLUTINOSA. L C Gonzalez G S Pound Phytopathology 53(9) 1041-1045, BIBL., TABS., PL. Sep 1963 464.8 P56 Cabbage, Nicotiniana, Temperature, Virus A (cabbage). 6759-68 FUNGI ATTACKING SEEDS IN DRY SEED-BEDS. D M Griffin Linn Soc New S Wales Proc 91 (1), 84-89 REF 1966 514 SY2

Aspergillus, Pungus diseases (plants), Penicillium, Seeds, Soils, Wheat.

6760-68 6767-68 SEED TRANSMISSION OF WHITE CLOVER MOSAIC AND CLOVER YELLOW MCSAIC VIRUSES IN RED CLOVER. H O Hampton Phytopathology 53 (10) 1139 Oct 1963 464.8 P56 Clover, Mosaic (white clover), Seed-borne plant diseases, White clover, Yellcw mosaic (clover). 6761-68 RATE AND PATTERN OF PRUNE DWARF VIRUS MOVEMENT WITRIN INOCULATED CRERRY TREES. R O Bampton Phytopathclogy 53 (9) 998-1002, BIRL., TARS. Sep 1963 464.8 P56 Cherries, Dwarf disease (prunus), Prunes. 6762-68 SCME OBSERVATIONS OF PEANUT LEAF RUST AND CERCOSPORA LEAF SPOTS IN TEXAS. L Harriscn Plant Dis Rep 51 (8)0 687-689 Aug 1967 1.9 F69P Cercospera personata, Fungicides, Fungus diseases (plants), Leaf rust (peanuts), Leaf spot (peanuts), Peanuts, Puccinia arachidis. Puccinia leaf rust and Cercospora leaf spot diseases caused serious losses in peanuts in south Texas in many fields harvested from September to November in 1965 and 1966. early harvested from September to November in 1965 and 1966. early harvested peanuts were not seriously affected by leaf rust. several fungicides of the ones tested, including 325-mesh dusting sulfur, reduced the incidence of both leaf rust and leaf spots. sprays were more effective than dusts in the 1966 tester. 1966 tests. 6763-68 A VISIT TO M. W. BEIJERINCK AT HIS HOME LABORATORY IN DECEMBER, 1925. L S Heisbeck Phytopathclogy 53(7) 862 Jul 1963 464.8 P56 Antirrhinum, Bacteria, Plant diseases. 6764-68 FIRST AND SECOND THAR EFFECTS ON CYTOSPORA CANKER DISEASE OF ITALIAN PRUNE TREES SPRAYED WITH FOUR CONCENTRATIONS OF CYCLOHEXIMIDE TRIOSEMICARBAZONE. A W Relton W J Kochan Plant Dis Rep 51 (8)0 655-658 Aug 1967 1.9 P69P Plant Dis Rep 51 (8) 0 655-658 Aug 1967 1.9 P69P Canker (Prunus domestica), Cyclcheximide thiosemicarbazone, Cytospora cincta, Dosage, Fungus diseases (plants), Prunes, Prunus domestica, Spraying. Three groups of Italian prune (Frunus domestica) trees in a commercial-orchard environment were spray-treated with 50, 200, 800, or 3200 ppm of cycloheximide thiosemichrbazone (CTS). in one case, 21-year-old trees with natural infec-tions were treated only the first year. in another case, healthy 18-year-old trees were treated both years, with artifical infections being initiated before and after treat-ment in the spring of both years. in a third case, healthy 4-year-old trees were treated only the first year, with artifical infections being initiated in the spring of both years. the results indicate that0 1) old infections can be suppressed satisfactorily only with relatively high concen-trations (3200 ppm or more), 2) the effectiveness of lower concentrations in old trees can be improved by treating each year, 3) low concentrations are highly effective in young or old trees when applied prior to infection, and 4) these effects can be measured during the winter period following treatment, and during the second growing season, even when treatments are applied only during the first year. 765-68 6765-68 765-68 ABSORPTION, TOXICITY, AND BIO-ASSAY OF RIGR-POTENCY FUNGICIDES IN PRUNUS DOMESTICA. A W Helton A F Rarvey Phytopathology 53(8) 895-898, BIRL. Aug 1963 464.8 P56 Cycloheximide, Mycostatin, Fhytoactin, Phytostreptin, Prunes, Quinolinol benzoate, 8-, Quinolinol citrate, 8-, Quinolinol sulfate, 8-. 6766-68 mato (variety Manapal). the pathogen was isolated, however, from the stems of many of the plants grown in lime-amended

SUMMATION. T R Repting Phytopathology 53(10) 1135-1136 Oct 1963 464.8 P56 Roots, Symposia, Tree diseases.

MONOGENIC CHLOROTIC LESION RESISTANCE TO RELMINTHOSPORIUM TURCICUM IN CORN SEEDLINGS. H M Rilu A L Rooker Phytopathology 53(8) 909-912, BIRL., TARS., PL. Aug 1963 464.8 P56 Chlorosis (corn), Corn, Helminthosporium, Plant disease resistance. 6768-68 PATROGENICITY, VITAMIN NUTRITION, AND CULTURAL CHARACTERIS-TICS OF ISOLATES OF PRYTOPHTRORA PARASITICA FROM CARNATION AND OTRER ROSTS IN HAWAII. R R Rine M Aragaki Phytopathology 53(10) 1194-1197, BIBL., TAES. Oct 1963 464.8 P56 Dianthus caryophyllus, Eavaii, Nutrition, Pathogenicity, Phytophthora, Vitarins. 6769-68 INFLUENCE OF SOIL TEMPERATURE ON A CROWN ROT DISEASE OF PARSLEY CAUSED RY PRYTOPRTHORA PARASITICA. R B Rine M Aragaki Phytopathology 53 (9) 1113-1114, RIRL. Sep 1963 464.8 P56 Crown rot (parsley), Parsley, Phytopathology, Phytophthora, Soil temperature. 6770-68 RECOVERY OF ASTER VELLOWS FROM EXCISED ORGANS OF INSECT VEC-TOES. R Hirumi K Maramorosch Phytopathology 53(7) 746 Jul 1963 464.8 P56 Aster yellows (callistephus chinensis), Gastrointestinal system, Insect vectors, Macrosteles fascifrons, Salivary glands (insects), Viscera. 6771-68 RLACK ROOT BOT OF PINE. C S Hodges Jr Phytopathology 53(10) 1132-1134, BIEL. Oct 1963 464.8 P56 Rlack root rot (pinus), Ethylene dibromide, Pinus. 6772-68 A NEW CROWN ROT OF STRAWRERRY PLANTS CAUSED BY COLLETOTRI-CRUM FRAGARIAE. N L Rorn R G Carver Phytopathology 53(7) 768-770, PL. Jul 1963 464.8 P56 Colletotrichum, Crown rot (strawberries), Methyl bromide, Strawberries. 6773-68 FIELD DISEASE CYCLE OF PEPPERMINT RUST. C E Rorner Phytogathology 53(9) 1063-1067, BIRL., PL. Sep 1963 464.8 P56 Ribernation, Mentha piperita, Puccinia, Rust (mentha piperita), Teliospores. 6774-68 RELATION OF THE IRIS BORER TO BACTERIAL SOFT ROT OF IRIS. C M Roward J G Leach Phytopathology 53(10) 1190-1193, RIEL., PL. Oct 1963 464.8 P56 Racterial soft rot (iris), Erwinia, Iris, Macronoctua. 6775-68 FUSARIUM WILT (RACE2) OF TOMATOO EFFECT OF LIME AND MICRO-NUTRIENT SOIL AMENDMENTS ON DISEASE DEVELOPMENT. P J Jones S S Woltz P J Jones S S Woltz Plant Dis Rep 51 (8)0 645-648 REF Aug 1967 1.9 P69P Calcium hydroxide, Fungus diseases (plants), Manganese sulfate, Micronutrients, Plant nutritional deficiencies, Soil amendments, Tomatoes, Wilt (tomatoes), Zinc sulfate. Field soil (Leon fine sand) naturally infested with Fu-sarium oxysporum f lycopersici race 2 was amended with hydrated lime, manganese sulfate, and zinc sulfate in two greenhouse pot tests. liming to a pR 8.0 0-8.3 greatly de-creased the incidence and severity of Fusarium wilt of to-mato (variety Manpal). the pathogen was isolated, however.

6785-68

20 6776-68 6776-68 DETECTION OF THE TOBACCO VEINAL NECROSIS STRAIN OF POTATO VIRUS Y IN SOLANUM CAEDENASII AND S. ANDIGENUM INTRODUCED INTO THE UNITED STATES. R P Kahn B L Monroe Phytopathology 53(11) 1356-1359, BIBL. 1358-1359, PL. Nov 1963 464.8 P56 Necrosis, Solanum, Tobacco, United States. 6777-68 EFFECT OF BIOTIN ON GROWTH AND SPORULATION OF VERTICILLIUM ALBC-ATEUM. W J Kaiser Phytopathology 53 (10) 1139-1140 Oct 1963 464.8 P56 Biotin, Growth factors, Sporulation, Verticillium. 6778-68 EFFECI OF THE SOIL CARBON NITROGEN RATIO ON SOIL FUNGI. D D Kaufman L E Williams Phytopathology 53(8) 956-960, BIBL., TABS. Aug 1963 464.8 P56 Carbon, Chaetomium, Humicola, Masoniella, Nitrogen, Soil fungi, Soils, Stysanus, Wheat straw. 6779-68 CONTROL OF BOTRYTIS NECK ROT OF ONIONS BY FUNGICIDAL DUSTS AND DESICCANT CBEMICALS. AND DESIGCANT CREMICALS. J Kaufman J W Lorbeer Flant Dis Rep 51 (8) 0 696-699 Aug 1967 1.9 P69P Botran, Botrytis allii, Calcium chloride, Captan, Chemical control (plant diseases), Defoliants, Dichlorc-4-nitroaniline, 2,6-, Dusting, Fungicides, Fungus diseases (plants), Neck rot (onions), Onions, Thiram. Supported in part by Orange County Vegetable Improvement Company, Camden. Cooperative Association, Middleton, and Campbell Soup Company, Camden. Certain fungicidal dusts and desiccant chemicals applied on the neck wounds of freshly harvested New york-grown Down-ing Yellow Globe onion bulbs, artificially inoculated with Botrytis allii, significantly reduced Botrytis neck rot after 4 to 5 months common storage. 2,6-Dichloro-4-nitroaniline and calcium chloride were most effective materials in reducing total decay of onions during the 1964-65 season. captan and two other fungicides greatly reduced Botrytis neck rot and total decay during 1965-66. two ex-perimental fungicides reduced Botrytis neck rot to very low levels during 1966-67. 6780-68 STUDIES ON THE NATURE OF BARLEY RESISTANCE TO HELMINTHO-SPORIUM TERES. B L Keeling B L Keeling Diss Abstr Sect B 27 (12,PT.1), 4208B-4209B Jun 1967 25055.049D53 Barley, Helminthosporium teres, Net blotch (barley), Plant disease resistance, Plant growth inhibitors. 6781-68 INFECTION OF SEEDLING COTTON HYPOCOTYL BY AN ISOLATE RHIZOCTONIA SCLANI. B B Khadga J E Sinclair B B Exner Phytopathology 53(11) 1331-1336, BIBL. 1335-1336, PL. Nov 1963 464.8 P56 Cotton, Bypocotyls, Rhizoctonia, Seedlings. 6782-68 INDUCED SUSCEPTIBILITY IN SOVBEAN PLANTS GENETICALLY RESTS-TANT TO PHYTOPHTHCRA SOJAE. W J Klarman.J W Gerdemann Phytopathology 53 (7) 863-864, PL. Jul 1963 464.8 P56 Phytophthora, Plant disease resistance, Soybeans. 6783-68 RESISTANCE OF SOVEBANS TO THREE PHYTOPHTHORA SPECIES DUE TO THE PRODUCTION OF A PETTOALEXIN. W L Klarman J W Gerdemann Phytopathology 53(11) 1317-1320, BIBL., TABS. Nov 1963 464.8 P56 Phytoalexin, Phytophthora, Plant disease resistance, Soybeans. 6784-68 NATURE OF RESISTANCE OF SOYBEANS TO THREE PHYTOPHTHORA SPECIES. W L Klarman J W Gerdemann Phytopathology 53(7) 747 Jul 1963 464.8 P56 PAGE 18

5 h MISIEWICZ Phytopathology 53(9) 1046-1049, BIBL., PL. Sep 1963 464.8 P56 Fusarium, Safflower, Seed-borne plant diseases, Seeds, Wilt (safflower). J M Klisiewicz 6786-68 CANCROID SPOT OF CITRUS. L C Knorr Phytopathology 53(12) 1415-1418, BIBL., PL. Dec 1963 464.8 P56 Cancroid spot (citrus), Citrus, Fungus diseases (plants). 6787-68 MECHANISM OF SOIL FUNGISTASIS. W H Ko Diss Abstr Sect B 27 (12,PT.1), 4209B Jun 1967 25055.U49D53 Fungicides, Plant nutrition, Soil fungi, Soil microorganisms. 6788-68 CONTROL OF DOWNY MILDEW OF OPIUM POPPY BY ROOT APPLICATION CONTROL OP DOWNY MILDEW OF OPIUM POPPY BY ROOT APPLICATION OF FUNGICIDES. K L Kothari A C Verma Plant Dis Rep 51 (8)0 686-687 Aug 1967 1.9 F69P Downy mildew (Papaver), Fungicides, Fungus diseases (plants), Papaver, Peronospora arborescens, Pesticide application, Plant disease control, Roots, Thiocarbamates. 6789-68 INFECTING SEVEN-DAY-OLD ALPALFA SEEDLINGS WITH WILT BACTERIA THROUGH WOUNDED COTYLEDONS. K W Kreitlow Phytopathology 53(7) 800-803, PL. Jul 1963 464.8 P56 Alfalfa, Bacterial wilt (alfalfa), Corynebacterium, Plant injuries, Seedlings. 6790-68 790-68 A PHYSIOGENIC LEAF AND STEM SPOT OF SOME FORAGE LEGUMES. K W Kreitlow R A Kilpatrick Plant Dis Rep 51(8)0619-622 Aug 1967 1.9 F69P Alfalfa, Birdsfoct trefoil, Leaf spot (alfalfa), Leaf spot (birdsfoot trefoil), Leaf spot (red clover), Leaf spot (vetch), Red clover, Vetch. New Hampshire Agricultural Experiment Station, Durham, cooperating New Hampshire Agricultural Experiment Station, Durham, cooperating. Some lines of alfalfa and red clover are affected by a phys-iogenic leaf and stem spot that resembles symptoms incited by Leptosphaerulina trifolii. similar symptoms were ob-served on birdsfoot trefoil and possibly earlier on common vetch. the spotting is transient and fails to develop when plants are grown at temperatures above 28 degrees centigrade or when light intensity is low. 6791-68 ON THE PUNGISTATIC AND PUNGICIDAL PROPERTIES OF AN ANTI-BIOTIC PRODUCED BY PENICILLIUM RUBRUM. M M Krstic Plant Dis Rep 51 (8)0 669-671 Aug 1967 1.9 P69P Antibiotics, Fungicides, Fungus diseases (plants), Penicillium rubrum. 6792-68 AN EVALUATION OF SOLANUM NIGRUM AND PHYSALIS MINIMA AS SUSCEPTS OF XANTHOMONAS VESICATORIA. C A Laub R E Stall C A Laub R E Stall Plant Dis Rep 51 (8)0 659-661 Aug 1967 1.9 P69P Bacterial diseases (plants), Bacterial spot (Physalis minima), Bacterial spot (Solanum nigrum), Physalis minima, Plant disease resistance, Solanum nigrum, Weeds, Xantaomonas vesicatoria. Plants of nightshade and ground cherry were resistant to Xanthomonas vesicatoria. resistance in both species Was similar to the hypersensitive resistance of a pepper line descended from PI 163192. X vesicatoria was isolated from the resistant plants 35 days after inoculation of low levels of bacteria even though no macroscopic symptoms were noted.

Phytophthora, Plant disease resistance, Soybeans.

SEED FROM INFECTED SAFFLOWER.

WILT-INCITANT FUSARIUM OXYSPORUM F. CARTHAMI PRESENT IN

this is evidence that the bacterial spot microorganism can survive as a resident in the resistant plants and as such might possibly survive the intercrop period in Florida. 6793-68 A RINGSPOT VIEUS FROM DAHLIA. R R Lawson J A Milbrath Phytopathclogy 53(10) 1140 Oct 1963 464.8 P56 Dahlia, Ring spct (dahlia). 6794-68 TRE RESISTANCE OF ZEA MAYS TO PUCCINIA GRAMINIS. R T Leath Diss Abstr Sect R 27 (12, PT. 1), 4209E-4210B Jun 1967 25055.049D53 Jun 1967 (2005).049053 Corn, Grasses, Rost indexing (plants), Plant disease resistance, Puccinia graminis, Puccinia sorghi. 6795-68 FORMATION OF RYDROGEN CYANIDE BY TRE MYCELIAL STAGE OF A FAIRY RING FUNGUS. J B Lebeau E J Rawn Phytopathology 53(12) 1395-1396, BIBL. Dec 1963 464.8 P56 Golf courses, Hydrocyanic acid, Lawns, Marasmius oreades, Mycelium, Parks, Fastures. 6796-68 MULTIFLICATION OF XANTROMONAS VESTCATORIA ON TOMATO SEED-LINGS. C Leben Phytopathology 53(7) 778-781 Jul 1963 464.8 P56 Bacteriology, Cultural control (plant diseases), Mucor, Reproduction, Seedlings, Spotted wilt (tcmatoes), Tomatoes, Xanthomonas. 6797-68 DISINFECTION OF TCMATO SEED INFESTED WITH XANTROMONAS VESI-CATORIA. G Libman R E Webb Phytopathology 53 (7) 747 Jul 1963 464.8 P56 Antibiotics, Antiseptics, Chemical control (plant diseases), Fungicides, Hexachlcrophene, Seed treatment, Seeds, Tomatoes. 6798-68 RELATIONSRIPS OF VIRUSES ASSOCIATED WITH RINGSPOT DISEASES OF BLUEBERRY. R M Lister L C Raniere E R Varney Phytofathclogy 53 (9) 1031-1035, RIBL., PL. Sep 1963 464.8 P56 Blueberries, Mecrotic ring spot (blueberries), Ring spot (tobacco), Xiphinema. 6799-68 FUNGITOXICITY OF STERILIZED SOIL INOCULATED WITH SOIL MICRCFLCEA. J L Lockwood B T Lingappa Phytopathology 53(8) 917-920, RIBL. Aug 1963 464.8 P56 Glomerella, Soil fungi, Soil sterilization. 6800-68 INSTABILITY OF SYMPTOMS OF PCTATO LEAF ROLL VIRUS. H R MacCarthy Phytograthology 53(10) 1161-1163, BIRL., TABS. Oct 1963 464.8 P56 Insect vectors, Leaf roll (potatoes), Myzus, Potatoes. 6801-68 CHEMOTREBAPY OF THE APPLE SCAR DISEASE WITH BUTYRIC ACID DERIVATIVES. D E MacIennan J Kuc E B Williams Phytopathology 53(11) 1261-1266, BIRL., TABS., PL. Nov 1963 464.8 P56 Apples, Butyric acid, Drug therapy, Scab (apples), Venturia. 6802-68 PRYSICLCGICAL FACTORS INVOLVED IN TUMOR PRODUCTION BY TRE OLEANDER KNCT FATROGEN, PSEUCOMCNAS SAVASTANOI. A B Magie E E Wilson Phytopathology 53(10) 1140 Oct 1963 464.8 P56 Crown galls, Nerium, Pseudomonas.

6803-68 VECTORS OF ALFALFA AND BEAN YELLOW MOSAIC VIRUSES IN LADINO WHITE CLOVER. G R Manglitz K W Kreitlow J Econ Entomol 53(1) 113-115, BIBL., TABS. Feb 1960 421 J822 Aceratagallia, Alfalfa, Anuraphis, Derocerus, Empoasca, Ladino clover, Macrosiphum, Mosaic (bean yellow), Myzus, Rhopalosiphum, Tetranychus, Therioaphis. 6804-68 804-68 PACTORS AFFECTING GROWTH, SPORULATION, PATHOGENICITY, AND DISSEMINATION OF LEPTOSFRAERULINA BRIOSIANA. E S Martinez E W Banson Phytopathology 53(8) 938-945, RIEL., TABS., PL. Aug 1963 464.8 F56 Alfalfa, Growth factors, Leaf spot (alfalfa), Leptosphaerulina, Sporulation. 6805 - 68EFFECT OF SHDC ON GERMINATION, PLANT GROWTE, AND FUSARIUM WILT INCIDENCE OF CUMIN (CUMINUM CYMINUM). B L Mathur R L Mathur Plant Dis Rep 51 (8)0 629-631 Aug 1967 1.9 P69P Aug 1967 1.9 P69P Cuminum cyminum, Fungus diseases (plants), Fusarium oxysporum, Plant physiology, Seed germination, SMDC, Thiocarbamates, Wilt (Cuminum cyminum). Addition of SMDC and its 50 percent solution to soil 20 days before soving resulted in increased seedling emergence, better plant growth, and reduction in will Fusarium oxyspo-rum cumini, incidence in cumin. in SMDC-TREATED soil there were relatively few fungal species and the population of Fusarium oxysporum, as well as of total fungi, was greatly reduced. 6806-68 VARIETAL RESPONSE IN GROUNDNUT TO SCLEROTIUM BATATICOLA. S B Mathur A Sigh L M Joshi Plant Dis Rep 51 (8)0 649-651 Aug 1967 1.9 P69P Crop varieties, Fungus diseases (plants), Peanuts, Sclerotium bataticola. Sclerotium bataticola caused severe damage in two varieties of groundnut out of four tested under field conditions. seventy-two percent mortality was observed in variety TMV 2 and 65 percent in Spanish Improved Punjab 1 TMV 3 varieties suffered only 13 and 4 percent losses, re-spectively. the latter two varieties are late-maturing and spreading types while the former ones mature early and pos-sess a bunchy habit, the residual yields of Punjab 1 and soil although these plants did not develop vascular browning TMV 3 per hectare were very much higher than yields for the symptoms, the Mn and Zn soil amendment results were vari-able and inconclusive. Sclerotium bataticola caused severe damage in two varieties other two susceptible varieties. punjab 1 and TMV 3 ap-peared to be fairly tolerant to root rot caused by S bataticola under Delhi conditions. 6807-68 CHITIN-LIGNIN AMENDMENTS FOR CONTROL OF REAN ROOT ROT. C L Maurer R Raker Phytopathology 53(8) 882 Aug 1963 464.8 P56 Reans, Chitin, Lignin, Root rot (beans). 6808-68 MYCELIAL PROTEIN COMPARISONS OF ISOLATES OF CUCURBIT ANTRRACNOSE FUNGI. C L McCombs N N Winstead Phytopathology 53(8) 882 Aug 1963 464.8 P56 Anthracnose (cucurbita), Colletotrichum, Fungi, Glomerella, Mycelium, Proteins. 6809-68 RETEROTHALLISM IN PYRENOPRORA TERES. W C McDonald Phytopathology 53(7) 771-773, PL. Jul 1963 464.8 P56 Barley, Cultural control (plant diseases), Culture media, Grasses, Mycology, Pathogenicity, Plant genetics, Plant morphology, Plant reproduction, Pyrenophora. 6810-68 PHYTOPATROLOGICAL NOTES. PHYTOPATROLOGICAL MOTES. INDUCING INFECTION OF PEAR ROOTLETS BY PHYTOPHTRORA CACTORUM IN POT TESTS. D L MCIntosh R J O Beilly Phytopathology 53(12) 1447, BIBL.

20 6810-68

20 6811-68 Dec 1963 464.8 P56 Pears, Fhytophthora, Roots. 6811-68 INOCULATION AND RUST DEVELOPMENT ON PEANUTS GROWN IN THE CREENHOUSE. D V McVey F A Jimenez Phytopathology 53(8) 882 Aug 1963 464.8 P56 Greenhouse culture, Immunization, Peanuts, Puccinia. 6812-68 GREENEUG DISPERSAL AND DISTRIBUTION OF BARLEY YELLOW DWARF VIRUS IN WISCONSIN. J T Medler P W Smith J Econ Entomol 53(3) 473-474, BIBL. Jun 1960 421 J822 Oats, Population statistics, Toxoptera, Yellow dwarf (barley). 6813-68 METABOLISM OF RESISTANT AND SUSCEPTIBLE CUCUMBER VARIETIES INFECTED WITH CUCUMBER MOSAIC VIRUS. G H Menke J C Walker Phytopathology 53 (11) 1349-1355, BIBL. Nov 1963 464.8 P56 Cucumbers, Leaves, Metabolism, Mosaic (cucumbers), Plant disease resistance. 6814-68 PHYSIOLCGY OF RHIZOPUS INFECTION ON CARROT. Menke Phytopathclogy 53(8) 882 Aug 1963 464.8 P56 Carrots, Plant physiology, Rhizopus. 6815-68 RESPONSE OF PLANTS TO AIR POLLUTANTS. II. EFFECTS OF OZONE CONCENTRATION AND LEAF MATURITY ON INJURY TO NICOTIANA TAEACOM. TAFACUM. H A Menser H E Heggestad O E Street Phytopathology 53(11) 1304-1308, BIBL., PL. Nov 1963 464.8 P56 Air pollution, Leaves, Ozone, Tobacco, Weather fleck (tobacco). 6816-68 THE UTILIZATION OF LIGNO-CELLULOSE BY COMMON MOLD FUNGI. M Merrill D W French Phytopathology 53(8) 882 Aug 1963 464.8 P56 Fungi, Lignocellulose, Molds, Populus. 6817-68 AN INVESTIGATION OF THERMAL INACTIVATION OF ALFALFA MOSAIC VIRUS. A Milbrath Phytopathology 53(9) 1036-1040, BIBL., TABS. Sep 1963 464.8 P56 Alfalfa, Beat, Mosaic (alfalfa). 6818-68 VARIABILITY IN RATES OF MOVEMENT OF DIFFERENT STRAINS OF THE VIRUS RESPONSIBLE FOR PRUNE DWARF. A Milbrath J A BILFRATD Phytopathology 53(9) 1106-1108, BIBL., PL. Sep 1963 464.8 F56 Cherries, Dwarf disease (prunus), Prunes, Prunus mahaleb, Yellows (cherries). 6819-68 OZONE INJURY TO THE FOLIAGE OF PINUS PONDEROSA. P R Miller J R Parmeter Jr O C Taylor E A Cardiff Phytopathclogy 53(9) 1072-1076, BIEL. 1075-1076, FL. Sep 1963 464.8 E56 Leaves, Ozone, Pinus, Smog. 6820-68 SOME BIOCHEMICAL CHANGES ASSOCIATED WITH VIRUS INFECTION IN APPLE. D F Millikan Phytopathology 53(8) 883 Aug 1963 464.8 p56 Apples, Biochemistry, Virus diseases (plants). 6821-68 PROPERTIES OF TULARE APPLE MCSAIC VIRUS. G I Mink J B Bancroft M J Nadakavukaren Phytopathology 53(8) 973-978, BIBL. 977-978, TABS., PL. Aug 1963 464.8 P56 PAGE 20

Apples, N-butanol, Tulare mosaic (apples). 6822-68 ADDITION OF FUNGAL CELL-WALL COMPONENTS TO SOIL FOR BIOLOGICAL DISEASE CONTROL R Mitchell Phytopathology 53(9) 1068-1071, BIBL., PL. Sep 1963 464.8 P56 Agrobacterium, Biological control (diseases), Cells, Chitin, Pusarium, Laminarin, Pythium, Soil sterilization, Soil-borne plant diseases. 6823-68 PLANT INTRODUCTION SOUR CHERRY SELECTIONS - PROBABLE SOURCES FLANT INTRODUCTION SOUR CHERRY SELECTIONS OF BROWN ROT RESISTANCE. J D Moore R D Berger A V Ravenscroft Phytopathology 53(8) 883 Aug 1963 464.8 F56 Brown rot (cherries), Cherries, Monilinia, Plant introduction) Plant introduction. 6824-68 J24-06 FOTENTILLA SPECIES AS HOSTS FOR PHYTOPHTHORA PRAGARIAE. J N Moore D H Scott R H Converse Phytopathology 53(8) 883 Aug 1963 464.8 P56 Greenhouse culture, Phytophthora, Potentilla. 6825-68 CALCIUM NUTRITION IN RELATION TO THE BLACK SHANK DISEASE OF TOBACCO. L D Moore W H Wills Plant Dis Rep 51 (8)0 641-644 Aug 1967 1.9 P69P Black Shank (tobacco), Calcium, Fungus diseases (plants), Phytophthora parasitica nicotianae, Plant disease resistance, Plant nutritional deficiencies, Tobacco. The affect of calcium supplied in modified Hoagland s solu-tion on susceptibility of tobacco to Phytophthora parasitic var. nicotianae was investigated in a series of experiments. when black shank resistant and susceptible tobacco was grown when black shank resistant and susceptible tobacco was grown in solution culture in the greenhouse at several calcium levels, less than 5 percent of the plants were diseased at 20 ppm supplied calcium in contrast to 85 to 100 percent diseased at 100 ppm or higher calcium. the effect was de-pendent upon the amount of calcium supplied in the nutrient solution at the time of inoculation and was independent of prior nutrition. the effect was apparently independent of pB of the growth medium. 6826-68 POTATO YELLOW VEIN VIRUS IN EQUADOR. J D Moreno Phytopathology 53(8) 883-884 Aug 1963 464.8 P56 Equador, Potatoes. 6827-68 INFECTION INHIBITION AND GERM-TUBE LYSIS OF THREE CEREAL RUSTS BY BACILLUS PUMILUS. F L Morgan Phytopathology 53(11) 1346-1348, BIBL. Nov 1963 464.8 P56 Bacillus, Grain, Lysis, Puccinia, Rust (grain). 6828-68 RELATIONSHIP OF GENES CONDITIONING PATHOGENICITY OF ERYSIPHE GRAMINIS F. SP. HORDEI ON BARLEY. J G Moseman Phytopathology 53(11) 1326-1330, BIBL. 1329-1330, TABS. Nov 1963 464.8 P56 Barley, Erysiphe, Genes, Pathogenicity. 6829-68 HAIRY ROOT (AGROBACTERIUM RHIZOGENES) OF FIELD ROSES. D E Munnecke P A Chandler M P Starr Phytopathology 53(7) 768-799, BIBL., TABS., PL. Jul 1963 464.8 P56 Agrobacterium, Bactericides, Chemical control (plant diseases), Dichloropropane dichloropropene mixture, Hairy root (rosa), Nematocides, Nematode vectors, Rosa, Sanitation control (pests), Sodium hypochlorite. HAIRY ROOT (AGROBACTERIUM RHIZOGENES) OF FIELD ROSES. 6830-68 STUDIES ON TOBACCO MOSAIC VIRUS ( TNV) INFECTION OF SUSPEN-DED CALLUS CELLS. H H Murakishi Phytopathology 53(8) 884

20 6850-68

Aug 1963 464.8 P56 Mosaic (tobacco), Tobacco. Cochliobolus, Metabolites. 6842-68 6831-68 CERATOCYSTIS FAGACEARUM IN ROOTS OF INFECTED BUR OAKS AND THE BECURRENCE AND SPREAD OF OAK WILT. V M G Nair J E Kuntz Phytograthology 53(6) 884 Aug 1963 464.8 P56 Ceratocystis, Quercus, Roots, Wilt (quercus). 6832-68 EFFECTS OF USTILAGO AVENAE CN GROWTH OF TWO OAT VARIETIES. A Narain B H Luke Phytopathology 53 (11) 1363-1364, BIBL. 1363-1364 Nov 1963 464.8 P56 Growth factors, Cats, Ustilago. 6833-68 FERSISTENCE OF CORYNEEACTERIUM INSIDIOSUM IN SOIL. C A Nelson G Semeniuk Phytogathology 53 (10) 1167-1169, BIBL. Oct 1963 464.8 P56 Alfalfa, Bacterial wilt (alfalfa), Corynebacterium, Soils. 6834-68 CHARACTERISTICS OF AN UNIDENTIFIED VIRUS FROM CUCURBITS. M B Nelson J C Matejka Phytopathology 53(10) 1140-1141 Oct 1963 464.8 P56 Cantaloupes, Cucurbits. 6835-68 EFFECTS OF GEOGRAPRIC ISOLATION AND HOST ASSOCIATION ON THE EVOLUTION OF SEXUALITY IN HELMINTHOSPORIUM. R R Nelson D M Kline R Wilson Phytopathology 53(8) 884 Aug 1963 464.8 P56 Fertility, Geography, Helminthosporium, Metamorphosis, Sex. 6836-68 RED LEAF DISORDERS OF PEAR IN CALIFORNIA AND TREIR RELATION TO PEAR DECLINE. C W Nichols A A Millecan S M Gotan Phytopathology 53(8) 884 Aug 1963 464.8 P56 California, Leaves, Fears, Red leaf disease (pears). 6837-68 SYMPTOMLESS ROSTS OF THE POTATO SPINDLE TUBER VIRUS (PSTV). \* M J C Brien W B Raymer Phytopathclogy 53(8) 884 Aug 1963 464.8 P56 Petunia, Fhysalis, Potatoes, Spindle tuber (potatoes), Tomatoes. 6838-68 338-68 EFFECTS OF 2,6-DICHLORO-4-NITROANILINE ON BHIZOPUS SPECIES AND ITS COMPARISON WITH OTHER FUNGICIDES ON CONTROL OF BHIZOPUS RCT OF PEACHES. J M Ogawa J H Mathre D J Weber S D Lyda Phytopathology 53(8) 950-955, BIBL., PL. Aug 1963 464.8 P56 Botran, Captan, Dichloro-4-nitroaniline, 2,6-, Orthocide, Peaches, Phaltan, Ehizopus, Rot (peaches). 6839-68 VARIATIONS IN TOLERANCE OF RRIZCPUS SPECIES TO 2,6-DICHLORO -4-NITRCANILINE. T M Ogawa T H Mathre Phytopathology 53(10) 1141 Oct 1963 464.8 P56 Dichloro-4-nitroaniline, 2,6-, Fruit, Rhizopus. 6840-68 RELATION OF DECOMPOSING PLANT RESIDUES TO ROOT GROWTE OF ALFALFA. J H Ohman T Kommedahl Phytopathology 53 (6) 884-885 Aug 1963 464.8 P56 Alfalfa, Decomposition, Growth factors, Plant residues, Roots. 6841-68 A TOXIC METABOLITE FROM ASCOCHYTA FABAE HAVING ANTIBIOTIC ACTIVITY. R Oku T Nakanishi Phytopathology 53(11) 1321-1325, BIBL., TABS., PL. Nov 1963 464.8 P56 Antibiotics, Ascochyta, Broadbeans, Brown spot (broadbeans),

FUNGISTATIC EFFECTS OF A SOIL BACTERIUM ON CONIDIA AND HYPHAE OF HELMINTROSPORIUM SATIVUM. к м оја Phytopathology 53(8) 885 Aug 1963 464.8 856 Conidia, Fungicides, Helminthosporium, Hyphae, Soil bacteria. 6843-68 STUDIES ON A VIRUS CAUSING STEM GROOVING AND GRAFT-UNION ABNORMALITIES IN VIRGINIA CRAB APPLE. O Omaro De Sequeira Ann Appl Biol 60 (1), 59-66 REF Aug 1967 442.8 AN72 Abnormalities, Chenopodium quinoa, Crabapples, Plant grafting, Virus diseases (plants). 6844-68 ELECTRON MICROSCOPY OF TOBACCO RATTLE TYPE VIRUSES. ALLEN JR, T L. ALLEN JR, T L. Phytopathology 53(10) 1137 Oct 1963 464.8 P56 Corky ringspot (tobacco), Electron microscopy, Rattle disease (tobacco), Tobacco. 6845-68 REAPPRAISAL OF TRANSMISSION OF TOBACCO MOSAIC VIRUS BY IN-SECTS. G B Orlob Phytopathology 53(7) 822-830, BIBL. 829-830, TABS., PL. Jul 1963 464.8 P56 Epitrix, Insect vectors, Lygus, Lygus lineolaris, Macrosiphum, Macrosiphum euphorbiae, Mosaic (tobacco), Plant disease transmission, Tobacco. 6846-68 846-68 EFFECT OF ROOTSTOCK ON THE INCIDENCE OF IMPIETRATURA-DIS-EASED GRAPEFRUIT FRUITS. A Papasolomontos C V Economides Plant Dis Reg 51(8)0 684-686 Aug 1967 1.9 P69P Citrus, Grapefruit, Impietratura (citrus), Impietratura (grapefruit), Plant disease resistance, Virus diseases (plants). The effect of different rootstocks on the susceptibility of the grapefruit scion to impietratura citrus virus Vas stud-ied in a rootstock trial which began in 1961 and trees of which were cropped for the first time in 1964. the results to date indicate that impietratura-infected scions groving on Morton and Troyer citrange, Cleopatra mandarin, Pal-estine sweet lime, and sour orange are about equally suson forton and froyer critically, creoparta manually, sar-estine sweet line, and sour orange are about equally sus-ceptible. grapefruit scions growing on rough lemon have, however, consistently produced a higher percentage of dis-eased fruit than any of the above. in this trial, suscepti-bility was measured by the percentage of diseased fruit borne on each infected tree. 6847-68 MICROBIAL ANTAGONISM IN BEAN RHIZOSPHERE AS AFFECTED BY OAT STRAW AND SUPPLEMENTAL NITROGEN. G C Papavizas Phytopathology 53(12) 1430-1435, BIBL., TABS., PL. Dec 1963 464.8 P56 Beans, Nitrogen, Oat straw, Rhizosphere. 6848-68 EFFECTS OF OAT STRAW AND SUPPLEMENTAL NITROGEN ON MICROBIAL ANTAGONISM IN BEAN RHIZOSPHERE. G C Papavizas Phytopathology 53(8) 885 Aug 1963 464.8 P56 Beans, Microorganisms, Nitrogen, Oat straw, Bhizosphere. 6849-68 RELATIONSHIP OF WATER CONTENT AND LIVING CELLS TO SPREAD OF DIPLODIA ZEAE IN CORN STALKS. A J Pappelis F G Smith Phytopathology 53(9) 1100-1105, BIBL. 1104-1105, TABS. Sep 1963 464.8 P56 Cells, Corn, Diplodia, Pith, Water. 6850-68 SOME CHARACTERISTICS OF DWARF MISTLETOE POPULATIONS ON RED FIR. J R Parmeter Jr R F Scharpf Phytopathology 53(8) 885 Aug 1963 464.8 P56

Abies, Arceuthobium, Dwarf mistletoe. 6851-68 PREE AMINO ACID AND AMIDE CONTENT OF TOBACCO AND OATS INPEC-TED BY WILDFIRE AND BALC BLIGBT BACTERIA. P N Patel J C Walker Phytopathology 53(8) 885 Aug 1963 464.8 P56 Amides, Amino acids, Balo blight (oats), Oats, Tobacco, Wildfire (tobacco). 6852-68 52-68 A SOLL-PORNE VIRUS DISEASE OF PEPPER IN CALIFORNIA. A O Paulus I J Themason L B Weathers Phytopathology 53(6) 885-886 Aug 1963 464.8 P56 California, Piper nigrum, Redpeppers (vegetable), Soil-borne plant diseases. 6853-68 PATBOLOGICAL ANATOMY OF WALNUT ERANCHES INFECTED BY BENDERSCNULA TORULCIDEA. T Paxton Phytopathology 53(10) 1141 Oct 1963 464.8 P56 Bendersonula, Juglans. 6854-68 SURVIVAL OF KANTBCHCNAS VESICATORIA IN SOIL AND DISEASED ICMATC FLANTS. G B Peterscn Phytopathology 53(7) 765-767 Jul 1963 464.8 P56 Bacterial spot (tomatoes), Bibernation, Tomatoes, Xanthomonas. 6855-68 CONTROL OF CYLINDROSPORIUM LEAF SPOT DISEASE OF RHUS TRI-LOBATB AND SHEPHERDIA ARGENTFA SEEDLINGS. G W Peterson G W Peterson Plant Dis Rep 51 (8) 0 700-701 Aug 1967 1.9 P69P Bordeaux mixture, Captan, Chemical control (plant diseases), Cylindrosporium, Fungicides, Fungus diseases (plants), Leaf spot (Rhus trilobata), Leaf spot (Shepherdia argentea), Maneb, Rhus trilobata, Shepherdia argentea, Windbreaks. 6856-68 RELATIONSBIF OF THE GENES CONDITIONING RESISTANCE TO ERY-SIPE GRAMING F. SP. BORDEI IN SOME VARIETIES OF BARLEY USED TO DIFFERENTIATE RACES OF THIS PATHOGEN. C'R Pineda Diss Abstr Sect B 27 (12,PT.1), 4214B Jun 1967 25055.049D53 Barley, Crop varieties, Erysiphe graminis hordei, Genes, Plant disease resistance. 6857-68 ENZYMES FRCM CONIDIA AND MATRIX OF COLLETOTRICHUM ORBICU-LARE GRCWN ON A NATURAL MEDIUM. F M Porter Phytopathology 53(8) 886 Aug 1963 464.8 P56 Colletotrichum, Conidia, Culture media, Enzymes, Matrices. RECOGNITION OF PBYMATOTRICBUM ROOT ROT OF COTTON AND ALFALFA IN AN AERIAL SUBVEY. R M Fratt G F Snow T R Carpenter Phytopathology 53 (10) 1141 Oct 1963 464.8 256 Alfalfa, Cotton, Fhymatotrichum, Root rot (cotton). 6859-68 BREARDOWN OF MO HO RESISTANCE IN PISUM SATIVUM BY THERMAL SELECTION WITHIN CERTAIN STRAINS OF THE BEAN VELLOW MOSAIC VIRUS (EV2). R Provvidenti W T Schroeder Phytopathology 53 (8) 886 Aug 1963 464.8 P56 Ho mo genotype, Plant disease resistance, Plant temperature, Yellow mosaic (beans). 6860-68 POSTINFECTION DEVELOPMENT OF WBEAT BUNT IN RELATION TO CONTROLLED SOIL MOISTURE. L B Purdy Phytopathology 53(8) 985-986, BIBL. Aug 1963 464.8 P56 PAGE 22

20 6851-68

Soil moisture, Stinking smut (wheat), Wheat. 6861-68 THREE DISTINCT PATHOGENIC TYPES OF STRIPE RUST IN THE WESTERN STATES. L H Purdy R E Allan Phytopathology 53(8) 886 Aug 1963 464.8 P56 Puccinia, Stripe rust (wheat), Wheat. 6862-68 TIME OF YEAR OF INFECTION OF WINTER WBEAT BY THE DWARF BUNT FUNGUS. L H Purdy J A Hoffmann J P Meiners V R Stewart Phytopathology 53(12) 1419-1421, BIBL. Dec 1963 464.8 P56 Dec 1963 464.8 P56 Dwarf bunt (wheat), Hexachlorobenzene, Stinking smut (wheat), Weather, Wheat. 6863-68 BACTERIAL WILT OF BIRD-OF-PARADISE CAUSED BY PSEUDOMONAS V L Quinon M Aragaki Phytopathology 53 (9) 1115-1116, BIBL., PL. Sep 1963 464.8 P56 Bacterial wilt (strelitzia), Pseudomonas, Strelitzia. 6864-68 ANTIBIOTIC PRODUCTION BY STREPTOMYCES SP. IN CORN RBIZOSPHERE. G Rangaswami P Vidyasekaran Phytopathology 53(9) 995-997, BIBL. 996-997, TABS. Sep 1963 464.8 P56 Sep 1963 464.8 P56 Antibiotics, Corn, Belminthosporium, Rhizosphere, Streptomyces. 6865-68 DIFFERENTIATION OF VIRUSES TRANSMITTED PROM PELARGONIUM BORTORIN. R A Reinert A C Bildebrandt G E Beck Phytopathology 53(11) 1292-1298, BIBL. 1297-1298, TABS., PL. Nov 1963 464.8 P56 Geranium, Pelargonium, Plant disease transmission, Virus diseases (plants). 6866-68 SPRING BLACK STEM OF ALFALPA IN BELATION TO TEMPERATURE, MOISTURE, WOUNDING, AND NUTRIENTS AND SOME OBSERVATIONS ON PATHOGEN DISSEMINATION. B L Renfro R D Wilcoxson Phytopathology 53(11) 1340-1345, BIBL. 1344-1345, TABS. Nov 1963 464.8 P56 Alfalfa, Nutrient solutions (plants), Phytophthora, Spring black stem (alfalfa), Temperature. 6867-68 MOVEMENT OF TOBACCO NECROSIS VIRUS IN SYSTEMICALLY INFECTED SOYBEANS. E C Resconich Phytopathology 53(8) 913-916, BIBL., PL. Aug 1963 464.8 P56 Necrosis, Soybeans, Tobacco. 6868-68 THE EFFECT OF DAPPLE APPLE AND STEM PITTING ON APPLE TREE GROWTH AND YIELDS IN NEW HAMPSBIRE OVER A FOURTEEN-YEAR PERIOD. A E Rich Phytopathology 53(8) 886 Aug 1963 464.8 P56 Apples, Crop yields, Dapple (apples), Growth factors, New Bampshire, Stem pitting (apples). 6869-68 INOCULUM POTENTIAL AND EFFECTIVE FUNGICIDE DOSAGE IN SOIL. Phytopathology 53(10) 1141 Oct 1963 464.8 P56 Pythium, Soils, Thiram. 6870-68 STERFRILLIUM LEAFSPOT OF SAFFLOWER. D A Roberts A S Muller G B Killinger Phytopathology 53(8) 886 Aug 1963 464.8 P56 Leaf spot (safflowers), Safflower, Stemphyllium.

20 6890-68

6871-68 AUTUMN AND WINTER SPORULATION BY BASIDIOCARPS OF FOMES ANNOSUS. D Regers Phytopathology 53(10) 1141-1142 Oct 1963 464.8 P56 Basidiocarps, Fomes, Sporulation, Weather. 6872-68 PURIFICATION, MORPHOLOGY, AND BIOCBEMICAL CHARACTERIZATION OF THE WISCONSIN PEA STREAK VIRUS. E E Rosencranz D J Hagedorn Phytopathology 53(8) 887 Aug 1963 464.8 P56 Biochemistry, Morphology, Peas, Purification, Streak (peas), Wisconsin. 6873-68 INTERACTION OF THE SOYBEAN MOSAIC AND BEAN POD MOTTLE VIRUS-ES INFECTING SOYBEANS. J P Ross Phytopathology 53(8) 887 Aug 1963 464.8 P56 Mosaic (soybeans), Mottle (bean pods), Plant disease transmission, Soybeans. 6874-68 INHIBITION OF GERMINATION OF SPORES OF ALTERNARIA PORRI F. SP. SCLANI. SF. SULANI. J Rotem Phytopathology 53(10) 1241, BIBL. Oct 1963 464.8 P56 Alternaria, Spore germination. 6875-68 PHYTOPHTHORA CINNAMCMI ROOT ROT OF DOUGLAS-FIR. L F Roth Phytofathology 53(10) 1128-1131, BIBL. Oct 1963 464.8 P56 Phytophthora, Pseudotsuga, Root rot (pseudotsuga menziesii). 6876-68 GENETIC MODEL FOR PBYSIOLOGIC STUDIES OF MECBANISMS GOVERNING DEVELOPMENT OF INFECTION TYPE IN WHEAT STEM RUST. J B Rowell W Q Loegering B R Powers Jr Phytopathology 53(8) 932-937, BIBL. 936-937, PL. Aug 1963 464.8 P56 Genetics, Puccina, Stem rust (wheat), Wheat. 6877-68 PREVENTION OF SYMPTOM DEVELOPMENT OF FUSARIUM WILT OF COT-TON BY ISOLATES OF A CEPHALOSPOBIUM SPECIES. I Roy M Patel Phytopathclogy 53 (8) 887 Aug 1963 464.8 P56 Cephalosporium, Cotton, Fusarium, Wilt (cotton), Wilt (tomatoes). 6878-68 COMPARISONS OF PEA ENATION MOSAIC VIRUS ISOLATES. E G Ruppel D J Hagedorn Phytopathology 53(7) 813-818, BIBL. 818, TABS., PL. Jul 1963 464.8 P56 Beans, Enation mosaic (peas), Longevity, Peas, Plant disease resistance, Virology, Virus diseases (plants). 6879-68 MEASURING THE PATHOGENIC POTENTIAL OF PUCCINIA CORONATA VAR. AVENAE. E E Saari M B Moore Phytopathology 53(8) Aug 1963 464.8 P56 Crown rust (oats), Oats, Puccinia, Rhamnus. 6880-68 DUE OF RUST (PUCCINIA HELIANTHI) RACES TO DISCOVER NEW GENE POOLS FOR BUST RESISTANCE IN SUNFLOWER (BELIANTHUS ANNUUS). W E Sackston M A Jabbar Miah Phytopathology 53(8) 887 Aug 1963 464.8 P56 Genes, Fuccinia, Bust (sunflower). 6881-68 CBEMICAL CONTROL OF BACTERIAL BLIGBTS OF DRY FIELD BEANS IN MICBIGAN BY FOLIAGE SPRAYS APPLIED BY GROUND AND AIR EQUIP-MENT. A W Saettler H S Potter Plant Dis Rep 51(8)0622-625 Aug 1967 1.9 P69P Aerial plant disease control, Aircraft,

Spray experiments for the chemical control of the halo and common bacterial blights of dry beans were conducted on var-ious commercial colored bean and white navy (pea) bean fields in Michigan during the 1966 growing season. six dif-ferent copper compounds applied by both air and ground equipment were equally efficacious in controlling disease. spraying with copper compounds had a beneficial effect on the yield of Dark Red Kidney and Light Red Kidney beans, but not of Sanilac navy beans. the result of 2 years of study suggest that spraying beans for blight control may be an effective, immediate means of reducing bean losses ac-companying blight infection. 6882-68 SPORANGIAL GERMINATION OF SCLEROSPORA GRAMINICOLA AND INOCULATION OF PENNISETUM GLAUCUM. R M Safeeulla C G Shaw Phytopathology 53 (10) 1142 Oct 1963 464.8 P56 Durra, Pearlmillet, Sclerospora, Spore germination. 6883-68 OOSPORE CHARACTERS IN THE CLASSIFICATION OF SCLEROPBTBORA AND SCLEROSPORE CHARACTERS IN TH AND SCLEROSPORA SPECIES. K M Safeeulla C G Shaw Phytopathology 53(8) 887 Aug 1963 464.8 P56 Oospores, Sclerophthora, Sclerospora. 6884-68 RESISTANCE IN MATTHIOLA INCANA TO THE TURNIP MOSAIC VIRUS. M O San Juan G S Pound Phytopathology 53(11) 1276-1279, BIBL., PL. Nov 1963 464.8 P56 Matthiola, Mosaic (turnips), Plant disease resistance, Turnips, Virus A (cabbage). 6885-68 VARIATION WITHIN AND AMONG SPECIES OF MELOIDOGYNE. J N Sasser Phytopathology 53(8) 887-888 Aug 1963 464.8 P56 Meloidogyne, Plant hosts, Population. 6886-68 HOSTIPARASITE INTERACTION IN BLACKSPOT DISEASE OF ROSES CAUSED BY DIPLOCARPON ROSAE WOLF. P J W Saunders Ann Appl Biol 60 (1), 129-136 REF Aug 1967 442.8 AN72 Amino acids, Black spot (rosa), Diplocarpon rosae, Parasitism, Plant disease resistance, Rosa. 6887-68 EFFECTS OF RAPID COOLING TO SUBZERO TEMPERATURES ON MELOI-DOGYNE HAPLA AND M. INCOGNITA. R M Sayre Phytopathology 53(8) 888 Aug 1963 464.8 P56 Cooling, Meloidogyne, Temperature. 6888-68 EPIDEMIOLOGY OF GLUME BLOTCH OF WBEAT. A L Scharen Phytopathology 53(7) 747 Jul 1963 464.8 P56 Epidemiology, Glume blotch (wheat), Plant disease transmission, Wheat. 6889-68 UPTAKE OF BELMINTBOSPORIUM VICTORIAE TOXIN BY OAT TISSUE. R P Scheffer R B Fringle N P Dast Phytopathology 53(8) 888 Aug 1963 464.8 P56 Helminthosporium, Oats, Tissues, Toxins. 6890-68 TRANSMISSION OF A VIRUS DISEASE OF MUSHBOOMS BY INFECTED SPORES. L C Schisler J W Sinden E M Sigel Phytopathology 53(8) 888 Aug 1963 464.8 P56 Dieback (mushrooms), Mushrooms, Plant disease transmission, Virus diseases (plants).

Chemical control (plant diseases), Copper compounds, Halo blight (beans), Helicopters, Spraying equipment, Thiocarbamates.

Michigan State University Cooperative Extension Service, East Lansing, cooperating. Spray experiments for the chemical control of the halo and

6901-68

20 6891-68 6891-68 COMMON ANTIGENS IN XANTHOMONAS MALVACEARUM AND GOSSYPIUM HIRSUTUM AND THEIR POSSIBLE RELATIONSHIP TO HOST SPECIFICITY AND EISFASF RESISTANCE. W C Schnathorst T E DeVay Phytogathclogy 53 (10) 1142 Oct 1963 464.8 P56 Antigens, Cotton, Flant disease resistance, Xanthomonas. 6892-68 THEORETICAL RELATIONSHIPS FITHERN INOCULUM POTENTIAL AND DISFASE SEVERITY BASED ON A STUDY OF THE VARIATION IN VIRU-LENCE AMONG ISOLATES OF VERTICILLIUM ALBO-ATRUM. W C Schnathorst Phytopathology 53(8) 888 Aug 1963 464.8 F56 Innunization, Verticillium. 6893-68 FACTORS AFFECTING RESISTANCE OF WHEAT TO SCAB CAUSED BY GHIBBERILA ZIAE. H W Schroeder J J Christensen Phytorathology 53(7) 831-838, BIBL. 838, TABS., PL. Jul 1963 464.8 P56 Ghibberella, Flant disease resistance, Scab (wheat), Wheat. 6894-68 THE RELATION BETWEEN STORAGE MOLDS AND DAMAGE IN HIGH-MOIS-TURE RICE IN AFRATED STORAGE. H W Schrceder Phytopathology 53(7) 804-808, IABS Jul 1963 464.8 P56 Food storage, Molds, Rice, Storage diseases, Ventilation. 6895-68 ORANGE STAIN, A STORAGE DISEASE OF RICE CAUSED BY PENICIL-LIOM FUEFFULUM. H W Schroeder Phytogathology 53(7) 843-845, PL. Jul 1963 464-8 256 Color, Crange stain, Penicillium, Pigments (plant), Rice, Storage diseases. 6896-68 REPRODUCTION OF PEATYLENCHUS PENETRANS ON CORN ROOTS CUL-TURED ON VARIOUS NUTRIENT MEDIA. P H Schroeder Phytopathology 53 (8) 888-889 Aug 1963 464.8 P56 Corn, Nutrient solutions (plants), Pratylenchus, Reproduction, Roots. 6897-68 BENTONITE PLOCCULATION & RAPID, SENSITIVE SEROLOGICAL TEST POR THE DETECTION OF PLANT VIRUS ANTIGENS. H & Scott J Bozicevich M M Vincent Phytopathology 53(8) 889 Aug 1963 464.8 P56 Antigens, Bentonite, Flocculation, Serological tests, Viruses. 6898-68 NEW RACE OF PLASMODIOPHORA BRASSICAE AFFECTING BADGER A NEW MACE OF FLEGORISTIC SHIPPER CAFEAGE. W L Seaman J L Walker L H Larson Phytopathology 53(12) 1426-1429, BIBL., TABS., PL. Dec 1963 464.8 P56 Dec 1963 464.8 P56 Cabbage, Fungus diseases (plants), Plasmodiophora. 6899-68 EFFECTS OF ULTRAVIOLET PREINOCULATION TREATMENT OF LEAVES ON SUBSEQUENT INFECTION BY TOBACCO MOSAIC VIRUS AND TMV. RIBONUCIFIC ACID. T Semal S G Wildman T H Phytopathology 53(10) 1142 Oct 1963 464-8 P56 Leaves, Mosaic (tobacco), Ribonucleic acid, Tobacco, Ultraviolet rays. 6900-68 INHIBITION OF INDOLEACETIC ACID OXIDASE IN TOBACCO PLANTS INFECTED BY PSEUDOMONAS SOLANACHARUM. Sequeira Phytopathology 53(8) 889 Aug 1963 464.8 p56 Indoleacetic acid, Pseudomonas, Tobacco.

Phytopathology 53(10) 1142 Oct 1963 464.8 P56 Electron microscopy, Mosaic (tobacco), Tobacco, Tomatoes. 6902-68 STUDIES ON THE AGGREGATION OF TOBACCO MOSAIC VIRUS IN THE GROUND CYTOPLASM AND CHLOROPLASTS OF TOMATO. T A Shalla Phytopathology 53(10) 1142 Oct 1963 464.8 P56 Chloroplasts, Cytoplasm, Mosaic (tobacco), Tomatoes. 6903-68 EFFECTS OF VARIOUS DIURNAL TEMPERATURE PROFILES ON HOST-PARASITE REACTION OF WHEAT VARIETIES AND PUCCINIA STRIIFORMIS. E L Sharp Phytopathology 53(8) 889 Aug 1963 464.8 P56 Diurnal rhythm, Host plants, Parasitism, Puccinia, Temperature, Wheat. 6904-68 OVERWINTERING OF STRIPE RUST IN WINTER WHEAT IN MONTANA. E L Sharp E B Hehn Phytopathology 53(10) 1239-1240, BIBL. Oct 1963 464.8 P56 Hibernation, Montana, Puccinia, Stripe rust (wheat), Wheat. 6905 - 68IDENTIFICATION OF THREE PHYSIOLOGIC RACES OF RHIZOCTONIA SOLANI ISOLATED FROM SEEDLING COTTON. M N Shatla Phytopathology 53(8) 889 Aug 1963 464.8 P56 Cotton, Rhizoctonia, Seedlings. 6906-68 COURCE RELATIONSHIP BETWEEN BEAN POD MOTTLE VIRUS AND COWPEA MOSAIC VIRUSES FROM ARKANSAS AND TRINIDAD. R J Shepherd Phytopathology 53(7) 865-866, PL. Jul 1963 464.8 P56 Arkansas, Ceratoma, Cowpeas, Mosaic (cowpeas), Mottle (bean pod), Trinidad. 6907-68 TOBACCO MOSAIC VIEUS ACTIVITY AND GROWTH OF INOCULATED TOBACCO SECONDARY SINGLE-CELL CLONES. R C Sievert A C Hildebrandt A J Riker Phytopathology 53(8) 889 Aug. 1963 464.8 P56 Clones, Mosaic (tobacco), Tobacco. 6908-68 A METHOD OF USING MYCELIAL, MONOSPORIDIAL ISOLATES OF TILLETIA CONTROVERSA IN PEDIGREED HYBRID CROSSES. M J Silvernagel Phytopathology 53(10) 1235-1236, BIBL. Oct 1963 464.8 P56 Breeding, Stinking smut (wheat), Tilletia, Wheat. 6909-68 THE EFFECT OF GROWTH SUBSTANCES ON VERTICILLIUM WILT OF THE EFFECT OF GROWTH SUBSTANCES ON VERTICILLIES WILT TOMATO FLANTS. A K Sinha R K S Wood Ann Appl Biol 60 (1), 117-128 REF Aug 1967 442.8 AN72 Chemical control (plant diseases), Plant regulators, Tomatoes, Verticillium albo-atrum, Wilt (tomatoes). 6910-68 EFFECT OF AGE OF VECTOR AND OF ABDOMEN PUNCTURES ON VIRUS TRANSMISSION. R C Sinha Phytopathology 53(10) 1170-1173, BIBL. 1172-1173, TABS. Oct 1963 464-8 P56 Abdomen, Insect vectors, Plant disease transmission, Virus diseases (plants), Yellow dwarf (potatoes). 6911-68 PATHOGENICITY OF PHACIDIUM ABIETIS. E Smerlis Plant Dis Rep 51 (8)0 678-679 Aug 1967 1.9 P69P

THE NATURE OF STAIN UPTAKE IN ULTRATHIN SECTIONS OF TOBACCO

MOSAIC VIRUS. T A Shalla T W Carroll G A DeZoeten

Fungus diseases (plants), Phacidium abietis, Picea, Pinus,

20 6927-68

Snow blight (Coniferae), Thuja. 6912-68 HYDROTHERMAL AND HYGROTHERMAL INACTIVATION OF MONILINIA FRUCTICCLA AND RHIZOPUS STOLCNIFER SPORES. W L Smith Jr # D Fassett W L Smith Jr & D rassett Phytopathology 53 (7) 747 Jul 1963 464.8 P56 Beat, Hct water treatment (plants), Humidity, Monilinia, Flant disease control, Rhizopus. 6913-68 CONTROL OF THE CHARCOAL ROOT DISEASE OF WHITE FIR BY FALL SOII FUMIGATICN. R S Smith S I Krugman Plant Dis Kep 51 (8)0 671-674 Aug 1967 1.9 P69P Abies concolor, Charcoal root (Abies concolor), Charcoal root (Pinus ponierosa), Fungus diseases (plants), Macrophomina phaseoli, Charton front (Finals policies), fundus diseases (Finals), Macrophomina phaseoli, Methyl and propargyl bromides plus trichloronitromethane, Methyl hromide plus trichloronitromethane, Pinus ponderosa, Plant disease control, Soil fumigation. A fall application of two soil fumigations a fease on trol, Soil fumigates was tested as a means of reducing mortality of white fir and ponderosa pine nursery seedlings from the charcoal root disease and as a means of producing disease-free stock. fumigation treatments lowered fir seedling mortality by about 50 percent and re-duced the proportion of seedlings of both species with in-fected roots from 100 percent in the untreated beds to 25 percent in the better of the two treatments. the mean number of infections per seedling sample also was reduced from 8.1 to 0.3 in the fir and from 3.9 to 0.2 in the pine root tips, lateral roots, and tap roots differed in their susceptibility to infection. it appears that a fall soil treatment with these fumigants will control the charcoal root disease and will produce disease-free stock. 6914-68 BIPHENVI-RESISTANT CITRUS GREEN MOLD REPORTED IN FLORIDA. J J Smoot J R Winston Plant Dis Kep 51 (8)0 700 Aug 1967 1.9 F69P Biphenyl, Citrus, Fungicide resistant fungi, Fungus diseases (plants), Green mold (citrus), Penicillium digitatum, Storage diseases. 6915-68 EFFECTS OF SOME CYTORININS CN TOBACCO AND THEIR RELATION TO TOBACCO MOSAIC VIRUS INFECTION. L C Scans Diss Abstr Sect B 27 (12,PT.1), 4210B-4211B Jun 1967 25055.049D53 Sun 1967 2505.049055 Benzimidazole, Benzyl-9-(tetrahydroryran-2-yl)-adenine, N-, Kinetin, Kinins, Mosaic (tobacco), Plant physiology, Tobacco. 6916-68 STEMPHYLIUM LEAFSFOT OF ECBEVERIA, KALANCHOE, AND SEDUM. Phytopathclogy 53 (12) 1443-1446, BIBL., PL. Dec 1963 464.8 P56 Alfalfa, Echeveria, Kalanchoe, Leafspot (echeveria), Leafspot (kalanchoe), Leafspot (sedum), Sedum, Stemphylium, Tcmatoes. 6917-68 IMPROVING EMERGENCE OF PELLETED VEGETABLE SEEDS WITH POROUS COATINGS. C A Sooter Diss Abstr Sect B 27 (12,PT.1), 4366B-4367B Jun 1967 Z5055.U49D53 Seed germination, Seed treatment, Vegetables. 6918-68 THREE DISEASES OF GUAR. G Sowell Jr Phytopathology 53(8) 890 Aug 1963 464.8 P56 Guar, Xanthomonas. 6919 PRODUCTION OF PECTINOLYTIC AND CELLULOLYTIC ENZYMES BY RHIZOFUS STOLCNIFER. D H Spalding Phytogathology 53(8) 929-931, BIBL. 930-931 Aug 1963 464.8 P56 Cellulase, Enzymes, Rhizopus.

6920-68 FACTORS AFFECTING THE PATHOGENESIS OF PYTHIUM SPECIES ON COTTON (GOSSYPIUM BIRSUTUM L) SEEDLINGS. J A Spencer J A Spencer Diss Abstr Sect B 27 (12,PT.1), 4211B Jun 1967 25055.049D53 Calcium, Cotton, Plant diseases, Plant nutrition, Plant senescence, Pythium, Root excretions. 6921-68 NEW RECORD OF THE OCCURRENCE OF MANGO SHOOT-GALL DISFASE IN THE UPPER INDO-GANGETIC PLAIN. G P Srivastava Indian J Entomol 28 (3), 411 Sep 1966 420 IN23 Apsylla cistellata, Mangoes, Plant diseases. 6922-68 RELATION OF AGBOFYRON REFENS MOSAIC AND WBEAT STREAK MOSAIC VIRUS. Staples M Brakke Phytopathology 53(8) 969-972, BIBL. Aug 1963 464.8 P56 Agropyron, Mosaic (agropyron repens), Streak mosaic (wheat), Wheat. 6923-68 CBANGES IN MULTIPLE MOLECULAR ENZYMES IN RUSTED BEAN LEAVES. B C Staples M A Stahmann Phytopathology 53(8) 890 Aug 1963 464.8 P56 Beans, Enzymes, Leaves, Molecules, Bust (beans). 6924-68 STUDIES ON THE HOST RANGE AND PATHOGENICITY OF ERYSIPHE POLYGONI. J E Stavely E W Hason Phytopathology 53 (8) 890 Aug 1963 464.8 P56 Erysiphe, Host range, Pathogenicity. 925-68 IDENTIFICATION OF THE VIBUSES AFFECTING COMMERCIAL VARITIES OF PEFPER (CAPSICUM ANNUM) IN NEW JERSEY. I L Steepy G D Lewis E B Varney Plant Dis Rep 51 (8)0 709-711 REF Aug 1967 1.9 P69P Etch (redpeppers), Host indexing (plants), Mosaic (redpeppers), Redpeppers (vegetable), Serological tests, Virus diseases (plants), Virus X (redpeppers), Virus Y (redpeppers). Differential hosts and serological techniques were used to identify viruses isolated in the summer and fall of 1965 from commercial plants of pepper (Capsicum annum) in New Jersey, tobacco etch virus was found to be the principal cause of virus diseases. tobacco mosaic virus, potatc virus X, and cucumber mosaic virus were isolated from a small number of plantings, while potato virus Y was not isolated during the study. 6925-68 during the study. 6926-68 A MOSAIC VIRUS TRANSMITTED BY BEETLES AND A GRASSHOPPER. W N Stoner Phytopathology 53(8) 890 Aug 1963 464.8 P56 Acalymma, Diabrotica, Melanoplus, Plant disease transmission. 6927-68 A VIRUS INFECTING MAIZE IN SOUTH DAKOTA. W N Stoner R D Gustin M L Macomb Plant Dis Rep 51 (8)0 705-709 Aug 1967 1.9 P69P Aug 1967 1.9 P69P Corn, Host indexing (plants), Plant disease resistance, Plant disease transmission, Virus diseases (plants). A nonpersistent virus was found infecting corn (maize) in 1966 in South Dakota. preliminary studies indicate that the following monocotyledonous plants are susceptible. Echinochloa crusgalli, Hordeum vulgare, Setaria lute-scens, Triticum aestivum, Zea mays, cvs. Golden Bantam, Seneca Chief, Stowell s Evergreen, and Golden Giant. seven dicotyledonous plant species were inoculated, but only Datura inermis proved susceptible. the symptom syndrome in Golden Bantam sweetcorn develops as local lesions on the inoculated leaves and progresses to a systematic infection that results in wilting, tip necrosis of the whorl leaves, and death within 10 to 14 days. 20 6928-68 6928-68 TRANSMISSION OF THE STUBBORN AND PSOROSIS & VIRUSES OF CITRUS TO AN HEREACECUS HOST. L W Storm R B Streets Phytopathology 53(10) 1142 Oct 1963 464.8 P56 Citrus, Cucunhers, Plant disease transmission, Psorosis (citrus), Virus A (citrus). 6929-68 A CAGE FOR FEEDING INSECTS THROUGH MEMBRANES. R F Stouffer Phytopathclogy 53(8) 890 Aug 1963 464.8 P56 Feeding, Insect cages, Insect vectors. 6930-68 STUDIES ON ASCCSPORE FRODUCTION BY MYCOSPHARRELLA MUSICOLA IN HCNDURAS. R H Stover Phytopathclogy 53(8) 890-891 Aug 1963 464.8 P56 Ascospore, Bananas, Honduras, Mycosphaerella. 6931-68 THE RCLE OF THE COAT PROTEIN IN THE INACTIVATION OF TOBACCO MOSAIC VIRUS EY ULTRAVIOLET LIGHT. D G Streeter Diss Abstr Sect H 27 (12,PT.1), 4287H-4288B Jun 1967 25055.049D53 Mosaic (tobacco), Froteins, Oltraviolet rays, Virus diseases (plants), Viruses. 6932-68 SIMILARITIES HETWEEN WOUND-TUMOR VIRUS AND THE HUMAN-PATHOGENIC REOVIRUSES. G Streissle K Maramorosch Phytopathclogy 53(8) 891 Aug 1963 464.8 P56 Reoviruses, Wound-tumor. 6933-68 AN UNIDENTIFIED FUNGUS PARASITIC ON THE SEED-CORN MAGGOT. P E Strong K Wells J W Apple J Econ Entomol 53(3) 478-479, BIBL., PL. Jun 1960 421 J822 Hylemya, Parasitism. 6934-68 PERTILIZER AND SOIL-FUMIGATION EFFECTS ON PYTHIUM SPLENDENS IN SOUTH FLORIDA. T E Summers H W Burdine F D Wilson Phytopathology 53(8) 891 Aug 1963 464.8 P56 Fertilizers, Florida, Jute, Kenaf, Pythium, Soil fumigation. 6935-68 INFECTION OF ALFALFA BY LEPTOSPHAERULINA BRIOSIANA. L Sundheim Phytograthology 53(8) 891 Aug 1963 464.8 P56 Alfalfa, Chlorosis (alfalfa), Leptosphaerulina. 6936-68 SCREENING SORGHUM VARIETIES FOR RESISTANCE TO THE COVERED KERNEL SMUT FUNGUS IN IRAQ. ALEMBL SAUT FUNCUS IN IMAG. S A Tamini I A AL-Sohaily Plant Dis Rep 51 (8) 0 690-692 Aug 1967 1.9 P69P Covered smut (sorghum), Crop varieties, Fungus diseases (plants), Plant disease resistance, Sorghum, Sphacelotheca sorghi. SphaceLotheca sorghl. Twenty-one sorghum varieties were evaluated for reaction to the covered kernel smut fungus (SphaceLotheca sorghl) at the College of Agriculture in Iraq, the local variety was included as a check, the results indicated that the reaction of these varieties was distinctly different, the variety Sour Fetorita was immune while Coor bad white variety Spur Feterita was immune, while Coes had White Norgaum were extremely susceptihle. three varieties, Red-lan, Beliance and White Yolo, exhibited a high level of resistance. 6937-68 937-68 TWO UNRELATED VIRUSES WHICH CAUSE WOODINESS DISEASE OF FASSICN FRUIT (PASSIFLORA EDULIS). R H Taylor K & Kimhle Phytopathology 53(10) 1143 Oct 1963 464.8 E56 Granadilla, Mosaic (cucumbers), Woodiness (granadilla).

6938-68 THE INACTIVATION OF VERTICILLIUM ALBO-ATRUM IN APRICOT TREES. T B Taylor Phytopathology 53(10) 1143 Oct 1963 464.8 P56 Apricots, Verticillium. 6939-68 A METHOD FOR EVALUATING SOIL FUNGICIDES. P L Thayer C Weblherg Phytopathology 53(8) 891 Aug 1963 464.8 P56 Fungicides, Pythium, Rhizoctonia, Soils. 6940-68 SEDIMENTATION PROPERTIES OF TWC STONE FRUIT VIRUSES. S A Tolin Phytopathology 53(8) 891 Aug 1963 464.8 P56 Dwarf disease (prunus), Fruit, Mosaic (tohacco), Sedimentation. 6941-68 EFFECT OF FUNGICIDES ON THE RESPIRATION OF THREE SPECIES OF SOIL FUNGI. D C Torgeson Phytopathology 53(8) 891 Aug 1963 464.8 P56 Fungicides, Fusarium, Phytophthora, Respiration, Sclerotium, Soil fungi. 6942-68 942-68 STUDIES ON THE PASSAGE OF PRUNUS RINGSPOT VIRUS COMPLEX THROUGH PLUM SEED. J A Traylor H E Williams J H Weinberger A K Wagnon Phytopathology 53(10) 1143 Oct 1963 464.8 P56 Plums, Prunes, Ring spot (prunus), Seed-horne plant diseases, Seeds. 6943-68 EFFECTS OF SODIUM FLUORIDE ON GROWTH OF SOME PATHOGENIC FUNGI. M Treshow Phytopathology 53(8) 891-892 Aug 1963 464.8 P56 Alternaria, Hotrytis, Colletotrichum, Fungi, Growth factors, Sodium fluoride. 6944-68 CULTURE OF THE DWARF BUNT FUNGUS. E J Trione Phytopathology 53(8) 892 Aug 1963 464.8 P56 Culture media, Dwarf hunt (wheat), Wheat. 6945-68 FUSARIUM YELLOWS AND RHIZOME ROT OF COMMON GINGER. E E Trujillo Phytopathology 53(11) 1370-1371, BIBL., PL. Nov 1963 464.8 P56 Fusarium, Ginger, Rhizome, Rot (ginger). 6946-68 GROWTH INHIBITION OF PHYTOPHTHORA CINNAMOMI BY SOIL DIFFUSATES ON AGAR MEDIUM. P H Tsao J L Hricker Phytopathology 53(8) 892 Aug 1963 464.8 P56 Agar, Growth factors, Soil aeration. 6947-68 INFLUENCE OF ROOT EXUDATES OF CACAO AND OTHER PLANTS ON SPORE DEVELOPMENT OF PHYTOPHTHORA PALMIVORA. P D Turner Pbytopathology 53(11) 1337-1339, BIBL. Nov 1963 464.8 P56 Cacao, Chemotropism, Exudates, Phytophthora, Roots. 6948-68 RELATION OF CERCOSPORA INFECTION TO OIL APPLICATION ON THE DORSAL OR VENTRAL SIDE OF TUNG LEAVES. T Van Der Zwet Phytopathology 53(8) 892 Aug 1963 464.8 P56 Cercospora, Leaves, Oils, Tung oil tree.

PAGE 26

1

6949-68 HISTOCHEMICAL STUDIES ON THE DEHYDROGENASES OF POTATO AFFECTED BY LATE ELIGHT. M A Viswanathan R L Pelletier Phytofathology 53(8) 892-893 Aug 1963 464.8 P56 Dehydrogenases, Late blight (potatoes), Potatoes. 6950-68 ROUGH FRUIT OF SWEET CHERRY. B N Wadley Phytopathology 53(10) 1144 Oct 1963 464.8 P56 Cherries, Flant disease transmission, Virus diseases (plants). 6951**-**68 CONTROL OF WESTERN X-DISEASE VIRUS IN UTAH ORCHARDS. B N Wadley Phytopathology 53(10) 1143-1144 Oct 1963 464.8 P56 Cherries, Feaches, Utah, Virus X (cherries), Virus X (peaches). 6952-68 952-68 DODDER TRANSMISSION OF CITRANGE STUNT VIRUS, A VIRUS ASSO-CIATED WITH TATTER LEAF OF CITRUS. L G Weathers M K Harjung Plant Dis Rep 51 (8) 0 629 Aug 1967 1.9 F69P Cowpeas, Cuscuta subinclusa, Plant disease transmission, Stunt (citrance) Stunt (course) Tattoraloaf (citrus) Stunt (citrange), Stunt (cowpeas), Tatter-leaf (citrus) Virus diseases (plants). 6953-68 STREFIONYCIN RESISTANCE -- A TECHNIQUE FOR THE DIRECT ASSAY OF POTATO SCAE ORGANISMS FRCM SCIL. D F Weber J D Menzies J W Paden Phytopathology 53(11) 1258-1260, BIBL., TABS. Nov 1963 464.8 P56 Assay, Potatoes, Scab (potatoes), Soils, Streptomyces, Streptomycin. 6954-68 INHIBITION OF FUNGI BY CULTURE MEDIA PREVIOUSLY EXPOSED TO LIGHT. A R Weinhold F F Hendrix Jr Phytopathclogy 53(11) 1280-1284, BIBL. 1283-1284, PL. Nov 1963 464.8 P56 Alternaria, Armillaria, Catalase, Culture media, Fusarium, Hydrogen peroxide, Light, Phytophthcra, Rhizoctonia, Temperature, Verticillium. 6955**-**68 AN ELECTRON MICROSCOPE STUDY OF TMV LESIONS IN NICOTIANA AN ELECTRON MICROSCOPE ST GLUTINOSA. W Weintraub H W J Ragetli Phytopathology 53(8) 893 Aug 1963 464.8 P56 Electron microscopy, Mosaic (tobacco), Tobacco. 6956-68 ANATOMICAL ASPECTS OF RESISTANCE IN SWEETPOTATO TO FUSARIUM WILT. J M Wells Phytopathology 53(7) 747-748 Jul 1963 464.8 P56 Crop varieties, Fusarium, Plant anatomy, Plant disease resistance, Plant histology, Sweetpotatoes, Wilt (sweetpotatoes). 6957-68 INFLUENCE OF LIGHT ON GROWTH OF ASPERGILLUS RESTRICTUS IN INFLUENCE OF LIGHT ON GROWTH OF ASPERGILLUS RESA AGAB CUITURE. R E Welty C M Christensen Phytopathclogy 53(8) 893 Aug 1963 464.8 P56 Agar, Aspergillus, Corn, Growth factors, Light. 6958-68 GREEN-SEEDED DOWNY MILDEW-RESISTANT FORDHOOK LIMA BEANS. R E Wester Phytopathclogy 53(7) 748 Jul 1963 464.8 P56 Downy mildew (lima beans), Lima beans, Plant disease resistance, Seeds.

6959-68 AN IMPROVED TECHNIQUE FOR INDUCING DIAGNOSTIC SYMPTOMS IN TOMATO INFECTED BY POTATO SPINDLE TUBER VIRUS. E D Whitney L C Peterson Phytopathology 53(8) 893 Aug 1963 464.8 P56 Diagnosis, Spindle tuber (potatoes), Tomatoes. 6960-68 RELATION OF SEED-BORNE FUNGI TO BOLL ROTS OF COTTON. A B Wiles Phytopathology 53(8) 984, BIBL. Aug 1963 464.8 P56 Alternaria, Aspergillus, Bcll rot (cotton), Cotton, Diplodia, Fusarium, Rhizopus, Seed-borne plant diseases. 6961-68 CONTROL OF PYTHIUM DAMPING-OFF OF MELONS BY SIMULTANEOUS SEEDING AND SOIL FUMIGATION WITH CHLOROPICBIN. S Wilhelm S Wilhelm Phytopathology 53(10) 1144 Oct 1963 464.8 P56 Chloropicrin, Damping-off (melons), Melons, Pythium, Seed planting, Soil fumigation. 6962-68 VENTURIA INAEQUALIS (CKE.) WINT. XVI. AMINO ACIDS IN RELATION TO PATHOGENICITY OF TWO WILD-TYPE LINES TO TWO ALLATION TO PATHOGENICITY OF TWO WILD-TYPE LINES T APPLE VARIETIES. B J Williams D M Boone Phytopathology 53(8) 979-983, BIBL. 982-983, TABS. Aug 1963 464.8 P56 Auglos Vactor Apples, Venturia. 6963-68 THE INFECTIOUS NATURE OF POLLEN FROM CERTAIN VIRUS-INFECTED STONE FRUIT TREES. H E Williams J A Traylor H K Wagnon Phytopathology 53(10) 1144 Oct 1963 464.8 P56 Fruit, Plant disease transmission, Pollen, Virus diseases (plants). 6964-68 EFFECT OF CROP ROTATION ON YIELDS, STALK ROT, AND ROOT ROT OF CORN. L E Williams A F Schmitthenner Phytopathology 53(12) 1412-1414, BIBL., TABS. Dec 1963 464.8 P56 Corn, Crop yields, Root rot (corn), Stalk rot (corn). 6965-68 NATURE AND INHERITANCE OF RESISTANCE TO ALEUGO CANDIDA IN NATURE AND - ----RADISH. P H Williams G S Pound Phytopathology 53(10) 1150-1154, BIBL., TABS., PL. Oct 1963 464.8 P56 Albugo, Heredity, Plant disease resistance, Radishes. 6966-68 WILTING OF PERSIMMON CAUSED BY CEPHALOSPORIUM DIOSPYRI. C L Wilson Phytopathology 53(12) 1402-1406, BIBL., PL. Dec 1963 464.8 P56 Cephalosporium, Persimmons. 6967-68 PATHOLOGICAL HISTOLOGY OF TUMORS INDUCED IN OLEANDER BY PSEUDOMONAS SAVASTANOI. E E Wilson A R Magie Phytopathology 53(8) 893-894 Aug 1963 464.8 P56 Histology, Nerium, Plant galls, Pseudomonas. 6968-68 PRODUCTION OF PECTINOLYTIC AND CELLULOLYTIC ENZYMES BY CUCURBIT ANTHRACNOSE FUNGI. N N Winstead C L EcCombs Phytopathology 53(8) 961-964, EIBL. Aug 1963 464.8 P56 Anthracnose (cucurbita), Cellulose, Cucumbers, Enzymes, Glomerella. 6969-68 PROGRESSIVE DISTRIBUTION OF SOUTHERN BEAN MOSAIC VIRUS ANTIGEN IN BEAN LEAVES DETERMINED WITH A FLUORESCENT ANTI-BODY STAIN. D F Worley I E Schneider Phytopathology 53(11) 1255-1257, BIBL., PL. Nov 1963 464.8 P56

PAGE 27

20 6969-68

20 6970-68 Antibodies, Antigens, Beans, Fluorescent antibody technic, Leaves, Mosaic (beans). 6970-68 970-68 HEAT ACTIVATION CF DIFFERENT STRAINS OF TOBACCO MOSAIC VIRUS INFECTION ON VARIETIES OF BEANS (PHASEOLUS VULGARIS). J H Wu S G Wildman Phytopathology 53 (10) 1144 Oct 1963 464.8 P56 Beans, Heat, Mosaic (tobacco), Tobacco. 6971-68 RELEASE OF INHIBITED TOBACCO MOSAIC VIRUS (TMV) INFECTION BY ULTRAVIOLET IRFADATION AS AFFECTED BY TIME AND TEMPERATURE AFTER INOCULATION. J-h Wu S G Wildman Phytopathology 53(8) 894 Aug 1963 464.8 P56 Mosaic (tobacco), Temperature, Time, Tobacco, Ultraviolet rays. 6972-68 PHOTOSYNTHETIC FEOSPHORYLATICN BY CHLOROPLASTS ISOLATED FROM RUST-INFECTED OATS. K Wynn Jr Phytopathology 53(11) 1376-1377, BIBL. Nov 1963 464.8 P56 Chloroplasts, Oats, Photosynthesis, Rust (oats). 6973-68 PURTFICATION OF TULIF BREAKING VIRUS. A Yamaguchi C Matsui Phytopathology 53(11) 1374-1375, BIBL., PL. Nov 1963 464.8 P56 Mosaic (tulipa), Julipa. 6974-68 HEAT THERAPY OF BEAN RUST. C E Yarwood Phytopathology 53(11) 1313-1316, BIBL. Nov 1963 464.8 P56 Beans, Heat, Fust (beans), Uromyces. 6975-68 PREDISPOSITION TO POWDERY MILDEW. C E Yarwood Phytograthclogy 53(10) 1144-1145 Oct 1963 464.8 P56 Beans, Cowpeas, Cucumbers, Fowdery mildew (cucumbers), Sunflewers. 6976-68 MECHANICAL TRANSMISSION OF A LATENT LEMON VIRUS. C E Yarwood Phytopathology 53(10) 1145 Oct 1963 464.8 P56 Cowpeas, Lemons, Flant disease transmission, Virus diseases (plants). 6977-68 A NEW PEA STREAK VIRUS RELATED TO RED CLOVER VEIN MOSAIC VIRUS (REVMV). . W J Zaumeyer R W Goth R E Ford Phytograthology 53(8) 894 Aug 1963 464.8 P56 Peas, Red clover, Streak (peas), Vein mosaic (red clover). 6978-68 BIOLOGICAL CONTRCL CF PHYTOPHTHCRA ROOT RCT OF AVOCADO WITH ALFALFA MEAL. G A Zentmyer Phytopathology 53(12) 1383-1387, BIBL. 1386-1387, PL. Dec 1963 464.8 p56 Alfalfa, Avocados, Biological control (diseases), Meal, Phytophthora, Root rot (avocados). 6979-68 SAPROPHYTISM AND FERSISTENCE IN SOIL BY PHYTOPHTHORA CINNAMOMI. G A Zentmyer S M Mircetich Phytopathology 53(10) 1145 Oct 1963 464.8 P56 Phytophthora, Saprophytes, Soils. 6980-68 TRANSMISSION OF BEAN MOSAIC VIRUS IN RELATION TO LENGTH OF PROBES BY APHIDS ALLOWED EITHER ONE OR SEVERAL ACQUISITION PROBES. N Zettler Phytopathology 53(8) 894 PAGE 28

Aug 1963 464.8 P56 Aphididae, Beans, Mosaic (beans), Plant disease transmission. 6981-68 EFFECT OF HEAT TREATMENT OF SUGARCANE FOR CONTROL OF RATOON STUNTING DISEASE (RSD) ON SPREAD OF MOSAIC. N Zummo Phytopathology 53(8) 894 Aug 1963 464.8 P56 Heat, Mosaic (sugarcane), Ratoon stunt (sugarcane), Sugarcane.

# Arthropods

6982-68 THE BEET ARMYWORK, SFODOPTERA EXIGUA, AN ECONOMIC PEST OF CITRUS IN CALIFORNIA. E L Atkins Jr J Econ Entomol 53(4) 616-619, BIBL., PL. Aug 1960 421 J822 Beets, Citrus, DDT , Parathion, Spodoptera. 6983-68 SOME EFFECTS OF AGE, PREIMAGINAL HABITAT, AND ADULT FOOD ON SUSCEPTIBILITY OF BOLL WEEVIL TO CERTAIN INSECTICIDES. M H Bass J W Rawson J Econ Entomol 53 (4) 534-536, BIBL. Aug 1960 421 J822 Anthonomus grandis, Azinphosmethyl, Benzene hexachloride, Cotton, Food, Habitats, Insecticide resistant insects, Life cycle, Toxaphene. 6984-68 A LABORATORY REARING METHOD FOR LYGUS HESPERUS KNIGHT. G W Beards T F Leigh J Econ Entomol 53(2) 327-328, BIBL. Apr 1960 421 J822 Insect rearing, Lyqus. 6985-68 SUSCEPTIBILITY OF LIFE STAGES OF THE MEXICAN FRUIT FLY TO FUMIGATION WITH ETHYLENE CHLOROBROMIDE. C A Benschoter J Econ Entomol 53(2) 323-325, BIBL., PL. Apr 1960 421 J822 Anastrepha, Bromochloroethane, Citrus, Fumigation, Mangoes. 6986-68 THE EFFECTIVENESS OF CHLORINATED HYDROCARBON INSECTICIDE MIXTURES FOR CONTROL OF RESISTANT AND SUSCEPTIBLE BOLL WEEVILS. J R Brazzel D A Lindquist J Econ Entomol 53(4) 551-554, BIBL., TABS. Aug 1960 421 J822 Anthonomus grandis, Chlorine, Cotton, DDT , Hydrocarbons, Toxaphene. 6987-68 INSECTICIDAL CONTROL OF THE HESSIAN FLY. H E Brown J Econ Entomol 53(4) 501-503, BIBL., TABS. Aug 1960 421 3822 Am. cyanamid 12008, Cyanamide, Disulfoton, Insecticides, 0,0-diethyl 5-(isopropylthio)methyl fhosphorodithioate, Phorate, Phytophaga, Wheat. 6988-68 LABORATORY STUDIES ON THE TOXICITY OF VARIOUS INSECTICIDES TO DIFFERENT STAGES OF THE ORIENTAL PRUIT MOTH. M H Brunson J Econ Entomol 53(3) 468-471, BIBL., TABS. Jun 1960 421 JS22 Azinphosmethyl, Carbaryl, EPN, Grapholitha, Insecticides, Methyl parathion, O- (3-chloro-4-nitro-phenyl)0,0-dimethyl phosphorothioate), Parathion, Peaches, Toxicology. 6989-68 INSECTS ASSOCIATED WITH WOUNDS ON TREES THAT DEVELOP OAK WILT. W D Buchanan

20 7009-68

J Econ Entomol 53(4) 578-581, BIBL., PL. Aug 1960 421 J822 Fungi, Inoculum, Insect vectors, Wilt (guercus). 6990-68 EUROPEAN CORN BORER CONTROL IN FEPPERS. P P Burbutis R VanDenburgh D F Bray L P Ditman J Econ Entemol 53(4) 590-592, BIBL. Aug 1960 421 J822 Carbaryl, Corn, DDT , Pepper (spice), Pyrausta. 6991-68 INFLUENCE OF TIMING AND INSECT BICLOGY ON THE EFFECTIVENESS OF INSECTICIDES AFFLIED FOR CONTROL OF EUROPEAN FINE SHOOT J W Butcher O L Haynes J Econ Entomol 53(3) 349-354, BIBL. Jun 1960 421 J822 Azinphosmethyl, Carbaryl, Dimethoate, DDT , Insect biology, Insecticides, Mevinphos, Pinus, Rhyacionia. 6992-68 BIONOMICS AND CONTROL OF CERTAIN PLUSIINAE AND STUDIES OF AN ASSOCIATED NUCLEAR POLYHEDROSIS VIRUS. T D Canerday Diss Abstr Sect B 27 (12,PT.1), 4435B Jun 1967 25055.049D53 Pield crops, Insect biology, Insect rearing, Pieris rapae, Plusiinae, Polyhedroses, Pseudoplusia includens, Rachiplusia ou, Trichoplusia ni, Vegetables. 6993-68 PHENOCOCCUS SOLANE EERRIS, A TOXICOGENIC INSECT. W Carter J Econ Entomol 53(2) 322-323, PL. Apr 1960 421 J822 Phenococcus, Fineapples. 6994-68 A STUDY OF MEALYBUG POPULATIONS (DYSMICOCCUS BREVIPES (CKL.)) IN AN ANT-FREE FIELD. W Carter J Econ Entomol 53(2) 296-299, PL. Apr 1960 421 J822 Formicidae, Mealybug wilt, Pineapples, Sampling (statistics). 6995-68 EUROPEAN CORN BORER POPULATIONS IN RELATION TO THE ESTIMATION OF CROF LOSS. H C Chiang F G Holdaway T A Brinoley C R Neiswander J Econ Entomol 53(4) 517-522, BIBL., TABS. Aug 1960 421 J822 Corn, Crop losses, Pyrausta. 6996-68 EVALUATION OF COMMONLY USED INSECTICIDES FOR THE CONTROL OF PEACE CURL APHID, ANURAPBIS HELICBRYSI KALT. A N Chowdhuri Indian J Entomol 28 (3), 405-407 Sep 1966 420 IN23 Anuraphis helichrysi, Chemical control (insects), Insecticides, Peaches. 6997-68 SOIL INJECTION AS A MEANS OF APPLYING SYSTEMIC ACARICIDES TO FRUIT TREES. M L Cleveland J Econ Entomol 53(1) 144-146, TABS. Peb 1960 421 J822 Acaracides, Apple trees, Chipman R-6199, Demeton, Fruit trees, Panonychus, Phorate, Soils, Tetranychus. 6998-68 FIELD CONTROL OF COTTON MITES WITH ARAMITE AERIAL SPRAY IN CALIFCRNIA. J P Corkins N W Hazel J Econ Entomol 53 (2) 203-205, BIBL., TABS. Apr 1960 421 J822 Aerial spraying, Aramite, California, Cotton, Mites, Mobil GFD 1442. 6999-68 GREENEUG CONTROL WITH SYSTEMIC INSECTICIDES AS INFLUENCED BY FERTILIZER APPLICATIONS. N E Daniels J Econ Entomol 53(2) 278-279, BIBL. Apr 1960 421 J822 Cotton, Demeton, Disulfoton.

7000-68 MORTALITY FACTORS FOR THE VETCH BRUCHID, BRUCHUS BRACHIALIS E A Dickason J Econ Entomol 53(4) 555-558, BIBL., TABS. Aug 1960 421 J822 Bruchus, Eggs, Bairy vetch, Larvae, Mortality, Vetch. 7001-68 FIELD TESTING OF INSECTICIDES FOR CONTROL OF THE NANTUCKET PINE MOTH, RHYACIONIA FRUSTRANA, AND THE EUROPEAN PINE SHOOT MOTH, R. BUOLIANA. D E Donley J Econ Entomol 53(3) 365-367, BIBL. Jun 1960 421 J822 Azinphosmethyl, Carbophenothion, Dioxathion, DDT Malathion, Methyl parathion, Pinus, Rhyacionia. 7002-68 WHITE-PINE SHOOT BORER (EUCOSMA GLORIOLA HEINRICH). A T Drooz J Econ Entomol 53(2) 248-251, BIBL., PL. Apr 1960 421 J822 Parasitic insects, Pinus, White-pine shoot borer. 7003-68 EVALUATION OF CHEMICALS FOR CONTROL OF A SPIDER MITE COMFLEX ON CBERRY AND PEACE. F E Ellertson J ECON Entomol 53(4) 522-526, BIBL., TABS. Aug 1960 421 J822 Azinphosmethyl, Carbophenothion, Chemical control (pests), P-chlorophenyl phenyl sulfone, Parathion, Peaches, Sulphenone, Tetradifon, Tetranychus. 7004-68 EVALUATION OF INSECTICIDES FOR CONTROL OF THE FULLER ROSE BEETLE ON CITRUS IN CALIFORNIA. H S Elmer J ECON Entomol 53(1) 164-165, BIBL. Feb 1960 421 J822 Azinphosmethyl, Citrus, Dieldrin, Insecticides, Pantomorus, Residues. 7005-68 THE EFFECT OF PHORATE APPLIED TO SEED ON THE GROWTE, DEVELOPMENT AND INSECTS ATTACKING GRAIN SORGHUM. R T Everly R C Pickett J Econ Entomol 53(1) 154-160, BIBL. 159-160, TABS. Feb 1960 421 J822 Aphididae, Insects, Phorate, Plant growth inhibitors, Seed germination, Seeds, Sorghum, Thiram. 7006-68 THE BEAN LEAF SKELETONIZER, AUTOPLUSIA EGENA, AND ITS CONTROL ON BUSH SNAP BEANS IN THE EVERGLADES. W G Genung J Econ Entomol 53(4) 566-569, BIBL. Aug 1960 421 J822 Aug. 1960 421 0022 Apanteles, Bacillus thuringiensis, Beans, Copidosoma, Dieldrin, Endosulfan, Everglades, Kepone, Leaves, Meteorus, Mevinphos, Octachloro-3a,4,7a-tetrahydro-4,7-methanophthalan,1,3,4,5,, Perthane, SD-4402, Toxaphene, 7007-68 ARTIFICIAL MEDIUM FOR REARING SOME LEPIDOPTEROUS CORN INSECTS. B W George E S Raun D C Peters C Mendoza J Econ Entomol 53(2) 318-319, BIBL. Apr 1960 421 J822 Corn, Culture media, Heliothis zea, Insect breeding, Lepidoptera. 7008-68 THE FATE OF PHORATE IN SOILS. I W Getzin R K Chapman J Econ Entomol 53(1) 47-51, BIBL., TABS. Feb 1960 421 J822 Cabbage, Insects, Peas, Phorate, Potatoes, Soils. 7009-68 PROBLEMS IN THE CONTROL OF MINT INSECTS. G E Gould J Econ Entomol 53(4) 526-531, BIBL., PL. Aug 1960 421 J822 Dieldrin, DDT , Heptachlor, Indiana, Longitarsus, Raphoplusia.

20 7010-68 7010-68 FIELD EVALUATION OF SEVIN AS AN INSECTICIDE FOR PESTS OF VEGETABLES IN NEW JERSEY. P Granett J P Reed J Econ Entomol 53 (3) 388-395, BIBL. 394-395, TABS. 1960 421 J822 Heliothis zea, New jersey, Phyllotreta, Vegetables. 7011-68 CONTROL OF THE WOCLLY APPLE APHID ON ROOTS OF APPLE NURSERY E O Hamstead E Gould J Econ Entomol 53(2) 217-220, BIBL., PL. Apr 1960 421 J822 Aldrin, Arples, Benzine hexachloride, Eriosoma, Lindane, Roots. 7012-68 EFFECT OF RONNEL UPON THE ADULT RICE WEEVIL, SITOPHILUS ORYZA. P K Harein J Econ Entomol 53(3) 372-375, BIBL. 374-375, TABS. Jun 1960 421 J822 Grain, Konnel, Sitophilus, Wheat. 7013-68 HYPERODES HUMILIS, A NEW PEST OF SWEET CORN IN THE EVERGLADES, AND IIS CONTROL. E D Harris Jr J Econ Entomol 53(2) 251-257, BIBL., PL. Apr 1960 421 J822 Azinphosmethyl, DDT , Everglades, Sweetcorn. 7014-68 EXPERIMENTS FOR THE CONTROL OF SAP BEETLES IN SWEET CORN GROWN FCR PROCESSING. F P Harrison J Econ Entomol 53(1) 174-175, BIBL. Feb 1960 421 J822 Carpophilus, Corn, Diazinon, DDT , Malathion, Parathion. 7015-68 THE EFFECTS OF DDT AND MALATHION UPON FOREST SOIL MICROARTHRCPODS. R C Hartenstein J Econ Entomol 53(3) 357-362, BIBL. Jun 1960 421 J822 DDT , Forest soils, Malathion, Microarthropods, Pinus. 7016-68 EFFECIS OF AN AERIAL DDT SPRAY ON AQUATIC INSECTS IN CONNECTICUT. S W Hitchcock J Econ Entomol 53(4) 608-611, BIBL. Aug 1960 421 J822 Aquatic insects, Connecticut, DDT , Spraying, Wildlife. 7017-68 EFFECTIVENESS OF INSECTICIDES AGAINST THE EUROPEAN CORN BORER AND GREEN PEACH APHID CN FEPPERS. R N Hofmaster D P Bray L P Ditman J Econ Entomol 53(4) 624-626, BIBL. Aug 1960 421 J822 Aug. 1960 42, 1982 1982 Aphidiae, Azinphosmethyl, Eacillus thuringiensis, Beans, Carbaryl, Corn, DDT, Phosphamidon, Potatoes, Tomatoes. 7018-68 INFLUENCE OF PLANT AGE ON THE SURVIVAL OF ALFALFA VARIETIES DIFFERING IN RESISTANCE TO THE SPOTTED ALFALFA APHID. W L Howe G'R Pesho J Econ Entomol 53(1) 142-144, BIBL., TABS. Feb 1960 421 J822 Alfalfa, Seedlings, Therioaphis. 7019-68 SPOTTED ALFALFA AFHID RESISTANCE IN MATURE GROWTH OF ALFALFA VARIETIES. W L Howe G R Pesho J Econ Entomol 53(2) 234-238, BIBL., PL. Apr 1960 421 J822 Alfalfa, Insecticide resistant insects, Plant injuries, Plant regulators, Therioaphis. 7020-68 RESIDUES OF SEVIN AND 1-NAPHTHOL ON FORAGE FROM AERIAL APPLICATIONS OF SEVIN IN OIL. J E W Buddleston G G Gyrisco J Econ Entomol 53 (3) 484 Jun 1960 421 J822 Aerial spraying, Carbaryl, Naphthol, 1-, Porthetria, PAGE 30

Residues. 7021-68 SURVEYS FOR NOSEMA DISEASE OF HONEY BEES IN CALIFORNIA. E R Jaycox J Econ Entomol 53(1) 95-98, BIBL., TABS., PL. Peb 1960 421 J822 Apis mellifera, California, Honey, Nosema disease, Surveys. 7022-68 THE EFFECT OF COPPER COMPOUNDS ON CONTROL OF CITRUS RUST MITE WITH ZINEB. R B Johnson J Econ Entomol 53(3) 395-397, BIBL., TABS. Jun 1960 421 J822 Citrus, Copper, Parathion, Phyllocoptruta, Zineb. 7023-68 OCCURRENCE OF EUBLEMMA SILICULA SWINHOE AS PEST OF BAJRA IN DELHI. M G Jotwani K Dang P N Saxena W R Young Indian J Entomol 28 (3), 407-408 Sep 1966 420 IN23 Eublemma silicula, Insect pests, Pearlmillet. 7024-68 CONTROL OF PEAR EORER AND AMERICAN PLUM BORER IN APPLE TREES. L P Kelsey L A Stearns J Econ Entomol 53(2) 276-278, BIBL. Apr 1960 421 J822 Apples, Dormant oil, Gamtox, Isotex, Paraflow, Parathion. 7025-68 LABORATORY STUDIES OF THREE-LINED POTATO BEETLE AND CONTROL WITH VARIOUS INSECTICIDES. T W Kerr C E Olney J Econ Entomol 53 (3) 480-481, BIBL. Jun 1960 421 J822 Dieldrin, DDT , Epitrix, Lema, Potatoes. 7026-68 TOXICITY OF CELLULOSE ACETATE SHEETING TO LEGUMINOUS PLANTS. J Econ Entomol 53 (3) 484 Jun 1960 421 J822 Cellulose acetates, Legumes, Sheets, Toxicology. 7027-68 THE EFFECT OF SEED TREATMENTS WITH PBORATE AND OTHER SYSTEMIC INSECTICIDES ON THE GERMINATION OF WHEAT. J ECON Entomol 53(4) 575-577, BIBL., TABS. Aug 1960 421 3822 Disulfoton, Phorate, Seed germination, Seed treatment, SD-3562, Wheat. 7028-68 INCREASE OF EUROPEAN CORN BORERS FOLLOWING SOIL APPLICATION OF LARGE AMOUNTS OF DIELDRIN. W H Luckmann J ECON Entomol 53(4) 582-584, BIBL., TABS. Aug 1960 421 J822 Corn, Dieldrin, Pyrausta, Soil fumigation. 7029-68 EFFECTS OF NECTABULESS COTTONS ON POPULATIONS OF THREE LEPIDOPTEROUS INSECTS. M J Lukefahr C Rhyne J Econ Entomol 53(2) 242-244, BIBL. Apr 1960 421 J822 Cotton, Lepidoptera, Pectinophora gossypiella. 7030-68 CONTROL OF THE GRAPE MEALYBUG ON APRICOTS. B F Madsen L B McNelly J Econ Entomol 53(3) 354-357, BIBL., PL. Jun 1960 421 J822 Apricots, Diazinon, Parathion, Pseudococcus. 7031-68 DROSOPHILA BREEDING IN REFUSE FROM TOMATO CANNERIES. B C Mason T J Benneberry J Econ Entomol 53(1) 8-11, BIBL., PL. Feb 1960 421 J822 Breeding, Canneries, Drosophila, Drosophila melanogaster,

Refuse disposal, Tomatoes.

Toxaphene.

20 7052-68

7032-68 REACTION OF DROSOPBILA TO DIFFERENT VARIETIES OF TOMATOES. B C Mason T J Henneberry R Lehr J Econ Entomol 53 (2) 337-339, BIBL., PL. Jun 1960 421 J822 Cracking process, Drosophila, Drosophila melanogaster, Tcmatces. 7033-68 THE EFFECT OF LYGUS BUG CONTROL ON THE YIELD OF LIMA BEANS. F L MCEwen G E R Hervey J Econ Entomol 53(4) 513-516, BIBL., TABS., PL. Aug 1960 421 J822 DDT , Lima beans, Lygus, Mevinphos, Parathion. 7034-68 NATURAL FACTORS CONTROL THE PINE TORTOISE SCALE IN THE NOETHEAST. T McIntyre J Econ Entomol 53(2) 325, BIBL. Apr 1960 421 J822 Pinus, Toumeyella. 7035-68 **O-ETBYL S-2 (ETHYLTHIO) - ETHYL ALKYLPHOSPHONOTHIOATES AS** SYSTEMIC INSECTICIDES. R L Metcalf T R Fukuto J Econ Entomol 53 (1) 127-130, BIBL. Feb 1960 421 J822 Cotton, Insecticides, Insects, Toxicology. 7036-68 COTTON INSECTS IN NICARAGUA. F D Miner J Econ Entomol 53(2) 291-296, BIBL., TABS. Apr 1960 421 J822 Anthonomus grandis, Cotton, Nicaragua. 7037-68 WATER TENSIONS IN PLANTS, AN ENTOMOLOGICAL APPROACE. T E Mittler Entomol Soc Amer Ann 60 (5), 1074-1076 Sep 1967 420 EN82 Insect pests, Plants, Tension, Virus diseases (plants), Water consumptive use. Abstract included. 7038-68 THIODAN, A PROMISING CHEMICAL PCR CONTROL OF THE LESSER PEACE TREE EORER. D B Moore J Econ Entomol 53(2) 321-322, BIBL. Apr 1960 421 J822 Apricots, Endosulfan, Synanthedon pictipes. 7039-68 CONTROL OF ROOT MAGGOTS IN SWEDE TURNIPS IN NEWFOUNDLAND WITB BEFTACELOR AND ALDRIN AND THE EFFECT ON PARASITES AND OVERWINTERING PUPAE. R F Morris J Econ Entomol 53(1) 65-67, BIBL., TABS. Feb 1960 421 J822 Aldrin, Beptachlor, Bibernation, Maggots, Parasites, Pupae, Roots, Swede turnips. 7040-68 CITRUS RED MITES RESISTANT TO DEMETON AND OVEX AND THEIR RESPONSE TO TEDION AND KELTHANE. F Munger J E Gilmore A W Cressman J Econ Entomol 53 (3) 384-388, BIBL., TABS., PL. Jun 1960 421 J822 Demeton, Dicofol, Lemons, Ovex, Panonychus, Tetradifon. 7041-68 EFFECT OF CULM SOLIDNESS ON THE SURVIVAL OF THE WHEAT STEM SAWFLY. L E O Keeffe J A Callenbach K L Lebsock J Econ Entomol 53(2) 244-246, BIBL., TABS. Apr 1960 421 J822 Culm, Insect survival, Larvae, Wheat. 7042-68 INCREASED TOLERANCE OF THE BOLL WEEVIL AND COTTON FLEAHOPPER TO SOME CBLORINATEL BYDROCARBON INSECTICIDES IN CENTRAL TEXAS IN 1958. C B Parencia Jr C B Cowan Jr J Econ Entomol 53(1) 52-56, BIBL. Feb 1960 421 J822 Anthonomus grandis, Azinphosmethyl, Carbaryl, Chlorine, Cotton, Dieldrin, DDT, Malathion, Psallus seriatus,

·7043-68 STARVATION TESTS WITH LARVAE OF THE CINNABAR MOTH. B L Parker J Econ Entomol 53(3) 472-473, BIBL. Jun 1960 421 J822 Artichokes, Asters, Bellis, Hops, Larvae, Lonicera, Strawberries, Tagetes, Tyria. 7044-68 INTER-RELATIONSHIP BITWEEN WHITEFLY (BEMISIA TABACI GIEN) POPULATION AND THE INCIDENCE OF LEAF CURL IN BIDI TOBACCO (NICOTIANA TABACUM L) IN RELATION TO DIFFERENT PLANTING DATES. V C Patel H K Patel Sep 1966 420 IN23 Bemisia tabaci, Cultural control (insects), Cultural control (plant diseases), Leaf curl (tobacco), Planting date, Tobacco. 7045-68 SUSCEPTIBILITY OF CERTAIN STAGES OF THE RICE WEEVIL TO A METBALLYL CHLORIDE FUMIGANT FORMULATION IN WHEAT OF VARIOUS MOISTURES. J R Pedersen J Econ Entomol 53(2) 288-291, BIBL. 290-291, TABS. Apr 1960 421 J822 Carbon tetrachloride, Fumigants, Methallyl chloride, Wheat. 7046-68 A BIOTYPE OF THE SPOTTED ALFALFA APHID ON ALFALFA. G R Pesho F V Lieberman W F Lehman J Econ Entomol 53(1) 146-150, BIBL., TABS. Feb 1960 421 J822 Alfalfa, ENT A, Plant disease resistance, Terioaphis. 7047-68 EFFECTS OF LCW TEMPERATURE ON THE SURVIVAL OF THE ALFALFA WEEVIL FROM ALBERTA AND UTAB. L K Peterson J Econ Entomol 53(4) 570-572, BIBL., TABS. Aug 1960 421 J822 Alberta, Alfalfa, Bypera, Mortality, Temperature, Utah. 7048-68 EFFECT OF LIME APPLICATIONS TO SOIL ON JAPANESE BEETLE LARVAL POPULATIONS. J B Polivka J Econ Entomol 53(3) 476-477, BIBL. Jun 1960 421 J822 Lime, Popillia, Soils. 7049-68 THE EFFECT OF GRAIN MOISTURE UPON DEVELOPMENT OF THE RICE J D FOWELL IN GREEN CORN. J D FOWELL E H Floyd J Econ Entomol 53(3) 456-458, BIBL. Jun 1960 421 J822 Corn, Eggs, Bumidity, Oviposition, Sitophilus. 7050-68 INCIDENCE OF PREDATORS AND FEASIBILITY OF THEIR CONTROL THROUGB HAND PICKING IN LAC CULTIVATION ON BUSB TYPES OF BOSTS. B K Purkayastha N Majumdar A Bhattacharya Indian J Entomol 28 (3), 394-396 Sep 1966 420 IN23 Cultural control (insects), Eublemma amabilis, Holcocera pulverea, Lac, Moghania macrophylla. 7051-68 OBSERVATIONS ON SOYBEAN INSECTS IN MARYLAND. R B Ratcliffe T L Bissell W E Bickley J Econ Entomol 53(1) 131-133, 14 REFS. Peb 1960 421 J822 DDT, Heliothis zea, Malathion, Maryland, Phorate, Soybeans, Tetranychus, Thrips. 7052-68 CELOROPLAST NUMBER IN LEAVES OF NORMAL WBEAT PLANTS AND TBOSE INFESTED WITH BESSIAN FLY OR TREATED WITH MALEIC HYDRAZIDE. R J Robinson B S Miller B L Mitchell B C Mussman J A Johnson E T Jones J Econ Entomol 53(4) 560-562, BIBL. 1960 421 J822 Chloroplasts, Leaves, Maleic hydrazide, Phytophaga, Wheat.

20 7053-68 7053-68 EFFECTS OF SOIL INSECTICIDES ON APPLE TREES AND RESULTING J G Rodriguez H H Chen W T Smith Jr J Econ Entomol 53(4) 487-490, BIBL., TABS. Aug 1960 421 J822 Apples, Insect nutrition, Insecticides, Mites, Soils. 7054-68 EPPECTS OF SOIL INSECTICIDES AND ABSORBENTS ON PLANT SUGABS AND RESULTING EFFECT ON MITE NUTRITION. J G Rodriguez D E Maynard W T Smith Jr J Econ Entomol 53(4) 491-495, BIBL Aug 1960 421 J822 Beans, DDT , Insect nutrition, Insecticides, Mites, Soils, Soybeans, Sugars, Tetranychus. 7055-68 EFFECTIVENESS OF MIXTURES OF ACRYLONITBILE AND CARBON TETRACHLORIDE AGAINST THEEE PESTS OF STORED COBN. K F Ruppel G Bravo W H Batheway J Econ Entomol 53(2) 238-242, BIBL. Apr 1960 421 J822 Acrylcnitrile, Calandra, Carbon tetrachloride, Corn, Sitophilus, Sitotrcga, Stored products, Tribolium. 7056-68 THE INFLUENCE OF SEASONAL DDT APPLICATIONS UPON ABTHROPOD POPULATIONS IN JACK PINE STANDS. L Saplala V L Sapidia Diss Abstr Sect B 27 (12, PT. 1), 4609B Jun 1967 25055.049D53 Arthropoda, DDT , Finus banksiana. 7057-68 DIUBNAL EMERGENCE OF XYLEBORUS FERRUGINEUS (COLEOPTEBA, SCOLYTIDAE) FROM CACAO TRUNKS IN FCUADOR AND COSTA BICA. J L Saunders J K Knoke Entomcl Soc Amer Ann 60 (5), 1094-1096 Sep 1967 420 EN82 Cacao, Diurnal rhythm, Xyleborus ferrugineus. Abstract included. 7058-68 DIAPAUSE AND SECONDABY PARASITES NULLIFY THE EFFECTIVENESS OF ROSE-APBID PARASITES IN RIVERSIDE, CALIFORNIA, 1957-1958. E I Schlinger J Econ Entorol 53(1) 151-154, BIBL. Feb 1960 421 J822 Charips, Diapause, Parasitic insects. 7059-68 SYSTEMIC INSECTICIDES FOB CONTRCL OF SCALES, LEAF MINEBS, AND LACE BUGS. J C Schread J Econ Entomol 53(3) 406-408, BIBL., TABS. Jun 1960 421 J822 Andromeda, Asterolecanium, Azalea, Buxus, Dimethoate, Disulfoton, Penusa, Ilex, Mevinphos, Phenacaspis, Phorate, Phosphamidon, Rhododendron, Stephanitis. 7060-68 RESPONSE OF DIFFERENT STRAINS OF THE GREEN PEACH APHID TO MALATBICN. F B Shirck J Econ Entomol 53(1) 84-88, BIBL., TABS., PL. Feb 1960 421 J822 Aphididae, Broccoli, Malathion, Potatoes. 7061-68 A TBREE-YEAR OVERWINTERING STUDY OF THE SPOTTED ALFALFA APBID. R G Simpson C C Burkhardt J Econ Entomol 53(2) 220-222, BIBL., TABS. Apr 1960 421 J822 Alfalfa, Hibernation, Kansas, Surveys, Therioaphis. 7062-68 PLUM CURCULIO CONTROL EXPEBIMENTS IN 1955-58. O I Snapp J Econ Entomol 53(3) 335-337, BIBL., TABS. Jun 1960 421 J822 Azinphosmethyl, Carbaryl, Carbophenothion, Conotrachelus, Dieldrin, Parathicn, Peaches, Perthane. 7063-68 SOIL TREATMENTS IN LIEU OF SPBAYING FOB PLUM CURCULIO CONTBOL IN PEACH OFCHARDS. O I Snapp J Econ Entomol 53 (3) 439-441, BIBL. PAGE 32

Jun 1960 421 J822 Chlordane, Endosulfan, Endrin, Heptachlor, Isodrin, Peaches, Soils, Spraying. 7064-68 CONTROL OF THE GRAPE LEAF FOLDER IN CALIFOBNIA. E M Stafford P L Jensen H Kido J Econ Entomol 53(4) 531-534, BIBL., TABS. Aug 1960 421 J822 Bayer 22408, Carbaryl, Desmia, Dicofol, Endrin, Grapes, Kepone, Lead arsenate, Methyl trithion, Naphthyl-N-methyl carbamate, 1-, 0,0-diethyl O-naphtalimidophosphorothioate, Parathion. 7065-68 EFFECTS OF DYLOX AND OTHEB INSECTICIDES ON ENTOMOPHAGOUS INSECTS ATTACKING FIELD CROP PESTS IN CALIFORNIA. V M Stern R Van Den Bosch H T Beynolds J Econ Entomol 53(1) 67-72, BIBL., TABS. Feb 1960 421 J822 California, DDT, Entomaphagous insects, Field crops, Beptachlor, Insecticide resistant insects, Parathion, Toxaphene, Trichlorfon. 7066-68 PIELD TESTS WITB VARIOUS INSECTICIDES FOB TBE CONTROL OF LYGUS BUGS AND THE COEN BARWOBM ON LIMA BEANS. M W Stone F B Foley R E Campbell J Econ Entomol 53(3) 397-403, BIBL., TABS. Jun 1960 421 J822 Dieldrin, DDT, Endrin, Beliothis zea, Lima beans, Lygus, Toxaphene. 7067-68 SAMPLING ALFALFA SEED FOR CLOVER SEED CHALCID DAMAGE. F E Strong J Eccn Entomol 53(4) 611-615, BIBL., TABS. 1960 421 J822 Alfalfa, Bruchophagus, Clover, Plant injuries. 7068-68 TOXICITY OF BBC TO LOBLOLLY PINE SEEDLINGS. B C Thatcher J Econ Entomol 53(1) 175-176, BIBL., PL. Peb 1960 421 J822 Benzene hexachloride, Pinus taeda, Seedlings, Toxicology. 7069-68 CURRANT FBUIT WEEVIL, PSEUDANTBONOMUS VALIDUS, A PEST OF CULTIVATED BIGHBUSB BLUEBERRY. W E Tomlinson Jr J Econ Entomol 53(3) 474-475, BIBL., PL. Jun 1960 421 J822 Blueberries, Dieldrin, Pseudanthonomus. 7070-68 LABOBATOBY STUDIES ON THE EFFECTIVENESS OF CHIPMAN R-6199 AGAINST SOME COTTON PESTS. C B Tsao G T Bottger J Econ Entomol 53(1) 103-106, BIBL., TABS. Feb 1960 421 J822 Anthonomus grandis, Chipman R-6199, Cotton, DDT , Endrin, 0,0-diethyl S(2-diethylamino)-ethyl phosphorothioate, Tetranychidae. 7071-68 EFFECT OF TEMPERATURE AND BUMIDITY ON THE FECUNDITY AND DE-VELOPMENT OF CADBA CAUTELLA WIK. IN WHEAT. S Tuli F B Mookherjee G C Sharma Indian J Entomol 28 (3), 305-317 BEF Sep 1966 420 IN23 Cadra cautella, Fertility, Bumidity, Temperature, Wheat. 7072-68 BIOLOGY AND CONTROL OF THE APPLE SEED CHALCID IN NORTH CABOLINA. G F Turnipseed J Econ Entomol 53(1) 166, BIBL. Feb 1960 421 J822 Biology, Carbaryl, Crabapples, Demeton, Dioxathion, DDT, Malathion, Phorate, Seedlings, Torymus. 7073-68 STUDIES ON THE HOST PBEFERENCE OF THE ONION THRIPS, THRIPS TABACI LINDEMAN TO THE VARIETIES OF ONION. S K Verma Indian J Entomol 28 (3), 396-398 Sep 1966 420 IN23 Onions, Plant pest resistance, Thrips tabaci.

7074-68 CONTROL OF BOLL WEEVILS RESISTANT TO CHLORINATED HYDROCAEHCNS. J K Walker Jr B L Hanna J Econ Entomol 53(2) 228-231, BIHL. 1960 421 J822 Apr Anthonomus grandis, Carbaryl, Cotton, DDT , Gothion, Hydrocarbons. 7075-68 YIELD AND QUALITY OF MUSBROOMS FROM HEDS TREATED WITH LINDANE. C A Weigel G Gilpin J Econ Entemol 53(4) 558-560, BIHL. Aug 1960 421 J822 Bradysia, Lindane, Megaselia, Mushrooms. 7076-68 CONTROL OF THE TWO-SPOTTED SPIDER MITE ON BEANS WITH SYSTEMIC INSECTICIDES APPLIED IN THE SOIL. J Wilcox A F Howland J Econ Entomol 53(2) 224-227, HIHL. Apr 1960 421 J822 Disulfoton, Lima beans, Phorate, Tetranychus, Thrips. 7077-68 FOREST-INSECT SURVEYS IN THE CENTRAL ROCKY MOUNTAINS. B B Wilford J Econ Entomol 53(3) 458-462, PL. Jun 1960 421 J822 Forest surveys, Forestry, Insects, Picea, Pinus, Rocky mountains. 7078-68 THE USE OF PHORATE TO CONTROL APBIDS AND THE HESSIAN FLY ON WINTER WHEAT. M C Wilson B F Hodges B L Gallun B E Kirk J Econ Entomol 53(2) 197-200, HIHL., TABS., PL. Apr 1960 421 J822 Aphididae, Phorate, Wheat. 7079-68 BRIEF HISTORY OF APBID CONTROL ON POTATOES IN SOUTH FLORIDA, 1946-59. D O Wolfenbarger J Econ Entomol 53(3) 403-405, BIHL. Jun 1960 421 J822 DDT , Endosulfan, Parathion, Potatoes, South florida, Toxaphene. 7080-68 FURTBER STUDIES CN CONTROL OF THE CLOVER ROOT HORER IN VIRGINIA. A M Woodside J Econ Entcmol 53(3) 449-450, HIHL. Jun 1960 421 J822 Aldrin, Henzene hexachloride, Chlordane, Beptachlor, Bylastinus, Red clover. 7081-68 THE SUITAHILITY OF TOHACCOS FOR THE GROWTH OF THE CIGARETTE HEETLE, LASIODERMA SERRICORNE. R T Yamamoto G Fraenkel J Econ Entemol 53(3) 381-384, HIHL. 383-384, TAES. Jun 1960 421 J822 Lasioderma, Nicotine, Tenebrio, Tobacco, Tribolium.

## Nematodes

```
7082-68
    A BACTERIAL INFECTION OF XIPBENEMA AMERICANUM.
R E Adams J J Eichenmuller
Phytopathology 53(7) 745
Jul 1963 464.8 P56
    Xiphinema americanum.
7083-68
    STALK SBREEDING AND PLOWING AS METBODS FOR CONTROLLING THE
FINK BOLLWCHM, PECTINOPBORA GOSSYPIELLA.
P L Adkisson L H Wilkes B J Cochran
J Econ Entomol 53 (3) 436-439, HIBL., TABS.
```

Jun 1960 421 J822

Cotton, Larvae, Stalk shredding, 7084-68 A COMPARISON OF THE TOXICITY OF INSECTICIDES FOR THE CONTROL OF CORN BARWORM ON SWEET CORN. L D Anderson B T Reynolds J Econ Entomol 53 (1) 22-24, BIBL., PL. Feb 1960 421 J822 Azinphosmethyl, Carbaryl, Diazinon, DDT , Endosulfan, Heptachlor, Isodrin, Sweetcorn, Toxicology, Trichlorion. 7085-68 BIOLOGY OF THE OAK TIMHERWORM, ARRBENODES MINUTUS. W D Buchanan J Econ Entomol 53(4) 510-513, PL. Aug 1960 421 J822 Arrhenodes, Insect biology. 7086-68 DEVELOPMENT OF MELCIDOGYNE HAPLA AND M. INCOGNITA IN ALFALFA. R A Chapman Phytopathology 53(9) 1003-1005, BIBL., TABS. Sep 1963 464.8 P56 Alfalfa, Meloidogyne. 7087-68 THE INFLUENCE OF SELECTED NEMATODE SPECIES AND NUMBER OF CONSECUTIVE PLANTINGS OF CORN AND SORGBUM ON FORAGE PRODUC-TION, SOIL, AND WATER USE EFFICIENCY. R Chevres-roman Diss Abstr Sect B 27 (12, PT. 1), 4207H Jun 1967 25055.049D53 Corn, Crop yields, Plant composition, Plant nematodes, Planting, Soil chemistry, Sorghum, Water consumptive use. 7088-68 OBSERVATIONS ON THE UTILIZATION OF THE BEXOSE MONOPBOSPBATE PATEWAY IN NEMATODE-INFECTED BOOTS OF TOMATO. B E DeMott Diss Abstr Sect H 27 (12,PT.1), 4257B Jun 1967 Z5055.U49D53 Glucose, Berose phosphates, Meloidogyne incognita acrita, Plant metabolism, Plant nematodes, Tomatoes. 7089-68 SWEETPOTATO VARIETAL REACTION TO SPECIES AND RACES OF SWEETFOLATO VARIALES. ROOT-KNOT NEMATOLES. M J Giamalva W J Martin T P Bernandez Phytopathology 53 (10) 1187-1189, BIBL. Oct 1963 464.8 P56 Meloidogyne, Plant nematode resistance, Sweetpotatoes. 7090-68 EVALUATION OF SEVERAL TECHNIQUES FOF SCREENING ALFALFA FOR RESISTANCE TO DITYLENCBUS DIPSACI. G D Griffin Plant Dis Bep 51 (8)0 651-654 Aug 1967 1.9 P69P Alfalfa, Ditylenchus dipsaci, Plant nematode resistance. Utah State University Agricultural Experiment Station cooperating Several techniques were studied to determine their reli-ability in a screening program for resistance of alfalfa to Ditylenchus dipsaci. methods used were0 inoculating svollen alfalfa seed with a water, or a 1 percent methyl cellulose suspension of nematodes inoculating alfalfa cotyledons with a one percent methyl cellulose suspension of nematodes and inoculating mature alfalfa plants at crown bud initiation with a water suspension of nematodes. inoculation was ef-fective when inoculated seed was maintained on a greenhouse bench at 30-60 percent relative humidity, or in a controlled humidity chamber at 80-100 percent relative humidity. inoculation of mature plants was more effective, however and inoculated cotyledons were only effective when maintained in a con-trolled humidity chamber at 80-100(. all methods required very little plant handling, and plants could be grown indef-Several techniques were studied to determine their relitrolled numlaty chamber at 80-100(. all methods required very little plant handling, and plants could be grown indef-initely to be certain of their susceptibility or resistance. there was one advantage to inoculating alfalfa seed. fewer nematodes were used, and possible escapes could be re-inocu-lated in the cotyledon stage.

PELICOTYLENCHUS THORNEI N SP (NEMATODA, BOPLOLAIMINAE) FROM A TOMATO PLANT FIELD IN LUDHIANA, PUNJAB. N K Gupta H K Chhabra Panjab Univ Res Hull (N.S.) 17 (3/4), 323-325 Dec 1966 513 EA72 Dec 1966 513 EA72 Helicotylenchus thornei, Boplolaiminae, Plant nematodes,

20 7092-68 Criconemoides curvatum, Ornamental trees, Plant nematodes, Pratylenchus penetrans, Shrubs. Tomatoes. Abstract included. 7092-68 7100-68 ON TWO PLANT FARASITIC NEMATODES FROM A CAULIFLOWER FIELD IN THE PUNJAH. N K Gupta J C Gupta Panjat Univ Res Eull (N.S.) 17 (3/4), 223-226 Dec 1966 513 EA72 Cauliflower, Filenchus, Plant nematodes, Tylenchorhynchus, Tylenchus. Abstract included. 7093-68 CRICONEMA LATERALE KHAN AND SIDDIQI, 1963 (NEMATODA, CRICONEMATIDAE), A PARASITE OF CITRUS PLANT IN THE PUN-7101-68 JAH. N K Gupta J C Gupta Panjat Univ Res Hull (N.S.) 17 (3/4), 219-220 Dec 1966 513 EA72 Citrus, Criconema laterale, Criconematidae, India, Plant nematodes. Abstract included. 7094-68 ON A NEMATODE SPECIES OF THE GENUS, HOPLOLAIMUS DADAY, 1905, FROM A CITRUS FLANT IN THE PUNJAH. N K Gupta J C Gupta Panjat Univ Res Hull (N.S.) 17 (3/4), 211-213 Dec 1966 513 EA72 Citrus, Hoplolaimus indicus, Plant nematodes. Abstract included. 7095-68 STUDIES ON TWO PLANT NEMATODE SFECIES OF THE GENUS XIPHI-NEMA COEB, 1913. N K Gupta J C Gupta Panjab Univ Res Eull (N.S.) 17 (3/4), 207-210 Dec 1966 513 EA72 Citrus, Plant nematodes, Xiphinema basiri, Xiphinema indicum. Abstract included. 7102-68 7096-68 ON HELICOTYLENCHUS INDICUS SIDDIQI, 1963 (NEMATODA, HOPLOLAIMIDAE), A FHYTOPARASITIC NEMATODE IN THE PUNJAB. N K Gupta J C Gupta Panjab Univ Res Bull (N.S.), 17 (3/4), 221-222 Parijab uliv Res Bull (N.S.), 17 (3/4), 221-222 Dec 1966 513 EA72 Citrus, Grasses, Helicotylenchus indicus, Hoplolaimidae, Parasitism, Plant nematodes. Abstract included. 7103-68 7097-68 ON LONGIDORUS HREVICAUDATUS (SCHUURMANS STEKHOVEN, 1951) THORNE, 1961, A NEMATODE PARASITE OF CITRUS PLANTS IN THE PUNJAH. PUNJAH. N K Gupta J C Gupta Panjat Univ Res Hull (N.S.) 17 (3/4), 215-217 Dec 1966 513 EA72 Citrus, India, Longidorus brevicaudatus, Plant nematodes. 7104-68 Abstract included. 7098-68 AN ATTEMPT TO EXTEND THE LONGEVITY OF THE HURBOWING NEMA-7105-68 TODE, RADOPHOLUS SIMILIS, WITH CITRUS ROOT EXUDATE. R W Hanks A W Feldman Plant Dis Rep 51 (8)0 675-677 REF Aug 1967 1.9 F69P Citrus, Longevity, Plant nematodes, Radopholus similis, Root excretions. Radophilus similis was provided with a continuous supply of citrus root exudate in a root-free environment to determine 7106-68 citus root exudate in a root-free environment to determine whether the mematodes could adapt to the exudate as a source of food and thereby extend their longevity beyond 6 months in the absence of roots. root exudate was continuously sup-plied by grapefruit seedlings grown in large glass cylinders fitted with sintered glass discs which permitted root exu-date to pass into the environment of the mematodes but pre-vented their contact with the roots. since no burrowing mematodes survived as long as 8 months, root exudate was of no significance for extending R similis longevity in the absence of contact with living roots. 7107-68 7099-68 THE EFFECT OF CRICCNEMOIDES CUEVATUM AND PRATYLENCHUS PENETRANS CN WOODY ORNAMENTALS. C M Heald W R Jenkins Phytopathology 53(7) 746 Jul 1963 464.8 P56 PAGE 34

THE POPULATION GENETICS OF THE POTATO CYST-NEMATODE, HETER-ODERA ROSTOCHIENSIS, MATHEMATICAL MODELS TO STIMULATE THE EFFECTS OF GROWING EELWORM-RESISTANT POTATOES HEED FROM PERCENSION STRUCTURE FRAME ANDIGENA. F G W Jones D M Parrott G J S Ross Ann Appl Hiol 60 (1), 151-171 REF Aug 1967 442.8 AN72 Genetics, Heterodera rostochiensis, Plant nematode resistance, Plant nematodes, Population, Potatoes. POPULATION DYNAMICS AND FUMIGATION STUDIES OF CERTAIN NEMA-TODES ASSOCIATED WITH ROOTS OF WHEAT IN NEHRASKA. E D Kerr Plant Dis Rep 51 (8)0 637-641 Aug 1967 1.9 P69P Plant bis kep 51 (5) 053-041 Aug 1967 1.9 P69P Dichloropropene, 1,3-, Plant nematodes, Population, Soil fumigation, Trichloronitromethane, Wheat. Nine stylet-bearing nematode genera (Pratylenchus, Phraty-lenchus, Tylenchorhynchus, Aphelenchus, and Tylenchus) and species of dorylaims and non-stylet-bearing nematodes were recovered from soil samples taken in fields of winter wheat in Nebraska. a substantial number of several genera survived summer fallowing in western Nebraska. the stylet bearing species were generally recovered from soil in high-est numbers in March through June and in lowest numbers in pecember through Pebruary and July through August. dur-ing the spring months, numbers of Paratylenchus microdorus, Tylenchorhynchus brevidens, Tylenchus spp, and Aphelen-choides spp were significantly higher in plots of growing wheat than in fallow plots. fumigation of field soil, both for plot tests and a greenhouse pot test, with trichloro-nitromethane and 1,3-dichloropropene resulted in good nema-tode control and increased growth of wheat. A PLANT-PARASITIC NEMATODE OF THE GENUS ROTYLENCHULUS FOUND IN CALIFORNIA. D E Konicek Phytopathology 53 (10) 1140 Oct 1963 464.8 P56 California, Nematodes, Rotylenchulus. MATERIALS DISCHARGED BY PLANT-PARASITIC NEMATODES. R F Myers Phytopathology 53 (8) 884 Aug 1963 464-8 P56 Ditylenchus, Eserine, Meloidogyne, Nematodes, Nicotine, Parasitism, Pyridine. CONTROL OF ARMY CUTWORMS IN ALFALFA DURING 1959. R E Pfadt J Econ Entomol 53(2) 319-320, HIHL. Apr 1960 421 J822 Alfalfa, Dieldrin, Dilan, Endrin, DDT . SMALL AMOUNTS OF INSECTICIDES EFFECTIVE IN CONTROLLING GRUBS OF THE JAPANESE BEETLE. J H Polivka J Econ Entomol 53(2) 320, HIHL. 1960 421 J822 Aldrin, Henzene hexachloride, Chlordane, Grubs, Heptachlor. DECLINE OF GRAPEFRUIT TREES IN RELATION TO CITEUS NEMATODE POPULATIONS AND TREE RECOVERY AFTER CHEMICAL TREATMENT. H W Reynolds J H O Hannon Phytopathology 53 (9) 1011-1015, BIHL., PL. Sep 1963 464.8 P56 Citrus, Grapefruit, Nematodes, 1,2-dibromo-3-chloropropane. PICKLEWORM CONTROL AND RESIDUE STUDIES WITH MALATHION AND PHOSDRIN. J E Roberts L E Anderson J Econ Entomol 53(3) 482-483, BIHL.

Jun 1960 421 J822 Cucumbers, Malathion, Mevinphos, Residues.

20 7127-68

LESICN NEMATODE INJURY TO CAEROL. Phytorathology 53(8) 886-887 Aug 1963 464.8 P56 Carrots, Nematodes, Pratylenchus. NEMATODE-INDUCED CALLUS ON CARROT DISCS GROWN IN VITRO. R Sandstedt M L Schuster Phytopathology 53 (11) 1309-1312, BIBL., PL. Nov 1963 464.8 F56 Callus (plants), Carrots, Meloidogyne, Nematodes. 7119-68 OBSERVATIONS ON FEBIODICITY OF HATCHING OF EGGS OF THE POTA-TO CYST-NEMATODE, HETERODERA ROSTOCHIENSIS WOLL. A M Shepherd P M COX Ann Appl Biol 60 (1), 143-150 REF Aug 1967 442.8 AN72 Beterodera rostochiensis, Plant nematodes, Potatoes. 7120-68 EXPERIMENTS ON CONTROL OF THE SUGAR-BEET WIREWORM IN SOUTHERN CALIFORNIA BEAN FIELDS. M W Stone L D Anderson J Econ Entomol 53(1) 176-177, BIBL. Feb 1960 421 J822 Aldrin, Chlordane, Dieldrin, EDT , Endrin, Beptachlor, Limonius californicus, Sugar beets. 7121-68 INFLUENCE OF SOIL AND MOISTURE ON THE BEET WEBWORM, LOXOSTEGE STICTICALIS, AND ITS FARASITES. G E Swailes J Econ Entomol 53(4) 585-586, BIBL. Aug 1960 421 J822 Beets, Loxostege, Soil moisture, Soils. EFFECT OF ROOT EXTRACT OF ASPARAGUS RACEMOSUS AND TAGETES ON HATCBING OF EGGS OF MELCIDOGYNE JAVANICA AND MELOIDOGYNE ARENAEIA. G Swarup R D Sharma 7123-68 Indian J Exp Biol 05 (1), 59 Jan 1967 442.8 IN2 Asparagus racemosus, Eggs, Mercury chloride, Nemaphos, Plant nematodes, Tagetes erecta. THE BISTOLCGICAL RELATIONSHIP OF RESISTANCE TO THE CITRUS NEMATODE IN CERTAIN CITATIONSHIP OF MESIS S D Van Gundy J D Kirkpatrick Phytorathology 53(8) 892 Aug 1963 464.8 256 7124-68 Citrus, Histology, Larvae, Nematodes, Plant disease resistance, Roots. BIOLOGICAL STUDIES OF A NEW SPECIES OF ANGUINA (NEMATODAO TYLENCHIDAE) FARASITIC ON PLANTAGO ARISTATA MICHX. O F Vargus-gonzales 7125-68 Diss Abstr Sect B 27 (12,PT.1), 4211B-4212B Jun 1967 25055.049D53 Anguina, Microbiology, Plant galls, Plant nematodes, Plantago aristata, Tylenchidae. THE BIOLOGY OF THE PINE WEBWORM, TETRALOPHA ROBUSTELLA, IN WISCONSIN. D P Wallesz D M Benjamin 7126-68 J Econ Entomol 53 (4) 587-589, BIBL., PL. Aug 1960 421 J822 Biology, Pinus, Tetralopha, Wisconsin.

7108-68

7109 - 68

7110-68

7111-68

7112-68

7113-68

7114-68

7115-68

7116-68

7117-68

ERECTA

R A Rohde

AERIAL FOREST SPRAYING AGAINST SPRUCE BUDWORM- A PROBLEM OF MUTUAL INTEREST IN CANADA AND THE UNITED STATES. F E Webb J Econ Entomol 53(4) 631-633 Aug 1960 421 J822 Aerial spraying, Choristoneura, DDT , Picea. 7118-68

SALT-MAESE CATERPILLAR CONTEOL ON COTTON IN ARIZONA. G P Wene D M Tuttle L W Sheets J Econ Entomol 53(1) 78-80, BIBL., TABS. Feb 1960 421 J822 Feb 1960 421 3822 Arizona, Carbaryl, Cotton, Diazinon, Dilan, DDT , Endrin, Estigmene acrea, Malathion, Methyl parathion, Parathion, Sodium fluosilicate, Toxaphene, Trichlorion.

### Weeds

DARKNESS AND THE ACTIVITY OF DIQUAT AND PARAQUAT ON TOMATO, BROAD BEAN AND SUGAR BEET. R C Brian Ann Appl Biol 60 (1), 77-85 REF Aug 1967 442.8 AN72 Diguat, Herbicides, Paraquat, Sugar beets, Tomatoes. INFLUENCE OF TILLAGE, ROW SPACING, AND ATRAZINE ON SCRGHUM AND WEED YIELDS FROM NONIRRIGATED SORGBUM ACROSS NEBRASKA. O C Burnside G A Wicks C R Fenster Weeds 12(3) 211-215 Jul 1964 79.8 W41 Atrazine, Planting, Sorghum, Tillage, Weed control. THE FIGHT AGAINST WEEDS. D Campbell Agr Chem 22 (9), 49-50 Sep 1967 381 AG8 Chemical control (weeds), D, 2,4-, Weeds. 7122-68 SCIENCE AND EDUCATION A NEW AWARENESS. 0 A Freeman Weeds 12(3)163-166 Jul 1964 79.8 W41 Agricultural administration, Agricultural education, Agricultural research, Pesticide residues, Weeds. BERBICIDAL ACTIVITY OF VAPORS OF 4-AMINO-3,5,6-TRICBLOROPIC-OLINIC ACID. W A Gentner Weeds 12(3) 239-240 Jul 1964 79.8 W41 Amino-3,5,6-trichloropicinolinic acid, 4-, Biological assay, Kidney beans, Vapors. RESPONSE OF SELECTED AND RANDOM PLANTINGS OF JOHNSONGRASS (SORGHUM BALEPENSE) TO DALAPON. K C Hamilton B Tucker Weeds 12(3) 220-222 Jul 1964 79.8 W41 Dalapon, Dichloropropionic acid, 2,2-, Poliar application, Sorghum. PARAQUAT FOR SELECTIVE CONTROL OF RANGE WEEDS. B L Kay Weeds 12(3) 192-194 Jul 1964 79.8 W41 California, Clover, Dimetyhl-4,4 -dipyridylium, 1,1;-, Elymus, Pestuca, Grasses, Hordeum, Lolium, Paraquat, Plant injuries, Ranges, Vetch, Weeds. THE MODE OF ACTION OF DIPHENAMID (N, N-DIMETHYL 2, 2-DI-PBENYLACETAMIDE) IN PLANTS. C D Kesner Diss Abstr Sect B 27 (12,PT.1), 4203B Jun 1967 Z5055.049253 Aspergillus candidus, Diphenamid, Diphenylacetamide, 2,2-, Grasses, Metabolites, Plant metabolism, Soil fungi, Tomatoes, Trichoderma viride. 7127-68 A STUDY OF FACTORS INFLUENCING THE EFFECTIVENESS OF DIQUAT (101 -ETBYLENE-202 -DIPYRIDYLIUM DIBROMIDE) FOR POTATO VINE KILLING. Mahadeva Diss Abstr Sect B 27 (12, PT. 1), 4204B Jun 1967 Z5055.049D53 Crop yields, Diguat., Berbicides, Humidity, Light, Pesticide application, Potatoes, Temperature.

20 7128-68 7128-68 PLANT EXTRACTS, RESIDUES, AND SCIL MINEFALS IN RELATION TO COMPETITION OF CUACKGRASS (AGROFYRON REPENS) WITH OATS AND ALFALFA. J H Ohman I Kommedahl Weeds 12(3) 222-231 Jul 1964 79.8 W41 Agropyron, Alfalfa, Nitrogen, Oats, Plant extracts, Plant residues, Poisonous plants, Soil extracts. 7129-68 CHLCROPHYLL FCRMATION IN EUGLENA 3 A TEST FOR HERBICIDES. C A Price M G Estrada Weeds 12(3) 234-235 Jul 1964 75.8 W41 Amitrole, Biological assay, Chlorophylls, Chloroplasts, Ethidnine, Euglena. 7130 - 68CHARACTERISTICS AND CONTROL OF SWAINSONPEA. W C Robecker A D Kerr V F Bruns Weeds 12(3) 189-191 Jul 1964 79.8 W41 Swainsonia, T, 2,4,5-, TBA, 2,3,6-, Western United States, 2-(2,4,5-trichlorophenoxy) propionic acid, 2,4-D. 7131-68 WEED SCIENCE - REVOLUTION IN AGRICULTURAL TECHNOLOGY. W C Shaw Weeds 12(3) 153-162 Jul 1964 79.8 W41 Agricultural outlook, Agricultural production economics, Agricultural productivity, Chemical control (weeds), Horbiging Weeds Herbicides, Weeds. 7132-68 AN EVALUATION OF ATRAZINE, SIMAZINE, MONURON AND DIURON ON TEN HAWAIIAN SUGAR CANE PLANTATIONS. K A Sund Weeds 12(3) 215-219 Jul 1964 79.8 W41 Atrazine, Chloro-4,6-bis(ethylamino)-6-isoprophylamino-s-triazine, 2-, Diuron, Hawaii, Monuron, Simazine, Sugarcane.

## **Other Pests**

7133+68 LEPTOSPIRES ISOLATED FROM NUTRIA. Amer Vet Med Ass J 142(2) 146 15 Jan 1963 41.8 AM3 Leptospira, Mycocastor, Nutria. 7134-68 LEUCODEFMIA-LIKE DISEASE IN THE CULTURE OF GIANT AFRICAN SNAIL ACHATINA FULICA BOWDICH. P D Srivastava Indian J Entonol 28 (3), 412-413 Sep 1966 420 IN23 Achatina fulica, Diseases, Leucodermia, Snails.

## **30 LIVESTOCK PROTECTION**

7135-68 CALCIUM REQUIREMENTS OF TURKEY BREEDER HENS. S L Balloun D L Miller Poultry Sci 43(2) 378-381 Mar 1964 47.8 AM33P Animal nutrition, Calcium, Egg production, Turkey eggs, Turkeys. 7136-68 PHYSIOLOGICAL AND PHARMACOLOGICAL PACTORS WHICH INFLUENCE THE INCIDENCE OF ACUTE PULMONARY ALTERATIONS FOLLOWING VAGO-TOMY IN THE DOMESTIC COCK. R E Burger M R Fedde Poultry Sci 43(2) 384-393 Mar 1964 47.8 AM33P Mar 1964 47.5 AB392 Cocks, Pentobarbital sodium, Phenoxybenzamine, Pulmonary edema, Reserpine, Vagotomy. 7137-68 137-68 INFLUENCE OF DIETARY ZINC, CALCIUM AND VITAMIN D FOR HENS ON ZINC CONTENT OF TISSUES AND EGGS AND ON BONE COMPOSITION. E W Kienholz M L Sunde W G Hoekstra Poultry Sci 43(3) 667-675 May 1964 47.8 AM33P Bones, Calcium, Chickens, Feed additives, Tissues, Vitamin D, Zinc. 7138-68 THE INCIDENCE OF SPONTANEOUS PATHOLOGIC CHANGES IN AORTAS OF THE INCIDENCE OF SFONTANEOUS PAT GROWING TUBREYS. B E McDonald H R Bird J J Lalich Poultry Sci 43(2) 341-352 Mar 1964 47.8 AM33P Aneurysms, Aorta, Sex, Turkeys. 7139-68 ZINC AVAILABILITY IN THE CHICK AS AFFECTED BY PHYTATE, CAL-CIUM AND ETHYLENEDIAMINETETRAACETATE. B L O Dell J M Yohe J E Savage Poultry Sci 43(2) 415-461 Mar 1964 47.8 AM33P Calcium, Chicks, Phytates, Zinc. 7140-68 POTENTIATION OF CHLORTETRACYCLINE IN LAYING CHICKENS. A B Robblee D R Clandinin Poultry Sci 43(2) 462-466 Mar 1964 47.8 AM33P Calcium, Chickens, Chlortetracycline, Eggs, Terephthalic acid. 7141-68 STUDIES ON THE DIETARY REQUIREMENT AND INTERACTION OF MAG-NESIUM WITH ANTIBIOTICS IN TURKEYS TO 4 WEEKS OF AGE. T W Sullivan Mar 1964 47.8 AM33P Antibiotics, Magnesium, Penicillin, Streptomycin, Turkeys. 7142-68 N2-00 INFLUENCE OF VITAMIN D ON AVRIOUS ASPECTS OF THE REPRODUC-TIVE PROCESS IN MATURE HENS. J L Turk J McGinnis Poultry Sci 43 (3) 539-583 May 1964 47.8 AM33P Chickens, Eggs, Reproduction, Vitamin D. 7143-68 THE UTILIZATION BY THE CHICK OF CALCIUM FROM DIFFERENT SOURCES. P W Waldroup C B Ammerman R H Harms Poultry Sci 43(1) 212-216 Son 1964 47.8 AM33P Ca. tum, Chicks.

7156-68

### Diseases

7144-68 CCHMON FROBLEMS IN THE PIG. Vet Rec 74(32) 865-871 11 Aug 1962 41.8 V641 Anemia, Pneumonia, Rhinitis, Svine. 7145-68 HOG CBOIERA IS ON THE WAY OUT. Amer Vet Med Ass J 147(6) 681-683 15 Sep 1965 41.8 AM3 Germ-free life, Bog cholera, Swine. 7146-68 POSSIBLE HAZARDS IN THE VETERINARY USE OF ANTIBIOTICS WITH PARTICULAR REFERENCE TO THEIR USE AS FOOD ADDITIVES. Vet Rec 76(4) 110-111, 4 REFS. 25 Jan 1964 41.8 V641 Antibiotics, Food additives, Residues. 7147-68 EXPERIMENTAL ORNITBOSIS IN CALVES. Amer Vet Med Ass J 142(6) 656 15 Mar 1963 41.8 AM3 Calves, Ornithosis, Turkeys. 7148-68 THE USE AND VALUE OF LABORATORY AND SKIN TESTS IN THE DIAG-NOSIS OE JCENE S DISEASE. Vet Rec 74 (37) 990-991 15 Sep 1962 41.8 V641 Johne s disease, Johnin test. 7149-68 REPORT OF THE COMMITTEE ON FOWL PEST, 1962. Vet Rec 74(14) 427-428 07 Apr 1962 41.8 V641 Newcastle disease, Newcastle disease vaccines, Poultry. 7150-68 DISEASE ON A LARGE SCALE. Vet Rec 76(34) 910-911 22 Aug 1964 41.8 V641 Animal diseases, Breeding. The Times Supplement of Agriculture, July 7, 1964. 7151-68 TREATMENT OF ANIMALS POISONED BY ORGANIC FBOSPBORUS COMFOUNDS. Amer Vet Med Ass J 142(1) 48 01 Jan 1963 41.8 AM3 Phosphorus, Poisoning. 7152-68 MYCOTCXICOSIS AND ANIMAL DISEASE. Vet Rec 74(36) 963-964 08 Sep 1962 41.8 V641 Animal diseases, Feed, Mycotoxicosis. 7153-68 LIMITATIONS OF LUNGWORM VACCINE. Amer Vet Med Ass J 147(4) 363 15 Aug 1965 41.8 AM3 Dictyocaulus, Immunization, Verminous bronchitis. 7154-68 ANTIBIOTICS IN MILK--POSTPONEMENT OF M.B.B. REDUCED PRICE SCBEME. Vet Rec 76(9) 250-251 29 Feb 1964 41.8 V641 Antibiotics, Milk, Prices. 7155-68 ISOLATION OF ENTEROVIEUSES FROM INTESTINAL TRACT OF SWINE. Amer Vet Med Ass J 142(4) 405 15 Feb 1963 41.8 AM3 Enteroviruses, Intestines, Swine, Virus diseases (animals).

TOXICITY IN GROUNDNUTS. Vet Rec 74(36) 964 08 Sep 1962 41.8 V641 Aflatoxin, Feed, Feanuts. 7157-68 ISU VETERINARIANS SUSPECT TWO WEEDS AS CAUSE OF SEASONAL SWINE DISEASE. Amer Vet Med Ass J 147(9) 994-995 01 Nov 1965 41.8 AM3 Lamb s guarters, Pigweed, Seasonal swine disease, Swine, Weeds. 7158-68 SIXTH INTERNATIONAL SYMPOSIUM ON DISEASES OF ZOO ANIMALS. Vet Rec 76(30) 822-824 25 Jul 1964 41.8 V641 Animal diseases, Zoological gardens. 7159-68 EFFECTS OF PAROMONYCIN SULPATE ON BLACKHEAD IN TURKEYS. Amer Vet Med Ass J 142(1) 53 01 Jan 1963 41.8 AM3 Blackhead, Metronidazole, Paromomycin sulfate, Turkeys. 7160-68 A REPORT OF THE AVMA MASTITIS COMMITTEE. THE VETERINARY PROFESSION AND PROGRAMS OF MILK QUALITY CONTROL. Amer Vet Med Ass J 147(2) 154-156 15 Jul 1965 41.8 AM3 Dairy cattle, Germ-free life, Mastitis. 7161-68 DIBYDROSTREPTOMYCIN THERAPY OF BOVINE VIBRIOSIS. Amer Vet Med Ass J 142(8) 880 15 Apr 1963 41.8 AM3 Cattle, Dihydrostreptomycin, Vibriosis. 7162-68 USE OF IRRADIATED VACCINES INCREASING. Amer Vet Med Ass J 147(6) 652 15 Sep 1965 41.8 AM3 Helminthiasis, Immunization, Irradiation. 7163-68 FLUGRESCENT ANTIBODY STUDIES FOR RABIES IN WILDLIFE. Amer Vet Med Ass J 142(1) 53 01 Jan 1963 41.8 AM3 Foxes, Mice, Rabies, Skunks. 7164-68 RABIES IN DOGS AND MAN SBARPLY REDUCED. Amer Vet Med Ass J 147(3) 259 01 Aug 1965 41.8 AM3 Dogs, Buman diseases, Rabies. 7165-68 LYMPHOCYTE COUNTS RELATING TO BOVINE LYMPBOSARCOMA. Amer Vet Med Ass J 142(2) 181-182 15 Jan 1963 41.8 AM3 Bovine lymphosarcoma, Cattle, Lymphocytes, Lymphosarcoma. 7166-68 TBIABENDAZOLE AND TRICBINAE. Amer Vet Med Ass J 147(11) 1262 01 Dec 1965 41.8 AM3 Thiabendazole, Trichinae. 7167-68 INFEPECTIVITY OF FURAZOLIDINE IN OVINE VIBRIOSIS. Amer Vet Med Ass J 142(1) 54 01 Jan 1963 41.8 AM3 Lambs, Ovine vibriosis, Parturition, Vibrios. 7168-68 ANAPLASMOSIS VACCINE ANNOUNCED. Amer Vet Med Ass J 147(2) 173 15 Jul 1965 41.8 AM3 Anaplasmosis, Cattle, Immunization. 7169-68 PBAGE TYPING OF STAPHYLOCOCCUS AUREUS. Amer Vet Med Ass J 142(6) 657 15 Mar 1963 41.8 AM3

Bacteriophages, Mastitis, Staphylococcus.

#### 30 7169-68

30 7170-68 7170-68 SALMONELLA PROBLEM RECEIVES PRIMARY ATTENTION AT AVMA COUN-CIL MEETING. Amer Vet Med Ass J 147(11) 1249-1250 Ol Dec 1965 41.8 AM3 Animal nutrition, Germ-free life, Salmonellosis. 7171-68 PERIODICITY OF DIROFILARIA IN THE PERIPHERAL CIRCULATION CF DOGS. Amer Vet Med Ass J 142(1) 22 01 Jan 1963 41.8 AM3 Circulatory system, Dirofilaria, Dogs, Microfilarial infestations. 7172-68 SKUMKS AND COWS ARE RABIES IBREAT IN IOWA. Amer Vet Med Ass J 147(2) 187 15 Jul 1967 41.8 AM3 Animal vectors, Cattle, Iowa, Rabies, Skunks. 7173-68 INFECTIVITY STABILITY CF FOOT-AND-MOUTH DISEASE VIRUS. Amer Vet Med Ass J 142(4) 406 15 Feb 1963 41.8 AM3 Foot-and-mouth disease, Infectious diseases. 7174-68 SUSPECTED CASES OF WESTERN ENCEPBALITIS ON INCREASE. Amer vet Med Ass J 147(10) 1156 15 Nov 1965 41.8 AM3 Aedes, Culex, Insect vectors. 7175-68 EIMERIA MAXIMA IN GEORGIA BROILERS. Amer Vet Med Ass J 142(7) 779 01 Apr 1963 41.8 AM3 Chicken types (meat), Coccidiosis, Eimeria. 7176-68 WISCONSIN ERADICATES BRUCELLOSIS. Amer Vet Med Ass J 147(2) 187 15 Jul 1965 41.8 AM3 Brucellosis, Cattle, Immunization, Wisconsin. 7177-68 FOOT-AND-MOUTH DISEASE VACCINE-PRODUCTION OF ANTIGEN IN CULTURE. Amer Vet Med Ass J 142(2) 182-183 Antigens, Cattle, Foot-and-mouth disease, Viral vaccines, Virus diseases (animals). 7178-68 78-68 FIRST POLICMYELITIS EPIZOOTIC IN LARGE PRIMATES UNDER STUDY. Amer Vet Med Ass J 147(2) 187-188 15 Jul 1963 41.8 AM3 Epizootic diseases, Immunization, Poliomyelitis, Primates. 7179-68 SUSCEPTIBILITY TO HOG CHOLERA MAY BE RELATED TO BREED. Amer Vet Med Ass J 142(6) 638 15 Mar 1963 41.8 AM3 Animal disease resistance, Hog cholera virus. 7180-68 WILDLIFE RABIES INCREASES. Amer Vet Med Ass J 147(2) 132 15 Jul 1965 41.8 AM3 Foxes, Rabies, Skunks, Wildlife diseases. 7181-68 DETECTION OF BOVINE BRUCELLOSIS BY ACIDIFIED PLATE TEST ANTIGENS. Amer Vet Med Ass J 142(4) 407 15 Feb 1963 41.8 AM3 Abortion, Bovine brucellosis, Brucella, Brucella abortus antigens, Brucellosis, Cattle. 7182-68 POLISEROSITIS-ARTERITIS COMFLEX IN SWINE. Amer Vet Med Ass J 147(3) 244 01 Aug 1965 41.8 AM3 Glasser s disease, Hemophilus, Mycoplasma, Polyserositis, Swine. 7183-68 COMBINED SEROLOGIC TESTS MOST ACCURATE FOR IDENTIFYING BRUCELLCSIS REACTORS. Amer Vet Med Ass J 142(8) 883 PAGE 38

15 Apr 1963 41.8 AM3 Brucella, Brucellosis, Cattle, Serological tests. 7184-68 RAM EPIDIDYMITIS VERSUS BRUCELLOSIS. Amer Vet Med Ass J 147(3) 252 01 Aug 1965 41.8 AM3 Brucella, Brucellosis, Epididymitis, Rams. 7185-68 BLOOD SEBUM FROTEIN FROM MINK WITH ALEUTIAN DISEASE. Amer Vet Med Ass J 142(2) 183 15 Jan 1963 41.8 AM3 Aleutian disease, Aleutian minks, Blood serum, Globulins, Minks, Proteins. 7186-68 RESPONSE OF COWS AND CALVES TO A PSITTACOSIS-LYMFHO-GRANULOMA GROUP AGENTS. Amer Vet Med Ass J 142(6) 656 15 Mar 1963 41.8 AM3 Anemia, Cattle, Erythrogenesis, Leukopenia, Miyagawanella group viruses. 7187-68 TICKS IN THE UNITED STATES SERVE AS VECTORS OF DISEASE. Amer Vet Med Ass J 142(4) 453 15 Feb 1963 41.8 AM3 Anaplasmosis, Boophilus, Dermacentor, Insect vectors, Ixodides, Piroplasmosis, Rocky mountain spotted fever, Spirochetosis, Tick paralysis, Tularemia. 7188-68 BRUCELLA-VACCINATED CATTLE HAVE FEWER ABORTIONS, INFECTED LESS EASILY. Amer Vet Med Ass J 142(8) 883 15 Apr 1963 41.8 AM3 Abortion, Brucella abortus vaccines, Cattle. 7189-68 PROCAINE AS AN ANTIBIOTIC AND ANTIFUNGAL AGENT. Amer Vet Med Ass J 142(2) 132 15 Jan 1963 41.8 AM3 Procaine, Proteus, Pseudomonas, Staphylococcus. 7190-68 CHANGES IN ENDOMETRIUM OF VIBRIO FETUS-INFECTED AND NONINFECTED HEIPERS. Amer Vet Med Ass J 142(6) 658-659 15 Mar 1963 41.8 AM3 Cattle, Endometrium, Fetus, Vibrio. 7191-68 191-68 ANTIDOTE FOR TANNIC ACID POISONING IN RABBITS. Amer Vet Med Ass J 142(4) 404 15 Feb 1965 41.8 AM3 Antidotes, Calcium hydroxide, Poisoning, Rabbits, Tannic acids. 7192-68 SIGNIFICANCE OF JOHNIN TEST ON NATURALLY INFECTED CATTLE. Amer Vet Med Ass J 142(7) 783 01 Apr 1963 41.8 AM3 Cattle, Johnin test, Mycobacterium. 7193-68 PSOROPTIC CATTLE SCABLES ERADICATION ACTIVITIES FOR 1962. Amer Vet Med Ass J 142(3) 263 01 Feb 1963 41.8 AM3 Cattle, Germ-free life, Psoroptes, Scabies. 7194-68 ARIFT VALLEY PEVER IN CALVES, GOATS AND PIGS. Amer Vet Med Ass J 142(6) 659 15 Mar 1963 41.8 AM3 Calves, Goats, Rift valley fever virus, Swine, Viremia. 7195-68 OVINE ABORTION VIRUS IN EWES AND PETUSES. Amer Vet Med Ass J 142(4) 405-406 15 Peb 1963 41.8 AM3 Abortion, Fetus, Ovine abortion virus, Sheep, Virus diseases (animals). 7196-68 HENAGGLUTINATION TEST FOR DIAGNOSIS OF HOG CHOLERA. Amer Vet Med Ass J 142(7) 767 01 Apr 1963 41.8 AM3 Antibody-coated erthrocytes, Hemagglutination-inhibition test, Hog cholera virus.

30 7223-68

7197-68 COCKERS AND LABRADORS MORE RESISTANT TO DISTEMPER. Amer Vet Med Ass J 142(2) 143 15 Jan 1963 41.8 AM3 Antibodies, Beagle dogs, Canine distemper, Cocker spaniel dogs, Dogs, Immunization, Labrador retriever dogs, Pointer dogs. 7198-68 COMPLEMENT-FIXATION TEST FOR DETECTING JAPANESE ENCEPHALITIS VIRUS. Amer Vet Med Ass J 142(6) 659-660 15 Mar 1963 41.8 AM3 Complement fixation, Japanese b encephalitis, Serum, Swine. 7199-68 199-68 TOXICITY OF COPPER SULFATE IN HEEF CATTLE. Amer vet Med Ass J 142(5) 509 01 Mar 1963 41.8 AM3 Animal nutrition, Cattle, Copper, Copper sulfate, Toxicology. 7200-68 AFRICAN BORSE-SICKNESS. Amer Vet Med Ass J 142(8) 894 15 Apr 1967 41.8 AM3 African horse sickness, Culicoides, Immunization, Insect vectors. 7201-68 201-68 DETECTICN OF ANTIPODIES TO STAPBYLOCOCCUS AUREUS IN CATTLE. Amer Vet Med Ass J 142(2) 181 15 Jan 1963 41.8 AM3 Antibodies, Cattle, Staphylococcus. 7202-68 THREE METHODS FOR CONTROLLING GRASS TETANY IN CATTLE AND SHEEP. Amer Vet Med Ass J 142(6) 623 15 Mar 1963 41.8 AM3 Cattle, Grass tetany, Magnesium, Sheep. 7203-68 INJECTED SAFONINS AS AHORTIFACIENTS. Amer Vet Med Ass J 142(4) 403 15 Feb 1963 41.8 AM3 Abortifacients, Abortion, Agave, Pregnancy, Saponins. 7204-68 FROPBYLACTIC TBERAPY AGAINST DIKOFILARIA IMMITIS. Amer Vet Med Ass J 142(6) 660-661 15 Mar 1963 41.8 AM3 Diethylcarbamazine, Dirofilaria, Dithiazanine, Dogs. 7205-68 AUJESKY S DISEASE IN DOGS. Amer Vet Med Ass J 142(3) 292 01 Feb 1963 41.8 AM3 Dogs, Herpes simplex, Pseudorabies. 7206-68 RIFT VALLEY FEVER IN LAMBS AND SHEEP. Amer Vet Hed Ass J 142(6) 655 15 Mar 1963 41.8 AM3 Aedes, Animal disease transmission, Lambs, Rift valley fever virus, Sheep. 7207-68 EFFECT OF RAHIES VIRUS INOCULATED INTO FOXES AND SKUNKS. Amer Vet Med Ass J 142(4) 404-405 15 Feb 1963 41.8 AM3 Foxes, Rabies, Skunks, Virus diseases (animals). 7208-68 ANTIDOTE FOR TANNIC ACID POISONING IN RAHHITS. Amer Vet Med Ass J 142(6) 662 15 Mar 1963 41.8 AM3 Antidotes, Calcium hydroxide, Poisons, Rabbits, Tannic acids. 7209-68 ANAPLASHOSIS COMPLEMENT-FIXATION RESPONSE IN CALVES. Amer Vet Med Ass J 142(3) 300 01 Feb 1963 41.8 AM3 Anaplasmosis, Animal disease transmission, Calves. 7210-68 EXPERIMENTAL TRANSMISSION OF ALEUTIAN DISEASE OF MINK. Amer Vet Med Ass J 142(6) 662 15 Mar 1963 41.8 AMB

Aleutian disease, Animal disease transmission, Minks. 7211-68 RESPIRATORY DISEASE IN VACCINATED FEEDER CATTLE. Amer Vet Med Ass J 142(5) 536 01 Mar 1963 41.8 AM3 Bowine rhinotracheitis waccines, Cattle, Pasteurella bacterins, Respiratory diseases. 7212-68 ROLE OF DEER IN EPIZOOTIOLOGY OF LEPTOSPIROSIS. Amer Vet Med Ass J 142(6) 662 15 Mar 1963 41.8 AM3 Deer, Epizootic diseases, Leptospira, Leptospirosis. 7213-68 PREGNANCY HORMONES AND HRUCELLACIDAL ACTIVITY IN HOVINE SERUM. Amer Vet Med Ass J 142(3) 300 Amer Vet neu ass o 142(5, 555 01 Feb 1963 41.8 AM3 Brucellosis, Cattle, Chorionic gonadotropins, Hormones, Serum. 7214-68 FETAL SKIN BARHORS MOST MICHOORGANISMS. Amer Vet Med Ass J 142(6) 642 15 Mar 1963 41.8 AM3 Brucellosis, Fetal skin, Microorganisms. 7215-68 GASTROINTESTINAL NEMATODES IN HEEF YEARLINGS. Amer Vet Med Ass J 142(5) 537-538 01 Mar 1963 41.8 AM3 Heef cattle, Festuca, Gastrointestinal system, Nematodes. 7216-68 HLOOD LOSS CAUSED HY HAEMONCHUS CONTORTUS IN SHEEP. Amer vet Med Ass J 142(3) 301 01 Feb 1963 41.8 AM3 Blood, Haemonchus, Radioactive tracers, Sheep. 7217-68 RESPONSE OF RAHHITS AND GUINEA PIGS TO VESICULAR STOMATITIS VIRUS. Amer Vet Med Ass J 142(4) 403-404 15 Feb 1963 41.8 AM3 Antibodies, Guinea pigs, Rabbits, Veicular stomatitis, Virus diseases (animals). 7218-68 PURIFICATION OF SWINE ENTEROVIRUSES AND SWINEPOX VIRUSES. Amer Vet Med Ass J 142(3) 301 01 Feb 1963 41.8 AM3 Cellulose, Enteroviruses, Swine, Swinepox. 7219-68 HOG CHOLERA HREAKS INFLUENCED HY BACTERIAL INFECTION. Amer Vet Med Ass J 142(6) 620 15 Mar 1963 41.8 AM3 Bacteria, Hog cholera, Hog cholera Breaks, Pasteurella bacterins, Salmonella bacterins. 7220-68 MUSCLE NECROSIS AND AMYLOIDOSIS IN THE WHITE PEKIN DUCK. Amer Vet Med Ass J 142(3) 301-302 01 Feb 1963 41.8 AM3 Amyloidosis, Carbohydrates, Metabolism, Muscles, Necrosis, Pekin ducks. 7221-68 SALMONELLOSIS IN THE DOG. Amer Vet Med Ass J 142(3) 302 01 Feb 1963 41.8 AM3 Animal nutrition, Dogs, Salmonella, Salmonellosis. 7222-68 CLOSTRIDIUM CHAVOEI COMMON IN NORMAL ADULT DOGS. Amer Vet Med Ass J 142(2) 143 15 Jan 1963 41.8 AM3 Hacteria, Clostridium, Dogs, Liver. 7223-68 SUSPECTED ANTBRAX IN A BITCB. E von Lustig-Lendva Vet Rec 76 (9) 262 29 Feb 1964 41.8 V641 Anthrax, Chlortetracycline, Dogs.

30 7224-68 7224-68 THE GROWTH OF RABIES VIRUS IN TISSUE CULTURE AND ITS USE AS A LIVING ATTENUATED VACCINE FOR DOMESTIC ANIMALS. M K Atelseth Jun 1967 Z5055.U49D53 Immunization, Livestock, Myxoviruses, Rabies virus, Tissue culture, Viral vaccines. 7225-68 GROUNDNUT TOXICITY. ASPERGILLUS FLAVUS TOXIN (AFLATOXIN) IN ANIMAI FRODUCTS PRELIMINARY COMMUNICATION. E Allcroft R E A Carnaghan vet Rec 74(31) 863-864, 5 REFS. 04 Aug 1962 41.8 v641 Aflatoxin, Cattle, Peanuts. 7226-68 CROTALARIA SPECTABILIS INTOXICATION IN RHESUS MONKEYS. J R Allen Amer Vet Med Ass J 147(10) 1067 15 Nov 1965 41.8 AM3 Crotalaria, Mcnkeys. 7227-68 227-06 THREE CASES OF SALMONELLA DUBLIN IN ADULT CATTLE ON THE SAME FARM. O F Amor A R Hopkins Vet Rec 74 (45) 1237-1238 10 Nov 1962 41.6 V641 Cattle, Salmonellosis. 7228-68 OCCURRENCE AND ETIOLOGY OF INFECTIOUS CALF DIARRHEA. H E Amstutz Amer Vet Med Ass J 147(12) 1360-1363 15 Dec 1965 41.8 AM3 Calves, Cattle, Diarrhea, Escherichia. 7229-68 THE RESPONSIBILITIES OF VETERINARY PRACTITIONERS AS TO THE USE OF PESTICIDES. R J Anderson Amer Vet Med Ass J 147(12) 1584-1587 15 Dec 1965 41.8 AM3 Insect population, Toxicology, Veterinary medicine. 7230-68 CATTLE LICE EBADICATION STUDIES- A-3-YEAR EVALUATION. D W Anthony L C Mott G D Mills Amer Vet Med Ass J 142(2) 130-132 15 Jan 1963 41.8 AM3 Anoplura, Bovicola, Cattle, Baematopinus, Linognathus. 7231-68 THE RELATIVE VALUE OF FORMALIN AND BETAPROPIOLACTONE AS IN-ACTIVATING AGENIS FOR NEWCASTLE DISEASE VACCINE. G S Appleton S B Hitchner R W Winterfield Vet Rec 76 (5) 162-163, 3 REFS. 01 Feb 1964 41.8 V641 Formaldehyde, Hydracrylic acid beta-lactone, Newcastle disease vaccines. 7232-68 DIFFUSE LIPCMATOSIS IN A BEIFER. B Arbuckle Vet Rec 74 (27) 768, 3 REFS. 07 Jul 1962 41.8 V641 Cattle, Lipomatosis. 7233-68 CISTEAMINE THERAPY OF PRIMARY BOVINE KETOSIS. S J Bacb K G Bibbitt Vet Rec 74(36) 965-966, 6 REFS. 08 Sep 1962 41.8 V641 Cattle, Cysteamine, Ketosis. 7234-68 CANINE LEUKOSIS IN SWEDEN. A W Backgren Amer Vet Med Ass J 147(5) 513 01 Sep 1965 41.8 AM3 Dogs, Leukosis, Lymphatic system. 7235-68 CANDIDIASIS IN PIGS IN NORTHWEST WISCONSIN. E D Baker L P Cadman Amer Vet Med Ass J 142(7) 763-767, 4 PLS. 01 Apr 1963 41.8 AM3 Candida, Moniliasis, Swine.

7236-68 AN ANALYSIS OF THE ELOAT COMPLEX AND PROGRESS TOWARDS ITS PREVENTION. E E Barley Amer Vet Med Ass J 147(12) 1397-1402 15 Dec 1965 41.8 AM3 Bloat, Legumes, Rumen. 7237-68 A CONDITION IN THE GOAT RESEMBLING SWAYBACK IN LAMBS. R M Barlow J M Robertson E C Owen R Proudfoot Vet Rec 74(26) 737-739, 18 REPS. 30 Jun 1962 41.8 V641 Goats, Swayback. 7238-68 HEREDITARY RETINAL ATROPHY IN THE POODLE. K C Barnett Vet Rec 74(24) 672-675, 4 REFS., 1 TAB. 16 Jun 1962 41.8 V641 Hereditary diseases, Poodle dogs, Retina. 7239-68 239-68 THE PRESERVATION OF BABESIA BIGEMINA, ANAPLASMA CENTRALE AND A. MARGINALE BY DEEP-FREEZING. S F Barnett Vet Rec 76(1) 4-8, 3 REFS., 6 TABS. O4 Jan 1964 41.8 V641 Anaplasmosis vaccines, Cold storage, Piroplasmosis. 7240-68 HYPOMYELINOGENESIS CONGENITA IN LAMBS. м вагг Vet Rec 76(30) 815-817, 3 REFS. 25 Jul 1964 41.8 V641 Border disease, Lambs. 7241-68 PIG DISEASES IN TBE RHODESIAS. N S Barron Vet Rec 74(14) 426 07 Apr 1962 41.8 V641 Ascariasis, Swine, Virus pneumonia. 7242-68 THYROID DYSPLASIA IN THE BUDGERIAR. J E Beach Vet Rec 76(1) 18-19, 4 REFS. 04 Jan 1964 41.8 V641 Birds, Deficiency diseases, Thyroid gland. 7243-68 VERTEBRAL OSTEOPHYTES IN THE CAT. R Beadman R N Smith A S King Vet Rec 76(37) 1005-1007, 5 REFS. 12 Sep 1964 41.8 V641 Cats, Osteophytes. 7244-68 PERFORATION OF THE OMASUM AND ULCERATION OF THE ABOMASUM IN A COW. A COW. T B Begg Vet Rec 74 (39) 1039-1040, 11 REFS. 29 Sep 1962 41.8 V641 Cattle, Ulcers. 7245-68 TOXIC CBEMICALS. M Berwyn-Jones Vet Rec 76(11) 330-331, 4 REFS. 14 Mar 1964 41.8 V641 Fluorosis, Legislation, Livestock. 7246-68 240-00 PNEUMONIA IN CALVES CAUSED BY PARAINFLUENZA VIRUS TYPE 3. A O Betts J R Jennings A R Omar Z E Page J B Spence Vet Rec 76 (13) 382-384, 7 REFS. 28 Mar 1964 41.8 V641 Calves, Pneumonia. 7247-68 EFFECT OF INGESTED DISINFECTANTS ON CHICKS. B W Bierer C F Risher D E Roebuck Amer Vet Med Ass J 142(5) 512-513 01 Mar 1963 41.8 AM3

Chickens, Coal tar, Cresylic acid, Sodium orthophenylphenate, Toxicology.

30 7271-68

7248-68 CHOLELITHIASIS CAUSING OBSTRUCTIVE JAUNDICE IN A BOXER DOG. R M Einns Vet Rec 76(9) 239-243, 15 REFS., 1 TAB. 29 Feb 1964 41.8 V641 Callstones, Jaundice. 7249-68 CHRONOLOGIC EVALUATION OF TETRATOGENICITY IN SHEEP FED VERATOR CALIFORNICUM. W Binns J I Shupe K F Keeler L F James Amer Vet Hed Ass J 147(8) 839-842, 3 FIGS. 15 oct 1965 41.8 AM3 Fetal death, Sheep, Veratrum. 7250-68 DERMATOFHYTOSIS (RINGWORM) PATHOGENESIS, DIAGNOSIS, AND TREATMENT. J C Blackmore Amer Vet Med Ass J 147(12) 1470-1474 15 Dec 1965 41.8 AM3 Dermatophytosis, Microsporum, Ringworm, Trichophyton. 7251-68 GRANULOCYTOPOTESTS IN GERMEREE MICE. D R Boggs F A Chervenick J C Marsh H I Pilgrim G E Cartwright M M Wintrobe Soc Exp Biol Med Froc 125 (1), 325-330 REF May 1967 442.9 SO1 Germ-free life, Granulocytopoiesis, Mice. 7252-68 ARSENICAL FOISONING OF RACE HORSES. E Booth Vet Rec 76(11) 331 14 Mar 1964 41.8 V641 Arsenic, Foisoning, Race horses. 7253-68 HUMAN TUBERCULOSIS IN AN CTTER. Amer Vet Med Ass J 147(10) 1074 15 Nov 1965 41.8 AM3 Mycobacterium, Otters. 7254-68 METALDEHYDE FOISCNING. B Boswood Vet Rec 74(17) 517-518 28 Apr 1962 41.8 V641 Dogs, Metaldehyde, Poisoning. 7255-68 BRUCELLOSIS CONTROL AND ERADICATION NOTES AND PROPOSALS OF THE OFFORD WORKING GROUP. P W Bothwell A McDiarmid H G Bartram H A Mackenzie-Wintle D Vet Rec 74(41) 1091-1101, 27 REFS., 3 TABS. 13 Oct 1962 41.8 V641 Brucellosis. 7256-68 ANTIBIOTICS IN SLOW- AND QUICK-RELEASE BASES. G C Brander A Jones F K Neave F H Dodd R G Kingwill Vet Rec 76(11) 329-330, 1 TAB. 14 Mar 1964 41.8 V641 Antibiotics, Mastitis. 7257-68 YITAMIN D3 AND OVINE RING WOMB . G D Bridges Vet Rec 74(16) 494-495 21 Apr 1962 41.6 V641 Bormones, Parturition, Sheer, Uterus, Vitamin D3. 7258-68 A VACCINE FOR ANAPLASMOSIS. W E Brock I O Kliener C C Pearson Amer Vet Med Ass J 147(9) 948-951, 3 TABS Ol Nov 1965 41.8 AM3 Anaplasmosis vaccines, Cattle, Immunization. 7259-68 PLUOROSIS OF NON-INDUSTRIAL ORIGIN IN A DAIRY HERD. K N BURDS M Gitter M D Keeling Vet Rec 74(31) 860-861 O4 Aug 1962 41.8 V641 Dairy cattle, Flucrosis.

7260-68 FLUOROSIS CAUSES LAMENESS. K N Burns Amer Vet Med Ass J 147(7) 735 01 Oct 1965 41.8 AM3 Cattle, Fluorosis, Lameness. 7261-68 A NEW PENICILLIN. R S Cameron Vet Rec 74(46) 1278-1279, 8 REFS. 17 Nov 1962 41.8 V641 Bacteria, Chloramphenicol, Penicillin. 7262-68 OSTEOGENIC SARCOMA OF THE OESOPHAGUS IN A DOG. J R Campbell H M Pirie W L Weipers Vet Rec 76(9) 244-246, 4 REFS. 29 Feb 1964 41.8 V641 Dogs, Esophagus, Sarcoma. 7263-68 PORCINE GASTRIC ULCERS IN THE UNITED STATESO & REVIEW. D T Cappucci Veterinarian +oxford+ 4 (4), 213-218 REF Aug 1967 41.8 V6467 Gastrointestinal system, Livestock diseases, Swine, Ulcers. Abstract included. 7264-68 GROUNDNUT TOXICITY. R B A Carnaghan R Allcroft Vet Rec 74(34) 925-926, 13 REFS. 25 Aug 1962 41.8 V641 Aflatoxin, Feed, Hyperkeratosis, Peanuts, Poisoning. 7265-68 THE RECOVERY OF PASTEURELLA MULTOCIDA FROM LYOPHILISED CUL-TURES. G R Carter C Grinewitsch Vet Rec 74(31) 861, 2 REFS. 04 Aug 1962 41.8 V641 Blood, Culture media, Lyophilization, Pasteurellosis. SUDDEN DEATH IN A CALF ASSOCIATED WITH ADVANCED LYMPHATIC LEUCOSIS. P C Carwardine Vet Rec 76(29) 803, 3 18 Jul 1964 41.8 V641 3 REFS. Calves, Lymphosarcoma. 7267-68 CARBOMYCIN FOR PLEUROPNEUMONIA-LIKE ORGANISM INFECTION. R R Chalquest W E Babcock J E Fahey Amer Vet Med Ass J 147(12) 1672 15 Dec 1967 41.8 AM3 Carbomycin, Pleuropneumonia-like organisms, Poultry. 7268-68 FIRST REPORT OF JCHNE S DISEASE IN THE SUDAN. A Q Chaudhari M T Fawi H M Obeid Vet Rec 76(9) 246-247, 10 REFS. 29 Feb 1964 41.8 V641 Goats, Johne s disease, Livestock. 7269-68 MYCOTOXICOSIS AND ANIMAL DISEASE. Vet Rec 74 (44) 1194 03 Nov 1962 41.8 V641 Livestock, Mycotoxicosis. 7270-68 A MIXTURE OF DIAVERIDINE AND SULFAQUINOXALINE AS A COCCIDIO-STAT FOR POULTRY. I. PRELIMINARY STUDIES ON EFFICIENCY AGAINST EIMERIA TENELLA AND E. NECATRIX INFECTIONS, AND ON TOXICITY IN POULTRY. M L Clarke Vet Rec 74 (31) 845-848, 12 REFS., 4 TABS. 04 Aug 1962 41.8 V641 Coccidiosis, Poultry, Sulfaquinoxaline. 7271-68 A CASE OF BOVINE LYMPHOMA. F G Clegg Amer Vet Med Ass J 147(4) 382 15 Aug 1967 41.8 AM3 Cattle, Lymphoma.

30 7272-68 7272-68 HAEMOGLOBINAEMIA OF CATTLE ASSOCIATED WITH THE FEEDING OF ERASSICAE SPECIES. F G Clegg F K Evans Vet Rec 74(44) 1169-1176, 20 REFS., 4 TABS. 03 Nov 1962 41.8 V641 Anemia, Cattle, Kale. 7273-68 AN CUIDFEAK OF POISONING IN STORE CATTLE ATTRIBUTED TO BRA-ZILIAN GRCUNDNUT MEAL. F G Clegg H Bryson Vet Rec 74 (37) 992-994, 11 REFS. 15 Ser 1962 41.8 V641 Cattle, Feanut meal, Poisoning. 7274-68 ZINC BACITRACIN AND CHICK GROWTH. W E Coates G F Barrison Vet Rec 74(44) 1191-1192 03 Nov 1962 41.8 V641 Chicks, Growth factors, Penicillin, Zinc bacitracin. 7275-68 CHRONIC RHINITIS IN CATS. A J Cclegrave B Ingham J & Inglis, Vet Rec 76(2) 67-68 11 Jan 1964 41.8 V641 Cats, Rhinitis, Spiramycin. 7276-68 EVALUATION OF BACTERINS FOR CONTROL OF SWINE ABSCESSES. G H Conner J A Hotefer D E Ellis Amer Vet Med Ass J 147(5) 479-482, 3 TABS 01 Sep 1965 41.8 AM3 Abscesses, Cattle, Immunization, Staphylococcus, Streptococcus, Swine. 7277-68 ELBOR DYSPLASIA IN THE GERMAN SHEPHERD DOG. E A Corley Diss Abstr Sect B 27 (12,PT.1), 4216B Jun 1967 25055.049D53 Animal abnormalities, Animal genetics, Dogs, Dysplasia, Extremities, Radicgraphy. 7278-68 INFECTIOUS BOVINE RHINOTRACHEITIS ABORTION AND ITS RELATION-SHIF TO NUTRITION IN CALIFORNIA BEEF CATTLE. C S Crane Amer Vet Med Ass J 147(12) 1308-1309 15 Dec 1965 41.8 AM3 Abortion, Animal nutrition, California beef cattle, Cattle, Rhinotracheitis. 7279-68 ARSENICAL FOISONING OF RACEHORSES. H A Crawshaw Vet Rec 76(12) 354-355 21 Mar 1964 41.8 V641 Arsenic, Poisoning, Race horses, Sodium thiosulfate. 7280-68 BASIC SLAG TOXICITY IN CATTLE AND SHEEP. J P Crowley M A Murphy Vet Rec 74(44) 1177-1178, 4 REFS. 03 Nov 1962 41.8 V641 Basic slag, Cattle, Poisoning. 7281-68 LABRADOR PLAGUE P J Dalton Vet Rec 74(39) 1064 29 Ser 1964 41.8 V641 Skin diseases. 7282-68 242-68 THE OCCURRENCE AND DISTRIBUTION IN THE UNITED KINGDOM OF ANTIBODIES TO PARAINPLUENZA 3 AND INFECTIOUS BOVINE RHINO-TRACHEITIS VIRUSES IN BOVINE SERA. P S Davson J B Darbyshire Vet Rec 76 (4) 111-115, 18 REFS., 2 TABS. 25 Jan 1964 41.8 V641 Antibodies, Infectious bovine rhinotracheitis virus, Parainfluenza-3 virus. POTENCY TESTS OF SEMPYLE-TYPE RABIES VACCINES OF NERVOUS TISSUE ORIGIN FOR USE IN ANIMALS. D J Dean W M Evans I Sherman 42

Amer Vet Med Ass J 142(2) 156-158 15 Jan 1963 41.8 AM3 Habel test, Nervous system, Rabies. 7284-68 CHARACTERIZATION AND CLASSIFICATION OF NEWLY ISOLATED AVIAN ENTERIC VIRUSES. D R Deshmukh Jun 1967 25055.049D53 Chickens, Enteroviruses, Reoviruses. 7285-68 MYCOSIS IN A MANATEE. R P Dilbone Amer Vet Med Ass J 147(10) 1095 15 Nov 1965 41.8 AM3 Epidermophyton, Manatees, Mycosis. 7286-68 EPIZOOTIOLOGY OF EQUINE VIRAL RHINOPNEUMONITIS. E R Doll J T Bryans Amer Vet Med Ass J 142(1) 31-37, 15 REFS. 01 Jan 1963 41.8 AM3 Epizootic diseases, Equine rhinopneumonitis, Horses. 7287-68 RUPTURE OF THE BLADDER IN A CALF. G P Doran C W Maclean Vet Rec 74 (27) 777 07 Jul 1962 41.8 V641 Bladder, Calves, Hernia. 7288-68 VACCINATION AGAINST JOHNE S DISEASE. T M Doyle Vet Rec 76(3) 73-77, 7 REFS., 2 TABS. 18 Jan 1964 41.8 V641 Immunization, Johne s disease. 7289-68 BOVINE LEUKEMIA. R M Dutcher Amer Vet Med Ass J 147(4) 369 15 Aug 1965 41.8 AM3 Leukemia, Lymphosarcoma. 7290-68 POLYARTHRITIS AND EPIPHYSEOLYSIS OF PIGS IN ENGLAND. FOLTANTHALTIS AND EPIPHYSEOLYSIS OF PIGS I F Duthie M C Lancaster Vet Rec 76 (10) 263-273, 21 REFS., 7 TABS. 07 Mar 1964 41.8 V641 Arthritis, Swine. 7291-68 IDENTIFICATION AND PERSISTENCE OF PHAGE TYPES OF STAPHYLO-COCCUS AUREUS IN DAIRY HERDS IN FLORIDA. G T Edds D A Sanders Amer Vet Med Ass J 147(12) 1665 15 Dec 1965 41.8 AM3 Dairy cattle, Florida, Mastitis, Staphylococcus. 7292-68 22-08 A SIMPLE TEST FOR DEPRIVATION OF COLOSTRUM IN PIGLETS. B L Edwards Vet Rec 74(17) 504-506, 7 REFS., 3 TABS. 28 Apr 1962 41.8 V641 Baby pigs, Colostrum, Sodium sulfite. 7293-68 RED SQUIRREL DISEASE. F B Edwards Vet Rec 74 (26) 739-741 30 Jun 1962 41.8 V641 Insect vectors, Squirrels, Wildlife diseases. 7294-68 THE EFFECT OF TYLOSIN AGAINST EXPERIMENTAL AND NATURAL IN-PECTION WITH MYCOPLASMA IN GOATS. M El Nasri Vet Rec 76(32) 876-877, 6 REFS., 1 TAB. 08 Aug 1964 41.8 V641 08 Aug 1964 41.8 V641 Antibiotics, Goats, Pleuroppeumonia. 7295-68 BASE COMPOSITION AND THERMAL DENATURATION OF DNA ISOLATED FROM ANAPLASMA MARGINALE. R D Ellender G T Dimopoullos Soc Exp Biol Med Proc 125 (1), 82-85 REF May 1967 442.9 So1

30 7317-68

Anaplasma marginale, Cattle, Deoxyribonucleic acid. 7296-68 296-68 AN UNUSUAL SPINDLE-CELL TUMCUR OF THE MANDIBLE OF A COW. H A Ellis D H Till Vet Rec 74(16) 472-474, 4 REFS. 21 Apr 1962 41.8 V641 Cattle, Neoplasms. 7297-68 PRENATAL BCG CHOLERA INFECTION A POTENTIAL SOURCE OF HOG CHOLERA. J L Emerson & L Delez Amer Vet Med Ass J 147(12) 1346-1349 15 Dec 1965 41.8 AM3 Germ-free life, Bcg cholera virus, Swine. 7298-68 CEREBELLAR BYPOPLASIA, BYPOMYELINOGENESIS, AND CONGENITAL TREMORS OF FIGS, ASSOCIATED WITE PRENATAL BOG CBOLERA VACCI-NATION CF SOWS. MAILON OF SONS. J L Emerson A L Delez Amer Vet Hed Ass J 147(1) 47-54, 9 PLS. 01 Jul 1965 41.8 AM3 Congenital tremors, Fetal death, Bog cholera virus, Hypomyelinogenesis, Hypoplasia, Swine. 7299-68 AN EVALUATION OF THE CALIFORNIA MASTITIS TEST AND THE NE-GRETTI FIELD TEST AS INDICATORS OF SUBCLINICAL BOVINE MASTI-TIS. R Eubank Vet Rec 74(38) 1017-1020, 10 REFS., 6 REFS. 22 Sep 1962 41.8 V641 California mastitis test, Diagnosis, Mastitis. 7300-68 BRACKEN POISONING OF FARM ANIMALS. W C Evans Vet Rec 76(13) 365-368, 7 REFS. 28 Mar 1964 41.8 V641 Avitaminosis, Livestock, Poisoning, Pteridium. 7301-68 THE CONTROL OF AN CUTBREAK OF PNEUMONIA IN BROILER CALVES WITB VIRUGON, A SYNTHETIC, ORAL ANTI-VIRAL AGENT. Vet Rec 76(9) 259-260, 3 REFS. 29 Feb 1964 41.8 V641 Calves, Virucides, Virus pneumonia. 7302-68 THE USE OF TBIOFURADENE AS A GROWTB STIMULANT AND ANTBEL-MINTIC IN THE PRODUCTION OF PORK IN THE BABAMAS. B K Fenton Vet Rec 74 (45) 1222-1225, 4 REFS., 1 TAB. 10 Nov 1962 41.8 V641 Belminthiasis, Nitrofurans, Swine. 7303-68 303-68 VACCINATION OF PUPPIES. A K Floeck G Holbrooke Vet Rec 76(6) 185, 2 REFS. 08 Feb 1964 41.8 V641 Canine distemper virus, Dogs, Immunization. 7304-68 TOXCPLASMCSIS IN FIGS. I. THE INFLUENCE OF AGE ON THE PATHOGENICITY OF TOXOPLASMA GONDII FOR PIGS. Vet Rec 76(27) 747-749, 16 REFS. 04 Jul 1964 41.8 V641 Swine, Toxoplasmosis. 7305-68 TOXOPLASMOSIS IN FIGS. II. - EXPERIMENTS ON THE PATHOGENIC-ITY OF TOXOPLASMA GCNDII FOR PIGS INFECTED BY DIFFERENT BOUTES. C Folkers Vet Rec 76(28) 770-774, 18 REFS., 1 TAB. 11 Jul 1964 41.8 V641 Swine, Toxcplasmosis. 7306-68 RECOVERY FROM GRASS SICKNESS. D M M Forth Vet Rec 76 (28) 791-792 11 Jul 1964 41.8 V641 Carbachol, Grass sickness, Borses.

7307-68 NIGROPALLIDAL ENCEPHALOMALACIA IN THE BORSE. M E Fowler Amer Vet Med Ass J 147(6) 607-616, 17 FIGS. 15 Sep 1965 41.8 AM3 Centaurea, Encephalomalacia, Horses, Nigropallidal encephalomalacia, Yellow star thistle. 7308-68 ACORN POISONING IN A COW AND A SBEEP. M E Fowler W P C Richards Amer Vet Med Ass J 147(11) 1215-1220, 23 REFS., 6 FIGS. 01 Dec 1965 41.8 AM3 Acorns, Cattle, Poisoning, Sheep. 7309-68 TICK-BORNE DISEASE CONTROL. J Francis Vet Rec 74 (25) 735 23 Jun 1962 41.8 V641 Breeding, Cattle, Insect vectors. NEWER KNOWLEDGE OF OVINE VIBRIOSIS. F W Frank D G Waldhalm W A Meinershagen L B Scrivner Amer Vet Med Ass J 147 (12) 1313-1318, 5 TABS. 15 Dec 1965 41.8 AM3 Bacterial diseases (animals), Sheep, Vibrio, Vibriosis. 7311-68 CHLORTETRACYCLINE FOR ELIMINATION OF ANAPLASMOSIS IN CARRIER CATTLE. T E Franklin J W Buff L C Grumbles Amer Vet Med Ass J 147(4) 353-356, 3 TABS. 15 Aug 1965 41.8 AM3 Anaplasmosis, Cattle, Chlortetracycline. 7312-68 THE EFFECT OF STAPHYLOCOCCAL TOXINS ON RUMINANT ERYTBROCYTES TREATED WITH DIFFUSABLE SUBSTANCES FORMED BY CORYNEBACTERIA. G Fraser Vet Rec 74 (26) 753-754, 6 REFS. 30 Jun 1962 41.8 V641 Bacteria, Bemolysins, Sheep, Toxins. 7313-68 ANTIVIRAL ACTIVITY OF BIGHER PLANTS AND PROPIONIN ON LYMEBO-CYTIC CBORIOMENINGITIS INFECTION. E Furusawa S Ramanathan S Furusawa Y K Woo W Cutting Soc Exp Biol Hed Proc 125 (1), 234-239 REF May 1967 442.9 SO1 Lymphocytic choriomeningitis virus, Magnolia kobus, Mice, Narcissus tazetta, Propionibacterium freudenreichii. 7314-68 STUDIES ON AN EXPERIMENTAL VACCINE FOR PROPHYLAXIS OF 7315-68 STANDARDIZED INFECTIONS FOR LABORATORY EVALUATION OF COM-POUNDS AGAINST & CBRONIC RESPIRATORY DISEASE COMPLEX IN CHICKENS. G O Gale C O Baughn Poultry Sci 43(1) 1 Jan 1964 47.8 AM33P 182-211 Chickens, Chronic respiratory disease, Escherichia, Mycoplasma, Pleuropneumonia-like organisms. 7316-68 MUSCULAR DYSTROPBY IN CALVES SIMULTANEOUS PERACUTE AND PROGRESSIVE TYPES. P Gallagher Vet Rec 74(35) 936 01 Sep 1962 41.8 V641 Calves, Muscular dystrophy. 7317-68 ATPASE ACTIVITY OF THE ERYTHROCYTIC MEMBRANE IN ANAPLASHO-SIS AND OF ANAPLASHA MARGINALE. C F Garon G T Dimopoullos Soc Exp Biol Med Proc 125 (1), 310-313 REF May 1967 442.9 So1 Adenosinetriphosphatase, Anaplasma marginale, Anaplasmosis, Cattle, Erythrocytes.

#### 30 7318-68

#### HIHLIOGRAPHY

7318-68 PATHOLOGICAL CHANGES IN THE TARSI OF CATTLE SUFFERING FROM PARESIS SPASTICA, EXAMINED FY MEANS OF X-RAYS. A V Gastel-Jansen G H Frederick Vet Rec 74(46) 1260-1263, 1 REP. 17 Nov 1962 41.8 V641 Cattle, Paresis. 7319-68 CONFERENCES APPRAISE HOG CHOLERA ERADICATION EFFORTS. G H Geyer Amer Vet Med Ass J 147(6) 680-681 15 Sep 1965 41.8 AM3 Germ-free life, Hcg cholera, Immunization, Swine. 7320-68 PARAFILARIA MULTIFAFILLOSA IN THE HORSE. T E Gibson G A Perin P J N Pinsent Vet Rec 76(28) 774-777, 16 REFS. 11 Jul 1964 41.8 V641 Griseofulvin, Horses, Ringworm. 7321-68 THE CONTROL OF NEMATODIBUS FILLICOLLIS INFECTION BY STRATE-GIC ANTHELMINTIC MEDICATION. T E Gibson Vet Rec 76(11) 295-296, 4 REFS. 14 Mar 1964 41.8 V641 Bephenium hydroxynaphthoate, Nematodiasis, Sheep. 7322-68 GROUNDNUT TOXICITY ASPERGILLUS FLAVUS TOXIN (AFLATOXIN) IN ANIMAL FRODUCTS. W W C Gibsch Vet Rec 74(32) 884, 7 REFS. 11 Aug 1962 41.8 V641 Aflatoxin, Peanuts. 7323-68 GROUNDNUT TOXICITY. W W C Gibson Vet Rec 74(36) 961, 6 REPS. 08 Sep 1962 41.8 V641 Aflatoxin, Feed, Eyperkeratosis, Peanuts. 7324-68 THE ENTEROPATHOGENIC EFFECT OF ESCHERICHIA COLI IN RABBITS AND PIGS. M Gitter M Gitter Hrit Vet J 123 (9), 403-409 REP Sep 1967 41.8 V643 Autopsies, Escherichia coli, Genetics, Hog cholera, Immunization, Rabbits, Swine. 7325-68 UNUSUAL CEREHELLAR CONDITIONS IN PIGS. PART II. CEREHEL-LAR HYPCPLASIA IN PIGS. M Gitter P D G Bowen Vet Rec 74(43) 1152-1154, 16 REFS. 27 Oct 1962 41.8 V641 Hypoplasia, Swine. 7326-68 UNUSUAL CEREBELLAR CONDITIONS IN PIGS. PART 1. CEREBELLAR HERNIATION ASSOCIATED WITH VITAMIN A DEFICIENCY. M Gitter Vet Rec 74(43) 1150-1152, 6 REFS. 27 Oct 1962 41.8 V641 Avitaminosis, Bernia, Swine, Vitamin A. 7327-68 BRUSH TECHNIQUE FOR DETECTION OF FUNGUS DISEASES. BROSA IECENTION OF TOURIST FOR DEFICITION OF TOURIST FOR Amer Vet Med Ass J 147(8) 845 15 Oct 1965 41.8 AM3 Animal vectors, Brush technique, Culture media, Fungus diseases (animals). 7328-68 CYPRESS POISONING. CYPRESS POISONING. C M Gould Vet Rec 74(26) 743, 1 REF. 30 Jun 1962 41.8 V641 Cattle, Cupressus, Poisoning. 7329-68 INTENSIVE VEAL PRODUCTION AND A HITHEBTO UNTRIED NITBOFURAN-A PRELIMINABLY TRIAL. W V Gray Vet Rec 74(22) 628-630 PAGE 44

02 Jun 1962 41.8 V641 Calves, Escherichia coli bacterins, Nitrofurans, Veal. 7330-68 SYMPOSIUM ON CALF DISEASES. B J Green Vet Rec 76 (39) 1102 26 Sep 1964 41.8 V641 Calves, Livestock diseases. 7331-68 SALMONELLA AND THE U.S. MEAT INDUSTRY ACTION AND REACTION. A Greenberg Amer Vet Med Ass J 147(6) 675 15 Sep 1965 41.9 AM3 Meat packing industry, Salmonellosis, Sanitation. 7332-68 OBSERVATIONS ON AN AVIAN STRAIN OF PASTEURELLA HAEMOLYTICA. L W Greenham T J Hill Vet Rec 74(31) 861-863, 19 REFS., 2 TABS. 04 Aug 1962 41.8 V641 Culture media, Fowl cholera, Poultry. 7333-68 THE PATHOGENESIS OF GASTRO-ENTERITIS ASSOCIATED WITH ESCHE-RICHIA COLI. D W Gregory Vet Rec 76(6) 185-186 08 Feb 1964 41.8 V641 Bacteria, Gastroenteritis. 7334-68 EQUINE VIRAL ABORTION IN WESTERN MONTANA. M J Hadlow J K Ward Amer Vet Med Ass J 142(5) 506-509 01 Mar 1963 41.8 AM3 Abortion, Fetal death. 7335-68 LACTOGENIC IMMUNITY TO TRANSMISSIBLE GASTROENTERITIS OF SWINE. E O Haelterman Amer Vet Med Ass J 147(12) 1661 15 Dec 1965 41.8 AM3 Gastroenteritis, Immunization, Luteotropin, Swine. 7336-68 SUSPECTED MYASTHENIA GRAVIS IN A DOG. SUSPECTED MINISTERNIA GRAVIS IN A DOG. L W Hall R G Walker Vet Rec 74(17) 501-503, 5 REFS. 28 Apr 1962 41.8 V641 Animal diseases, Dogs, Muscles, Succinylcholine chloride. 7337-68 GASTRIC DYSPEPSIA IN CALVES. S A Ball Vet Rec 74(29) 814-816, 7 REPS., 1 TAH. 21 Jul 1962 41.8 V641 Calves, Indigestion. 7338-68 A PRACTITIONER S MASTITIS CONTROL PROGRAM. C J Haller Amer Vet Med Ass J 147(4) 346-349 15 Aug 1967 41.8 AM3 Dairy cattle, Mastitis, Pregnancy. 7339-68 EFFECT OF PASTEURELLA BACTERIN ON MORTALITY AND PNEUMONIA IN LANDS. A H Hamdy W D Pounden D S Bell Amer Vet Med Ass J 142(4) 379-381, 4 TABS 15 Feb 1963 41.8 AM3 .5 rep 1903 41.8 AM3 Hacterins, Lambs, Mortality, Pasteurella bacterins, Pneumonia. 7340-68 AU-68 A HAEMOLYTIC COCCO-HACILLUS RECOVERED FROM POULTRY. J F Harbourne Vet Rec 74(19) 566-567 12 May 1962 41.8 V641 Enteritis, Poultry, Pullorum disease. 7341-68 CONGENITAL DETACHMENT OF THE PROCESSUS ANCONEUS IN THE DOG. W C D Hare Vet Rec 74(18) 545-546 05 May 1962 41.8 V641 Bone dislocation, Dogs.

30 7364-68

7342-68 EFFECT OF FEEDING VARIOUS LEVELS CROTALARIA SPECTARILIS EFFECT OF FEEDING VARIOUS LEVELS CROTALARIA SPECTARILIS SEED CN TRE PERFORMANCE OF CRICKS, TURKEYS, AND FULLETS. R H Harms F W Waldroup C F Simpson Amer Vet Med Ass J 142(3) 260-263, 4 TAHS. 01 Feb 1963 41.8 AM3 Animal nutrition, Chickens, Crotalaria, Seeds, Turkeys. 7343-68 SOME CONGENITAL ABNORMALITIES IN THE REAKS AND SKULLS OF WILDFCWL. J Harrison J Kear Vet Rec 74(22) 632-633, 6 REFS. 02 Jun 1962 41.8 V641 Abnormalities, Reak, Game birds. 7344-68 FACTORS INFLUENCING THE SURVIVAL OF COLIFORMS IN TRE DUST OF DEEP LIITER HOUSES. E G Barry L A Hemsley Vet Rec 76(32) 863-867, 6 REFS., 2 TARS. 08 Aug 1964 41.8 V641 Hacteria, Formaldehyde, Poultry, Poultry houses. A RAEMOLYTIC COCCORACILLUS RECOVERED FROM POULTRY. E G Rarry Vet Rec 74(22) 640, 1 REF. 02 Jun 1962 41.8 V641 Poultry, Virus diseases. 7345-68 7346-68 TRE ASSESSMENT OF THE VALUE OF TOPICAL APPLICATIONS FOR TRE TREATMENT OF CONTAGIOUS FOOT-BOT IN SREEP, WITE PARTICULAR REFERENCE TO DICRLOROPHEN. C R Bart J C Malone W H Sparrow Vet Rec 74(14) 416-420, 6 REFS., 8 TARS. 07 Apr 1962 41.8 V641 Dichlorophene, Foot rot (animals), Sheep. 7347-68 THE INFLUENCE OF PRYSICAL FORM OF ROUGRAGES AND ANTIHIOTIC ADMINISTRATION ON PERFORMANCE, CARCASS CHARACTERISTICS, HEALTE, OF TRE RUMEN EPITHELIUM, RUMEN VOLATILE FATTY ACIDS AND LIVER ARSCESSES OF STEERS FED ALL-CONCENTRATE RATIONS. AND LIVER ABSENDED OF DEALER TO A 1878-4188R B W Harvey Diss Abstr Sect R 27 (12, PT. 1), 4187R-4188R Jun 1967 25055.049D53 Abscesses, Antibictics, Reef cattle, Carcasses, Chlortetracycline, Epithelium, Fatty acids, Feed concentrates, Liver diseases, Roughage, Rumen. 7348-68 CERVICAL AND UTERINE INFECTION IN TROROUGHERED MARES. C S Haselden J A Cunningham S A Glendinning Vet Rec 76(28) 791 11 Jul 1964 41.8 V641 Thoroughbred horses, Uterus. 7349-68 EXPERIMENTAL PRODUCTION AND CONTROL OF UROLITRIASIS. W W Hawkins Amer Vet Med Ass J 147(12) 1321-1323 15 Dec 1965 41.8 AM3 Livestock diseases, Urinary calculi, Urolithiasis. 7350-68 AMINOPRYLLINE POISCNING IN LOGS. D L Raxby Vet Rec 74(30) 832, 1 REF. 28 Jul 1962 41.8 V641 Caffeine, Dogs, Pcisoning. 7351-68 CHEMICAL CRANGES IN NERVES FROM HIRDS AFFECTED BY FOWL PARA-LYSIS. P J Heald H G Radman R F Frunival P A L Wight Poultry Sci 43(3) 701-710 May 1964 47.8 AM33P Avian lymphomatosis, Chickens, Nerves. 7352-68 STATUS OF INACTIVATED VACCINES FOR HOG CHOLERA. J M Hejl Amer Vet Med Ass J 142(2) 127-129 1963 41.8 AM3 15 Jan Hog cholera, Immunization, Inactivated vaccines, Swine.

7353-68 RISTOMONIASIS ( BLACKREAD ) IN RROILER CRICKENS. L A Remsley Vet Rec 76(37) 1017-1018, 1 TAH. 12 Sep 1964 41.8 V641 Rlackhead, Chickens. 7354-68 MYODEGENERATION IN CATTLE GRAZING CASSIA SPECIES. J H Renson J W Dollahite C H Hridges R R Rao Amer Vet Med Ass J 147(2) 142-145, 2 PLS. 15 Jul 1965 41.8 AM3 Cassia, Cattle, Myodegeneration. 7355-68 A SIMPLE TEST FOR ROVINE LIVER DYSFUNCTION. J C Hindson Vet Rec 74 (34) 922-923 25 Aug 1962 41.8 V641 Cattle, Liver function tests. 7356-68 INFECTIOUS HRONCRITIS VIRUS TYPES--INCIDENCE IN THE UNITED STATES. Amer Vet Hed Ass J 147(12) 1671 15 Dec 1967 41.8 AH3 Infectious bronchitis, Poultry, Serological tests, United states. 7357-68 DISINFECTED WATER SUFPRESSES PSEUDOMONAS IN MICE. M G Hoag Amer Vet Med Ass J 147 (10) 1127 15 Nov 1965 41.8 AM3 Mice, Pseudomonas, Water. 7358-68 ISOLATION OF MYCOPLASMA SP. FROM THE OVIDUCTS OF DAIRY COWS. M Roare D A Raig Vet Rec 76 (35) 956-957, 4 REFS. 29 Aug 1964 41.8 V641 Dairy cattle, Fertility, Mycoplasmosis. 7359-68 INFECTIOUS HEONCHITIS VIEUS- TISSUE DISTRIBUTION. M S Rofstad Amer Vet Med Ass J 147(12) 1671 15 Dec 1965 41.8 AM3 Infectious bronchitis, Poultry, Virus diseases (animals). 7360-68 SUSPECTED SKELETAL SCURVY IN THE DOG. J R Holmes Vet Rec 74(29) 801-813, 16 REFS., 6 TARS. 21 Jul 1962 41.8 V641 Ascorbic acid, Hone diseases, Dogs, Scurvy. 7361-68 SOME EXAMPLES OF SECONDARY CIRCULATORY DYSFUNCTION IN CATTLE. J R Holmes Vet Bec 74 (20) 569-573, 1 BEF., 3 TAES. 19 May 1962 41.8 V641 Cattle, Circulatory system. 7362-68 OSTEOGENESIS IMPERFECTA IN LAMES. J R Holmes J R Raker E T Davies Vet Rec 76 (36) 980-984, 17 REFS., 1 TAH. 05 Sep 1964 41.8 V641 Hone diseases, Lambs. 7363-68 URETHRAL CALCULI IN A STEER. J W H Holmes E P Nelson Vet Rec 76(12) 343 21 Mar 1964 41.8 V641 Cattle, Urinary calculi. 7364-68 AN OUTHREAK OF SALMONELLA PULLORUM INFECTION IN TURKEY POULTS. R G Rolmes Vet Rec 74(39) 1046-1047, 4 REFS. 29 Sep 1962 41.8 V641 Poults, Salmonellosis.

30 7365-68 7365-68 EFFECT CF FLUORIDES IN CATTLE. B Boogstratten Amer Vet Med Ass J 147(5) 498 01 Sep 1965 41.8 AM3 Cattle, Fluorides, Sodium fluoride. 7366-68 SURGICAL INTERFERENCE IN TORSION OF THE CANINE STOMACH. D L Hopkins Vet Rec 74(23) 667-668 09 Jun 1962 41.8 V641 Dogs, Stomach. 7367-68 A CASE OF EBYSIPELOTHRIX MONOCYTOGENES (LISTERIA MONOCYTO-GENES) IN THE CAT. W P Bowat Vet Rec 74(29) 821-822 21 Jul 1962 41.8 V641 Cats, Listeriosis. 7368-68 EFFECT OF REVACCINATION ON DISTEMPER ANTIBODY LEVELS. D G Bowell Vet Rec 76(6) 184-185, 2 REFS. 08 Feb 1964 41.8 V641 Antibodies, Canine distemper, Immunity. 7369-68 SUSPECTED SYNTBETIC OESTROGEN POISONING IN MINK. J M Bowell C M Fickering Vet Rec 76(6) 169-170, 5 REFS. 1 TAB. 08 Feb 1964 41.8 V641 Estrogens, Minks, Poisoning, Sterility. 7370-68 CALCIFICATION OF THE ADRENAL GLANDS IN A DOG. J MCC Howell A N CTHTOd Vet Rec 74(16) 469-472, 6 REFS. 21 Apr 1962 41.8 V641 Adrenal glands, Calcification (physiological), Dogs. 7371-68 A CASE OF DISTENSION OF THE CMASUM. W A Bughes J R Cartwright Vet Rec 74(24) 676-677 16 Jun 1962 41.8 V641 Cattle, Omasum, Peritonitis. 7372-68 SUSPECTED SKELETAL SCURVY IN THE DOG. G C Hunt Vet Rec 74(44) 1190-1191 03 Nov 1962 41.8 V641 Dogs, Scurvy, Vitamin C. 7373-68 SURGICAL TREATMENT OF CBRONIC OTITIS IN A POODLE. J Iffey Vet Rec 76(7) 203 15 Feb 1964 41.8 V641 Otitis, Poodle dogs, Surgery. 7374-68 BACTERIAL GASTRO-ENTERITIS CUTBREAKS IN CATS. J Iffey Vet Rec 76(4) 132-133 25 Jan 1964 41.8 V641 Bacteria, Cats, Gastroenteritis. 7375-68 SIS-06 SALMONBELLOSIS IN SLAUGHTEEHOUSES IN ISRAEL. Z Imre A Showrony E Eylon Amer Vet Med Ass J 147(6) 677 15 Sep 1965 41.8 AM3 Gastroenteritis, Israel, Salmonellosis, Slaughterhouses. 7376-68 A POSSIELE CASE OF PURPURA HAEMORRHAGICA IN A DOG. A POSSIELE CALL CALL CALL M Irfan Vet Rec 74(34) 923-924 25 Aug 1962 41.8 V641 Dogs, Purpura hemorrhagica. 7377-68 EOSINOPHILS OF DOGS. M Irfan Vet Rec 76(5) 163-164, 5 REFS. 01 Feb 1964 41.8 V641 PAGE 46

Dogs, Eosinophils. 7378-68 TWO-DAY TREATMENT WITH THIACETARSAMIDE FOR CANINE HEARTWORM DISEASE. R F Jackson Amer Vet Med Ass J 142(1) 23-26, 4 IABS. 01 Jan 1963 41.8 AM3 Canine heartworm disease, Dirofilaria, Thiacetarsamide. 7379-68 BOVINE LYMPHOSARCOMA. Doving Linendarcona. C J Johanns Amer Vet Hed Ass J 147(4) 381-382 15 Aug 1965 41.8 AM3 Cattle, Lymphosarcona, Neoplasms. 7380-68 ISOLATION OF A VIRUS FROM A CONDITION SIMULATING FELINE PAN-LEUCOPAENIA IN A LEOPARD. R H Johnson Vet Rec 76(37) 1008-1013, 11 REFS., 1 TAB. 12 Sep 1964 41.8 V641 Feline infectious enteritis, Wildlife. 7381-68 FOWLPOX VIRUS FROM CHICKENS WITH HEMORRBAGIC TRACHEITIS. B C Johnstone J D Russell Amer Vet Med Ass J 147(12) 1675 15 Dec 1965 41.8 AM3 Chickens, Fowlpox virus, Hemorrhagic tracheitis. 7382-68 MICROBIOLOGICAL STUDIES ON A NEW PENICILLIN, BRL 1621. A Jones H M Bagley L M Cleverly Vet Rec 74(42) 1113-1120, 5 REFS., 5 TABS. 20 Oct 1962 41.8 V641 Bacteria, Penicillin. 7383-68 ABOMASAL IMPACTION. ABOMASAL IMPACTION. R S Jones B M Pirie Vet Rec 74(20) 582-583, 6 REFS. 19 May 1962 41.8 V641 Abnormalities, Abomasum, Dairy cattle. 7384-68 SEMINAL VESTICULITIS IN BULLS ASSOCIATED WITH INFECTION BY ACTINOBACILLUS ACTINOIDES. T H Jones A D Osborne R R Ashdown Vet Rec 76(2) 24-28, 13 REFS., 3 TABS. 11 Jan 1964 41.8 V641 Actinophages, Bulls, Seminal vesicles. 7385-68 AN OUTBREAK OF ACUTE DISEASE IN CHESTER ZOO DIAGNOSED AS ANTHRAX. W J Jordan Vet Rec 76(35) 927-930, 6 REFS. 29 Aug 1964 41.8 V641 Animals, Anthrax, Fenicillin. 7386-68 366-68 A CLINICIAN S VIEW OF CANINE VIRUS DISEASES. J O Joshua Vet Rec 74(21) 599-604, 1 REF. 26 May 1962 41-8 V641 Canine distemper virus, Dogs, Infectious canine hepatitis. 7387-68 ANAPLASMOSIS CONTROL PREVENTING THE INTRODUCTION AND SPREAD IN ANAPLASMOSIS-FREE AREAS. G S. Kaley Amer Vet Med Ass J 147(12) 1565-1566 15 Dec 1965 41.8 AM3 Anaplasmosis, Cattle, Insect vectors, Ixodides. 7388-68 VITAMIN D-INDUCED CALCIUM BINDING FACTOR IN RAT INTESTINAL MUCOSA. F A Kallfelz A N Taylor R H Wasserman Soc Exp Biol Med Proc 125 (1), 54-58 REF May 1967 442.9 SO1 Calcium, Intestines, Rats, Vitamins. 7389-68 INCIDENCE OF MASTITIS IN COWS AND BUFFALOES IN NORTH WEST INDIA. D S Kalra M R Dhanda Vet Rec 76(8) 219-222, 10 REFS., 6 TABS.

22 Feb 1964 41.8 V641 Buffaloes, Dairy cattle, Mastitis. 7390-68 JUG-68 DURATION OF IMMUNITY AGAINST NEWCASTLE DISEASE IN CHICKS VACCINATED WITE BETA-FROPIOLACTONE INACTIVATED VACCINE. S & Keeble C R Coid Vet Rec 74(41) 1112, 6 REFS. 13 Cct 1962 41.8 V641 Chickens, Immunity, Newcastle disease, Newcastle disease vaccines. 7391-68 XANTBOMATOSIS IN LAYING BENS - A CASE BEPORT. K K Kellogg Poultry Sci 43(3) 777-778 May 1964 47.8 AM33F Aspergillus, Chickens, Feed, Xanthomatosis. 7392-68 PATBOLOGY OF THE NORTBERN FUR SEAL. M C Keyes Amer Vet Med Ass J 147(10) 1090-1095, 18 REFS. 15 Nov 1965 41.8 AM3 Callorhinus, Pathelogy. 7393-68 CURRENT DISEASE FROBLEMS OF HORSES. H C King R C Knowles Amer Vet Med Ass J 147(12) 1556-1562 15 Dec 1965 41.8 AM3 Equine infectious anemia, Equine influenza, Borses, Livestock diseases, Piroplasmosis. 7394-68 MALFORMED CALF SYNDROME ON KODIAK ISLAND, ALASKA. J A King Amer Vet Med Ass J 147(3) 239 01 Aug 1965 41.8 AM3 Animal nutrition, Lupine, Malformed calf syndrome. 7395-68 STUDIES ON MYXOVIRUS PARAINFLUENZA-3 VACCINE FOB PREVENTION OF SHIPFING FEVER IN CATTLE. OF SHIPPING FITH IN CATTLE. N B King C Gale Amer Vet Med Ass J 142(8) 881-883 15 Apr 1963 41.8 AM3 Cattle, Immunization, Myxoviruses, Parainfluenza-3 vaccines, Shipping fever. 7396-68 THE USE OF CHEMOTHERAPEUTIC AGENTS IN ANIMAL TUBEBCULOSIS. H B Kleeberg Veterinarian +oxfcrd+ 4 (4), 197-211 REF Aug 1967 41.8 V6467 Cattle, Drug therapy, Tuberculosis. Abstract included. 7397-68 THE PRENATAL MIGRATION OF TOXOCARA CANIS LARVAE AND THEIR RELATIONSHIP TO INFECTION IN PUPS. F R Kloutz B F Groves M W Scothorn Amer Vet Med Ass J 147(12) 1663-1664 15 Dec 1965 41.8 AM3 Dogs, Fetal death, Pregnancy, Toxocara. 7398-68 EPIZCOTIOLOGY OF EOVINE MYXOVIRUS PARAINFLUENZA 3(SF-4) IN NEBRASKA CATTLE AS DETERMINED BY ANTIBODY TITERS. L L Kramer R I Sweat G A Young Amer Vet Med Ass J 142(4) 375-378 15 Feb 1963 41.8 AM3 Cattle, Epizootic diseases, Myxoviruses, Nebraska, Parainfluenza-3 virus, Respiratory diseases. 7399-68 A CASE OF TBAUHATIC UTERINE RUPTUBE IN A BEIFER. G B Lamont R G E Young Vet Rec 74(24) 677 16 Jun 1962 41.8 V641 Cattle, Bernia, Uterus. 7400-68 BACTERIAL GASTRO-ENTERITIS IN CATS. B A Langman Vet Rec 76(6) 190, 1 REF. 08 Feb 1964 41.8 V641 Bacteria, Cats, Gastroenteritis.

.

7401-68 THE CONTROL OF AN OUTBREAK OF SALMONELLA DUBLIN IN CALVES. A Leason Vet Bec 76 (6) 172 08 Feb 1964 41.8 V641 Antibiotics, Calves, Salmonellosis. 7402-68 ANTHRAX VACCINATION. W B Lindley Amer Vet Med Ass J 142(6) 621-623, 17 BEFS. 15 Mar 1963 41.8 AM3 Anthrax, Bacillus, Immunization, Intradermal anthrax vaccine. 7403-68 NUS-06 ROLE OF AGGBEGATED BOVINE SERUM ALBUMIN IN PATHOGENESIS OF SERUM SICKNESS NEPERITIS IN RABBITS. D S Lirenman A J Fish R A Good Soc Exp Biol Ned Proc 125 (1), 231-234 REF May 1967 442.9 SO1 Placed Norbridge Debits Blood, Nephritis, Rabbits. 7404-68 FOOT-ROT IN FEEDING SHEEP. A I Littlejohn Vet Rec 76(27) 741-742, 3 REFS., 2 TAES. 04 Jul 1964 41.8 V641 Foot rot (animals), Formaldehyde, Sheep. 7405-68 HEPATITIS CYSTICEBOSA CAUSING SUDDEN DEATH IN A PIG. T S Lloyd Vet Rec 76 (38) 1080 19 Sep 1964 41.8 V641 Bepatitis, Swine. 7406-68 THE PRESENCE OF AFLATOXIN IN A SAMPLE OF COTTON-SEED CAKE. R M LOOSBORE R Alleroft E A Tutton R B A Carnaghan Vet Rec 76 (2) 64-65, 2 BEFS. 11 Jan 1964 41.8 V641 Aflatoxin, Cattle. 7407-68 A SWINE HRUCELLOSIS EPIZOOTIC. D W Luchsinger R K Anderson D F Werring Amer Vet Med Ass J 147(6) 632-636 15 Sep 1965 41.8 AM3 Brucella, Brucellosis, Epizootic diseases, Swine. 7408-68 PYOMETRA IN THE LIONESS (PANTBEBA LEO). V M Lucke Vet Rec 74(45) 1225-1227, 5 REFS. 10 Nov 1962 41.8 V641 Metritis, Predatory animals. 7409-68 OBSERVATIONS ON THE EFFECTS OF FLIES AND HUMIDITY ON THE NA-TURAL LESIONS OF STREPTOTHRICOSIS. I Macadam Vet Rec 76(7) 194-198, 12 REFS., 1 TAB. 15 Feb 1964 41.8 V641 Cattle, Streptotrichosis. 7410-68 AN OUTBREAK OF AUJESZKY DISEASE IN PIGS IN LINCOLNSHIRE. R R Mackay J T Done R Burrows Vet Rec 74 (24) 669-672, 4 BEFS., 3 TABS. 16 Jun 1962 41.8 V641 Pseudorabies, Swine. 7411-68 DYSPEPSIA IN CALVES. N S M Macleod Vet Rec 74 (33) 906-907 18 Aug 1962 41.8 V641 Calves, Indigestion. 7412-68 SALMONELLA PULLORUM INFECTIONS IN TURKEYS. T B Mann Vet Rec 77 (41) 1111 13 Oct 1962 41.8 V641 Salmonellosis, Turkeys.

30 7412-68

30 7413-68 7413-68 THE CHARACTERIZATION OF A CAUSITIVE AGENT OF VIRUS PIG PNEU-MONIA. C J Mare W P Switzer Amer Vet Med Ass J 147(12) 1662 15 Dec 1965 41.8 AM3 Culture media, Immunization, Swine, Virus pneumonia. 7414-68 DIPHENOXYLATE A USEFUL DRUG IN THE SYMPTOMATIC TREATMENT OF ACUTE AND CHRONIC DIARRHOEA IN DOMESTIC AND WILL ANIMALS. R Marshoom C Hofkens J Mortelmans J Vercruyse Vet Rec 74(39) 1043-1046, 9 REFS., 3 TABS. 29 Sep 1962 41.8 V641 Animals, Diarrhea, Phenols. 7415-68 ULCERATION OF COW S TEATS CAUSED BY A VIRUS. W B Martin B Martin I M Lauder Vet Rec 76(1) 15-16, 3 REFS. 04 Jan 1964 41.8 V641 Dairy cattle, Teats, Ulcers, Viruses. 7416-68 TICK-BORNE FEVER IN EAST AFRICA. B A Matson E T R Evans Vet Rec 74(28) 799, 1 REF. 14 Jul 1962 41.8 V641 Cattle, Piroplasmosis. 7417-68 AN EVALUATION OF SCME RAPID TESTS ON MILK FOR THE EARLY DE-TECTION OF BOVINE KETOSIS. P A Mayes Vet Rec 74(31) 848-849, 8 RFFS., 1 TAH. 04 Aug 1962 41.8 V641 Ketosis, Milk analysis. 7418-68 PYLCRIC STENOSIS IN THE DOG. J MCCaig Vet Rec 74(41) 1101-1102, 7 REFS. 13 Cct 1962 41.8 V641 Dogs, Pyloric stenosis. 7419-68 A CASE OF RETENTICN PYONEPHROSIS IN A CORGI BITCH. Vet Rec 74(18) 537-538 05 May 1962 41.8 V641 Dogs, Hydronephrosis, Urinary calculi. 7420-68 RADIOSTRONTIUM TOXICITY IN MINIATURE SWINE. R O McClellan J L Falotay W J Clarke G Vogt H A Ragan Amer Vet Med Ass J 147(12) 1670 15 Dec 1965 41.8 AM3 Radioisctopes, Swine. 7421-68 TUBERCULOSIS IN DEER. A McDiarmid Amer Vet Med Ass J 147(10) 1098 15 Nov 1965 41.8 AM3 Animal vectors, Deer, Tuberculosis. 7422-68 ABORTION AND INFERTILITY IN SOWS IN IRELAND APPARENTLY DUE TO INFECTION BY LEPTOSPIRA CANICOLA. B A McErlean Wet Rec 76(9) 248-250, 9 REFS., 4 TABS. 29 Feb 1964 41.8 V641 Abortion, Leptospirosis, Sterility, Swine. 7423-68 TOXICITY OF NITRATE NITROGEN TO CATTLE. P K MCIlwain I A Schipper Amer Vet Med Ass J 142(5) 502-505, 33 REFS. 01 Mar 1963 41.8 AM3 Cattle, Escherichia, Nitrogen, Thyroid gland. 7424-68 SALMONELLA RESISTANCE INCREASES. K A McKay Amer Vet Med Ass J 147(9) 932 Amer Vet Med Ass J 147(9) 932 O1 Nov 1965 41.8 AM3 Antibiotics, Chloramphenicol, Chlorhexidine, Neomycin, Nitrofurazone, Resistant strains, Salmonellosis, Streptomycin, Tetracycline.

PAGE 48

7425-68 IMMUNOLOGIC AND EPIZOOTIOLOGIC STUDIES OF EPIZOOTIC BOVINE ABORTION. ADORITON: D G MCKercher E M Wada E A Robinson J A Howarth Amer Vet Med Ass J 147(12) 1666-1667 15 Dec 1965 41.8 AM3 Abortion, Cattle, Epizootic diseases, Immunization. 7426-68 FLUORESCENT ANTIBODY DETECTS CARRIERS OF VIBRIOS. P W Mellick Amer Vet Med Ass J 147(9) 957 01 Nov 1965 41.8 AM3 Vibrio. 7427-68 127-68 METASTATIC CALCIFICATION INDUCED BY HYTAKEROL IN CHICKENS INFECTED WITH PLASMODIUM GALLINACEUM. T I Mercado T von Brand Poultry Sci 43(1) 222-232 Jan 1964 47.8 AM33P Calcification (physiological), Chickens, Dihydrotachysterol, Metakorol Dlacendiam Hytakerol, Plasmodium. 7428-68 ABORTION IN THE SOW DUE TO INFECTION BY LEPTOSPIRA CANICOLA - A PRELIMINARY REPORT. S W Michna Vet Rec 74 (34) 917-919, 17 REFS., 2 TABS. 25 Aug 1962 41.8 V641 Abortion, Leptospirosis, Swine. 7429-68 PYLORIC STENOSIS IN THE DOG. E R Miller Vet Rec 74 (43) 1168 27 Oct 1962 41.8 V641 Dogs, Pyloric stenosis. 7430-68 TO VETERINARY SURGEONS IN EQUINE PRACTICE SURVEY OF UTER-INE INFECTIONS. W C Miller Vet Rec 76(2) 65-67 11 Jan 1964 41.8 V641 Animal diseases, Horses, Uterus. 7431-68 CARDIOVASCULAR DISEASE IN HORSES. W C Miller Vet Rec 74(30) 825-828, 8 REFS. 28 Jul 1962 41.8 V641 Circulatory system, Horses. 7432-68 UTERINE INFECTIONS IN MARES--1964 SURVEY. W C Miller Wet Rec 76(8) 235 22 Feb 1964 41.8 V641 Animal diseases, Horses, Uterus. 7433-68 DISEASE CONTROL IN AFRICA. Vet Rec 74 (17) 518-519 28 Apr 1962 41.8 V641 Cattle, Livestock diseases. 7434-68 134-68 A FLUGRESCENT ANTIBODY STUDY OF INFECTIOUS BRONCHITIS VIRUS. S B Mohanty H M DeVolt J E Paber Poultry Sci 43(1) 179-182 Jan 1964 47.8 AM33P Fluorescent antibody technic, Infectious bronchitis virus. 7435-68 J3-60 PULMONARY ASPERGILLOSIS IN A COW. J A Molello W Busey Amer Vet Med Ass J 142(6) 632-633, 4 PLS. 15 Mar 1963 41.8 AM3 Aspergillosis, Aspergillus, Cattle, Pneumomycosis. 7436-68 THE PATHOGENISIS OF DIARRHEA IN THE NEWBORN CALF, WITH SPECIAL REFERENCE TO PHYSIOLOGIC FUNCTIONS AND ENVIRONMENTAL CONDITIONS. T Moll Amer Vet Hed Ass J 147(12) 1364-1366 15 Dec 1967 41.8 AM3 Calves, Diarrhea, Environment, Escherichia, Physiology.

.

7437-68 437-68 IRON DEFICIENCY ANEMIA AS A CAUSE OF STILLBIRTHS IN SWINE. R W Moore H E Bedmond C W Livingston Amer Vet Med Ass J 147(7) 746-748 01 Oct 1965 41.8 AM3 Anemia, Fetal death, Iron sulfates, Swine. 7438-68 SALMONELLOSIS A SERIOUS OUTEREAK IN A DAIRY HERD. D H Morten Vet Rec 74(14) 423-425, 1 TAB. 07 Apr 1362 41.8 V641 Copper sulfate, Dairy cattle, Salmonellosis. 7439-68 FELINE DERMATOLOGY. J E Mosier Amer Vet Med Ass J 147(12) 1447-1453 15 Dec 1965 41.8 AM3 Animal nutrition, Cats, Dermatology. 7440-68 A REPORT ON THE DOSAGE OF PENTOBARBITONE SODIUM REQUIRED TO INDUCE ANAESTHESIA IN PERRETS. INDUCE ANALSTRUCTURE J P BOSS Vet Rec 74(26) 742-743, 1 REF., 2 TABS. 30 Jun 1962 41.8 V641 Anesthesia, Perrets, Pentobarbital sodiwa. 7441-68 ACUTE PULHONAEY EMPHYSEMA IN CATTLE. J E Moulton C E Cornelius B I Osburn Amer Vet Med Ass J 142(2) 133-137 15 Jan 1963 41.8 AM3 Cattle, Pulmonary emphysema. 7442-68 PROPHYLACTIC USE OF FRAMYCETIN SULPHATE IN CALVES. P A Mullen Vet Bec 76 (34) 920-922, 1 BEF. 22 Aug 1964 41.8 V641 Antibiotics, Calves, Enteritis. 7443-68 WHITE MUSCLE DISEASE, A SELENIUM-RESPONSIVE MYOPATHY. O H Muth Amer Vet Med Ass J 142(3) 272-277, 64 BEFS. 01 Feb 1963 41.8 AM3 Calves, Lambs, Myopathy, Selenium, White muscle disease. 7444-68 444-68 EFFECT OF MELATONIN ON THYROID HORMONE SECRETION RATE AND FEED CONSUMFTICN OF FEMALE BATS. G D Narang D V Singh C W Turner Soc Exp Biol Med Proc 125 (1), 184-188 REF May 1967 442.9 Sol Feeding, Hormones, Melatonin, Rats, Thyroid gland. 7445-68 445-68 IDENTIFICATION OF MYCOPLASMA GALLISEPTICUM IN LESION TISSUE BY IMMUNOFLUORESCENCE. J K Noel B M DeVolt J E Faber Poultry Sci 43(1) 145-153 Jan 1964 47.8 AM33P Chickens, Chronic respiratory disease, Fluorescent antibcdy technic, Mycoplasma, Pleuropneumonia-like organisms, Turkeys. TOXICITY OF SOME EYDRAZINE TRANCHILLISERS TO DOGS. P R B Noel A C Palmer Vet Rec 74(24) 692 16 Jun 1962 41.8 V641 Dogs, Hydrazine, Monoamine oxidase, Poisoning. 7447-68 SWINE FEVER IN TWO PROGENY TESTING STATIONS. J D P O Brien Vet Rec 74 (44) 1193 03 Nov 1962 41.8 V641 Hog cholera. 7448-68 FELINE CRYPTOCOCCOSIS. FELINE CRYPTOCOCCOSIS. H J Olander H Beed A C Pier Amer Vet Med Ass J 142(2) 138-143, 7 TABS. 15 Jan 1963 41.8 AM3 Cats, Cryptococcosis, Cryptococcus.

7449-68 METALDEHYDE POISONING. R G Orton Vet Rec 74(21) 617 26 May 1962 41.8 V641 Cats, Dogs, Metaldehyde, Poisoning. 7450-68 THE DIFFERENTIAL DIAGNOSIS OF BONE TUMOURS IN THE DOG. Vet Rec 74(15) 439-446, 13 REFS. 14 Apr 1962 41.8 V641 Dogs, Sarcoma. 7451-68 STUDIES ON COCCIDIOSIS AND VITAMINA NUTRITION OF BROILERS. B Panda G F Combs H M DeVolt Poultry Sci 43(1) 154-164 Jan 1964 47.8 AM33P Chickens, Coccidiosis, Liver, Vitamin A. 7452-68 APPARENT CANINE DISTEMPER CAUSED BY KLEBSIELLA ORGANISMS. J Parker Vet Rec 76(33) 900 15 Aug 1964 41.8 V641 Bacteriophages, Canine distemper, Dogs. 7453-68 EMPHYSEMA WITH CARDIAC EMBASSMENT IN CALVES. W H Parker Vet Rec 74 (43) 1168 27 Oct 1962 41.8 V641 Calves, Emphysema. 7454-68 PATTERN OF MORTALITY IN AVIAN NEPHROSIS. ATTEAN OF HOLARTIT IN ATTAC NATION. R T Parkhurst Poultry Sci 43(3) 788-790 May 1964 47.8 AM33P Avian nephrosis, Chickens, Mortality. 7455-68 GROUNDNUT TOXICITY AS THE CAUSE OF EXUDATIVE HEPATITIS (OEDEMA DISEASE) OF GUINEA-PIGS. J S Paterson J C Crook A Shand G Lewis R Allcroft Vet Rec 74(22) 639-640, 8 REFS., 1 TAB. 02 Jun 1962 41.8 V641 Edema disease, Guinea pigs, Peanuts, Peaning. 7456-68 THE SPREAD OF SCRAPIE BY CONTACT BETWEEN AFFECTED AND HEAL-THY SHEEP, GOATS OR MICE. I H Pattison Vet Rec 76(12) 333-336, 14 REFS. 21 Mar 1964 41.8 V641 Scrapie, Sheep. 7457-68 THE RESPONSES OF COWS TO EXPERIMENTALLY INDUCED HYPOCALCE-MIA. J M Payne Vet Rec 76(3) 77-81, 5 BFFS., 2 TABS. 18 Jan 1964 41.8 V641 Cattle, Milk fever. 7458-68 OBSERVATIONS ON THE BLOOD PICTURE OF CATTLE, SHEEP AND RAE-BITS FED ON KALE. R H C Penny J S E David A I Wright Vet Rec 76 (38) 1053-1059, 22 REFS. 19 Sep 1964 41.8 V641 Anemia, Kale, Livestock, Rabbits. 7459-68 MYCOBACTERIUM FORTUITUM AS À CAUSE OF BOVINE MASTITIS TUBERCULIN SENSITIVITY FOLLOWING EXPERIMENTAL INFECTIONS. K J Feterson Amer Vet Med Ass J 147(12) 1600-1607, 15 FIGS. T5 Dec 1965 41.8 AM3 Cattle, Mastitis, Mycobacterium, Tuberculin. 7460-68 DIAGNOSIS ANTIGENS FOR THE DETECTION OF NOCARDIOSIS IN ANI-MALS. A C Pier J R Thurston Amer Vet Med Ass J 147(12) 1668 15 Dec 1965 41.8 AM3 Antibodies, Antigens, Bacterial diseases (animals), Cattle, Nocardia, Nocardiosis.

30 7461-68 7461-68 DURATION OF IMMUNITY TRIALS WITH BETAPROPIOLACTONE-INACTIVA-TED NEWCASTLE DISEASE VIRUS VACCINES. S E Piercy A J Macleod J D Hlaxland Vet Rec 76 (39) 1084-1089, 12 REFS., 6 TABS. 26 Sep 1964 41.8 V641 Chickens, Hydracrylic acid beta-lactone, Newcastle disease vaccines. 7462-68 RESISTANCE OF EGG-ADAPTED CANINE DISTEMPER VIRUS TO FORMALIN\* RESISTANCE OF LCG MALLER S E Piercy Vet Rec 74(20) 590, 4 REFS., 2 TABS. 19 May 1962 41.8 V641 Canine distemper virus, Formaldehyde. 7463-68 THE ECONOMIC LOSS ASSOCIATED WITH INFECTIOUS BOVINE RHINO-TRACHEITIC IN A DAIRY HERD. R & Pierson C A Vair Amer Vet Med Ass J 147(4) 350-352 15 Aug 1967 41.8 AM3 Abortion, Dairy cattle. 7464-68 SUSPECTED SKELETAL SCURVY IN THE DOG. Vet Rec 74 (34) 923 25 Aug 1962 41.8 V641 Ascorbic acid, Bone diseases, Dogs, Scurvy. 7465-68 PURFURA HAEMORRHAGICA IN A DOG. J M Pinkney Vet Rec 74(33) 905-906 18 Aug 1962 41.8 V641 Dogs, Purpura hemorrhagica. 7466-68 STUDIES ON EQUINE RESPIRATORY VIRUS. G Plummer J B Kerry Vet Rec 74 (36) 967-970, 7 REFS., 1 TAB. 08 Sep 1962 41.8 V641 Horses, Respiratory diseases. 7467-68 SALMONELLOSIS IN ANIMALS THREATENS MAN. J E Porter Amer Vet Med Ass J 147(2) 141 15 Jul 1965 41.8 AM3 Animal vectors, Human nutrition, Salmonellosis. 7468-68 EFFECTS OF CORTISOL AND ADRENALECTOMY ON INDUCTION OF INTER-FERCN BY ENDOTOXIN. B Postic C Deangelis M K Breinig M Ho Soc Exp Biol Med Proc 125 (1), 89-96 REF May 1967 442.9 SO1 Adrenal glands, Cortisol, Interferon, Newcastle disease virus, Rabbits, Vesicular stomatitis virus. 7469-68 A09-00 A NOTE CN RABIES AND EUTHANASIA IN MAN. L P Pugh Vet Rec 74(16) 486-487 21 Apr 1962 41.8 V641 Euthanasia, Human diseases, Rabies. 7470-68 VASCULAE OCCLUSION IN A BITCH. P J Quigley J Iffey Vet Rec 74 (25) 702 23 Jun 1962 41.8 V641 Circulatory system, Dogs, Endocarditis. 7471-68 TONSILLAR CARCINOMA IN RURAL DOGS. N L Ragland J R Gorham Nature 214 (5091), 925-926 27 May 1967 472 N21 Carcinoma, Dogs, Ionsils. 7472-68 ROUS SARCOMA VIRUS INFECTION OF CHICKEN BUFFY COAT MACRO-PHAGE. S R S Rangan F B Bang Soc Exp Biol Med Froc 125 (2), 593-598 REF Jun 1967 442.9 So1 Chickens, Macrophages, Rous sarcoma virus.

7473-68 PERITONEAL DIALYSIS AS AN ADJUNCT TO LEPTOSPIROSIS THERAPY IN A DOG. G L Raulston Amer Vet Med Ass J 142(6) 613-617, 20 REFS., 5 TABS. 15 Mar 1963 41.8 AM3 Dialysis, Dogs, Leptospirosis, Peritoneum, Uremia. 7474-68 PROBLEMS OF ANAPLASMOSIS CONTROL IN TICK-INFESTED AREAS OF THE NORTHWEST. G B Rea Amer Vet Med Ass J 147(12) 1567-1569 15 Dec 1965 41.8 AM3 Anaplasmosis, Insect vectors, Ixodides, Northwest. 7475-68 THE SEASONAL INCIDENCE OF CANINE COCCIDIOMYCOSIS. R E Reed J L CONVERSE Amer Vet Med Ass J 147(12) 1670 15 Dec 1965 41.8 AM3 Coccidioides, Dogs, Weather. 7476-68 FACTORS OTHER THAN GROUNDNUT IN THE PRODUCTION OF AFLATOXIN. J W Richmond N H Sutcliffe N W R Daniels P W R Eggitt Vet Rec 74(35) 962, 5 REFS. 01 Sep 1962 41.8 V641 Aflatoxin, Peanuts. 7477-68 FACTORS OTHER THAN GROUNDNUT RELATING TO TURKEY X DI-SEASE J W Richmond N H Sutcliffe N W R Daniel P W R Eggitt Vet Rec 74(18) 544-545 05 May 1962 41.8 V641 Ducklings, Hyperkeratosis, Peanuts, Poisonous fungi. 7478-68 EXPERIMENTAL INFECTION OF CHICKENS WITH MYCOPLASMA GALLI-SEPTICUM AND SUBSEQUENT RE-ISOLATION OF THE ORGANISM FROM THE BODY TISSUES. D H Roberts Vet Rec 76 (29) 798-801, 14 REFS., 1 TAB. 18 Jul 1964 41.8 V641 Chickens, Mycoplasma gallisepticum antigens. 7479-68 479-68 MADUROMYCOSIS OF THE BOVINE NASAL MUCOSA. E D Roberts H A McDaniel E A Carbrey Amer Vet Med Ass J 142(1) 42-48, 12 PIGS. O1 Jan 1963 41.8 AM3 Cattle, Eosinophilic granuloma, Helminthosporium, Histology, Maduromycosis, Nasal mucosa. 7480-68 STREPTOTHRICOSIS IN CATTLE. H E Roberts T F Vallely Vet Rec 74(25) 693-696, 8 REFS., 1 TAB. 23 Jun 1962 41.8 V641 Cattle, Streptotrichosis. 7481-68 MASTITIS CONTROL PROVES ITS WORTH IN NEW YORK. S J Roberts C E DeCamp Amer Vet Med Ass J 147(4) 367-369 15 Aug 1965 41.8 AM3 Mastitis, Streptococcus. 7482-68 PROPHYLAXIS AGAINST TRYPANOSOMIASIS IN ZEBU CATTLE. IV. A FIELD TRIAL OF METAMIDIUM AND ISOMETAMIDIUM. J Robson Vet Rec 74 (34) 913-917, 8 REFS., 2 TABS. 25 Aug 1962 41.8 V641 25 Aug 1962 41.8 V641 7483-68 TRANSMISSION OF EQUINE PIROPLASMOSIS BY DERMACENTOR NITENS NEUMANN. T O Roby D W Anthony Amer Vet Med Ass J 142(7) 768-769 01 Apr 1963 41.8 AM3 Animal disease transmission, Dermacentor, Horses, Piroplasmosis. 7484-68 BRUCELLA AGGLUTININS IN EAST AFRICAN GAME ANIMALS. D H L Rollinson Vet Rec 74(33) 904, 13 REFS.

18 Aug 1962 41.8 V641 Agglutination test, Brucella abortus antigens, Game animals. 7485-68 COLITIS X OF HCESES. J R Rooney J T Bryans E R Doll Amer Vet Med Ass J 142(5) 510-511 01 Mar 1963 41.8 AM3 Colitis X, Diarrhea, Endotoxemia, Escherichia, Borses. 7486-68 SALMCNELLOSIS IN TURTLES IN RHODE ISLAND. B J Rosenstein Amer Vet Med Ass J 147(10) 1089 15 Nov 1965 41.8 AM3 Pseudemys scripta, Rhode island, Salmonella, Salmonellosis, Turtles. 7487-68 CHRONIC COPPER POISONING IN LAMBS. D B Ross Vet Rec 76(32) 875-876, 4 REFS., 3 TABS. 08 Aug 1964 41.8 V641 Copper, Lambs, Foiscning. 7488-68 COMPARISON OF PATHOGENICITY OF VARIOUS ISOLATES OF BORDE-TELLA BEONCHISEPTICA IN YOUNG PIGS. R P Ross W P Switzer J R Duncan Amer Vet Med Ass J 147(12) 1662-1663 15 Dec 1965 41.8 AM3 Bordetella, Pathogenicity, Swine. 7489-68 MORTALITY AND MORBIDITY IN CALVES WITH SALMONELLOSIS. H Rothenbacher Amer Vet Med Ass J 147(11) 1211 01 Dec 1965 41.8 AM3 Calves, Mortality, Salmonella, Salmonellosis. 7490-68 SUSPECTED SKELETAL SCURVY IN A DOG. S E Sadek Vet Rec 74(33) 905 18 Aug 1962 41.8 V641 Ascorbic acid, Bone diseases, Dogs, Scurvy. 7491-68 PROBLEMS OF ESTABLISBING ANAPLASMOSIS-FREE BERDS IN MONTA-NA. J W Safford Amer Vet Med Ass J 147(12) 1570-1572 15 Dec 1967 41.8 AM3 Anaplasmosis, Cattle, Insect vectors. 7492-68 CLINICAL APPRAISAL OF AN AVIRULENT ORAL BRYSIPELAS VACCINE. G R Sampson R A Sauter L M Wilkins R J Driesens Amer Vet Med Ass J 147(5) 484-489, 5 TABS 01 Sep 1965 41.8 AM3 Erysipelas bacterins, Immunization, Swine. 7493-68 VIRAL CAUSES OF BOVINE ABORTION IN OHIO. S A Sattar E B Bohl M Senturk Amer Vet Med Ass J 147(11) 1207-1210 01 Dec 1965 41.8 AM3 Abortion, Cattle, Ohio, Rhinotracheitis, Virus diseases (animals). 7494-68 LOW LEUKOCYTE LEVELS PROTECT COWS FROM COLIFORM MASTITIS. O W Schalm Amer Vet Med Ass J 147(1) 37 O1 Jul 1965 41.8 AM3 Cattle, Leukocytes, Mastitis. 7495-68 SUBENDOCARDIAL BAEMORRBAGE IN RINDERPEST-INFECTED CATTLE. G R Scott Vet Rec 74(19) 567-568, 5 REPS., 12 May 1962 41.8 V641 Cattle, Bemorrhage, Rinderpest. 7496-68 BREAKDOWNS IN SWINE-FEVER VACCINATED BERDS. W A Scott Vet Rec 74(43) 1168 27 Oct 1962 41.8 v641 Bog cholera, Immunization, Swine.

7497-68 PESTICIDES AND ANIMAL POISONING. PESTICIDES AND ANIMAL FORCELLER W N Scott Vet Rec 76 (36) 964-973, 31 REFS., 2 TABS. 05 Sep 1964 41.8 V641 Animals, Pesticides, Poisoning. 7498-68 OBSERVATIONS ON PATHOGENICITY AND IMMUNOGENICITY OF A CELL-CULTURE-MODIFIED FOOT-AND-MOUTE DISEASE VIRUS. B R Seibold E Dougherty J S Martinsen Amer Vet Med Ass J 147(12) 1608-1618, 4 TABS. 15 Dec 1965 41.8 AM3 Culture media, Foot-and-mouth disease virus, Immunization, Pathogenicity, Swine, Virus diseases (animals). 7499-68 AN OUTBREAK OF MALIGNANT CATARRB AMONG THE PERE DAVID DEER-M Senior C R E Balnan E B Tong Vet Rec 74 (35) 932-936 01 Sep 1962 41.8 V641 Deer, Malignant catarrh, Sulfamethazine. 7500-68 SYNTHETIC OESTROGEN POISONING. G W Serth Vet Rec 74(23) 667 09 Jun 1962 41.8 V641 Dogs, Estrogens, Poisoning. 7501-68 PUBLIC BEALTH ASPECTS OF CESIUM-137 IN RUMINANTS. R O Shannon R O McClellan C R Watson L K Bustad Amer Vet Med Ass J 147(12) 1488-1491, 24 REFS, 3 TABS. 15 Dec 1965 41.8 AM3 Cesium isotopes, Cesium-137, Ruminants. 7502-68 THE CLINICAL APPROACE TO ABDOMINAL DISORDERS OF THE DOG. N C C Sharp Vet Rec 76(3) 94-97, 4 REFS., 2 TABS. 18 Jan 1964 41.8 V641 Dogs, Lymphosarcoma, Pancreas, Weil s disease. 7503-68 RESISTANCE OF BOOPBILUS MICROPLUS TO ORGANO-PROSPRORUS IN-RESISTANCE OF BOOPBLUS HICKOFLOS TO CROAM TREATIONS SECTICIDES. R D Shaw H A Malcolm Vet Rec 76(7) 210-211 15 Peb 1964 41.8 V641 Boophilus annulatus, Carbaryl, Carbophenothion, Diazinon, Insecticide resistant insects, Rotenone. IMMUNOFLUORESCENT STUDIES OF VIRUS-INDUCED RABBIT PAPILLOMA IMMONOFLOCKESCENT STUDIES OF VIRUS-INDUCED RABBIT PAP (SBOPE) IN VIRUS. O Shiratori T Osato Y Ito Soc Exp Biol Med Proc 125 (2), 435-440 Jun 1967 442.9 SO1 Fluorescent antibody technic, Rabbit papilloma virus. 7505-68 TBE CCCURRENCE OF GASEOUS LYMPBADENITIS AND MOREL S DISEASE IN A SHEEP FLOCK IN KENYA. J F Shirlaw W A Ashford Vet Rec 74 (38) 1025-1026, 5 REFS. 22 Sep 1962 41.8 V641 Caseous lymphadenitis, Sheep. 7506-68 ANTHRAX IN CHESTER ZOO. R V Short Vet Rec 76(37) 1040 12 Sep 1964 41.8 V641 Anthrax, Elephants. 7507-68 THE THERAPEUTIC USE OF CYSTEAMINE IN BOVINE KETOSIS. M G Simesen Vet Rec 74(32) 872-874, 14 REFS. 11 Aug 1962 41.8 V641 Cattle, Cysteamine, Ketosis. 7508-68 PATHOLOGIC CBANGES ASSOCIATED WITE FEEDING VARIOUS LEVELS OF CROTALARIA SPECTABILIS SEED TO POULTRY. C F Simpson P W Waldroup R B Barms Amer Vet Med Ass J 142(3) 264-271, 12 FIGS. 01 Peb 1963 41.8 AM3

30 7508-68

30 7509-68 Crotalaria, Necrosis, Poultry, Seeds. 7509-68 POTENTIATION OF DIETHYLSTILEESTROL INDUCED AORTIC RUPTURES OF TURKEYS WITH THIOURACIL. C F Simpson R H Harms Soc Exp Biol Med Froc 125 (1), 245-248 REF May 1967 442.9 SO1 Aorta, Diethylstillestrol, Thiouracil, Turkeys. 7510-68 A PERLIMINARY REPORT ON THE OCCURENCE OF INFECTIOUS LARYNGO-TRACHFITIS OF FOULTRY IN INDIA. S B Singh G R Singh C N Singh Poultry Sci 43(2) 492-494 Mar 1964 47.8 AM33P Chickens, Epidemiclogy, India, Infectious laryngotracheitis, Infectious laryngotracheitis virus, Serodiagnosis. 7511-68 THE TREATMENT OF INFECTIOUS SINUSITIS OF TURKEYS WITH FURA-The Inclaiment of Information Entropy T E Singleton Vet Rec 74(16) 485-486, 8 REFS. 21 Apr 1962 41.8 V641 Purazclidone, Sinusitis, Turkeys. 7512-68 TOWARDS CONTROL OF MASTITIS. G F Smith Vet Rec 76(6) 187 08 Feb 1964 41.8 V641 Mastitis. 7513-68 DIAGNOSIS AND CAUSES OF NITRATE POISONING. G S Smith Amer Vet Med Ass J 147(4) 365-366 15 Aug 1965 41.8 AM3 Animal nutrition, Feed toxicity, Nitrates. 7514-68 MASTITIS, METRITIS AND DIARRHEA IN SWINE. H C Smith Amer Vet Med Ass J 147(6) 626-631 15 Sep 1965 41.8 AM3 Diarrhea, Mastitis, Metritis, Swine. 7515-68 INCOMFLETE DILATION OF THE CVINE CERVIX. Vet Rec 74(18) 545 05 May 1962 41.8 V641 Oxytocin, Sheep, Uterus. 7516-68 MASTITIS CONTROL PROGRAMS EFFECTIVE IN CONNECTICUT. J V Smith Amer Vet Med Ass J 147(4) 366-367 15 Aug 1965 41.8 AM3 Mastitis, Streptococcus. 7517-68 A POSSIBLE CASE OF PURPURA HAEMORRBAGICA IN A DOG. A POSSIELE CASE OF TOWERS A S St. John Vet Rec 74(29) 822 21 Jul 1962 41.8 V641 Dogs, Purpura hemorrhagica. 7518-68 CONCUBRENT SALMONELLA TYPHIMURIUM AND EIMERIA NECATRIX IN-FECTICNS IN CHICKS. J F Stepens E D Barnett D F Holtman Poultry Sci 43(2) 352-356 Mar 1964 47.8 A M33P Chicks, Coccidiosis, Eimeria, Salmonella. 7519-68 EXPERIMENTAL TRYPANOSOMA CONGOLENSE INFECTION IN A BORSE. L E Sterhen Vet Rec 74(31) 853-855, 4 REES., 1 TAB. 04 Aug 1962 41.8 0641 Horses, Trypanosomiasis. 7520-68 RECOVERY FROM SUBACUTE GRASS SICKNESS. E C Straiton Vet Rec 76(5) 148-149, 2 REFS. 01 Feb 1964 41.8 V641 Grass sickness, Horses, Oxytetracycline. PAGE 52

7521-68 DERMOID SINUS IN THE RHODESIAN RIDGEBACK. J Stratton Vet Rec 76(31) 846, 2 REFS. 01 Aug 1964 41.8 V641 Dermoid cysts. 7522-68 THE ZOONOSIS PROBLEM IN CHILE. D Studic M I A Martinez Vet Rec 74(18) 531-537 05 May 1962 41.8 V641 Zoonoses. 7523-68 ARSENICAL POISONING OF RACEHORSES. G N Sutherland E V Pawell J K Brown Vet Rec 76(10) 275-278, 1 TAB. 07 Mar 1964 41.8 V641 Arsenic, Poisoning, Race horses. 7524-68 ADVERTISEMENTS, ANTIBIOTICS AND MASTITIS. A M Taylor Vet Rec 76(13) 385 28 Mar 1964 41.8 V641 Advertising, Antibiotics, Mastitis. 7525-68 TREATMENT OF STRONGYLES IN BORSES. J H Theis Amer Vet Med Ass J 147(11) 1210 01 Dec 1967 41.8 AM3 Borses, Strongylus. 7526-68 THE PATHOGENESIS OF GASTRO-ENTERITIS ASSOCIATED WITH ESCHE-RICHIA COLI. J R Thomlinson Vet Rec 76(8) 237-238, 5 REFS. 22 Feb 1964 41.8 V641 Bacteria, Edema, Gastroenteritis, Swine. 7527-68 SALMONELLOSIS, A PET-IMPLICATED ZOONOSIS. SALBONELLUSIS, A FEI INTERCENTE LI L R Thomsen Amer Vet Med Ass J 147(11) 1234 01 Dec 1965 41.8 AM3 Animal vectors, Pets, Salmonellosis. 7528-68 A STUDY OF THE EFFECTS OF VARIOUS BORMONE TREATMENTS ON THE REPRODUCTIVE ACTIVITY OF PREPUBERAL AND POST-PUBERAL BEEF HEIFERS AND LACTATING BEEF COWS. JE-Tilton Diss Abstr Sect B 27 (12,PT.1), 4196B Jun 1966 25055.049D53 Beef cattle, Cattle, Gonadotropins, Hormones, Methyl-u17acetoxyprogesterone, 6-. 7529-68 THE INCIDENCE OF LEAD POISONING IN CALVES IN NORTHERN IRE-LAND. J R Todd Vet Rec 76 (31) 845, 6 REFS., 1 TAB. 01 Aug 1964 41.8 V641 Calves, Lead, Northern Ireland, Poisoning. 7530-68 AMINO-ACID EXCRETION IN CANINE CYSTINE-STONE DISEASE. R J Treacher Vet Rec 74(17) 503-504, 13 REFS. 28 Apr 1962 41.8 V641 Cystine, Dogs, Urinary calculi. 7531-68 531-68 A NEW PENICILLIN. T Turner Vet Rec 74(44) 1190, 3 REFS. 03 Nov 1962 41.8 V641 Penicillin. 7532-68 METALDEHYDE POISONING IN THE DOG. T Turner T Turner Vet Rec 74 (20) 592-593, 3 REFS. 19 May 1962 41.8 V641 Dogs, Metaldehyde, Pentobarbital, Poisoning.

30 7555-68

7533-68 A CASE OF ESCHERICBIA MONOCYTOGENES (LISTERA MONOCYTO-GENES) IN A CAT. T Turner Vet Rec 74(27) 778, 2 REFS. 07 Jul 1962 41.8 V641 Cats, Listeriosis. 7534-68 EVALUATION OF PROBLEMS RELATED TO INTRODUCTION OF SECONDARY SPECIFIC-FATBOGEN-FRFE (SPF) BOARS INTO SPF AND NON-SPF HERDS. N R Underdahl L C Welch G A Young Amer Vet Med Ass J 142(6) 634-638, 6 TABS. 15 Mar 1963 41.8 AM3 Bcars, Germ-free life. 7535-68 TRANSMISSION AND CHARACTERIZATION OF EDEMA DISEASE OF SWINE. M R Underdahl E L Stair G A Young Amer Vet Med Ass J 142(1) 27-30 01 Jan 1963 41.8 AM3 Edema disease, Swine, Virus diseases (animals). 7536-68 THE RELATIVE IMMUNISING VALUE OF MUCOID L AND S19 STRAINS OF BRUCELLA ABORIUS WITE COMPARATIVE OBSERVATIONS ON THE AGGLUTINATION AND COMPLEMENT FIXATION TESTS. A Van Der Schaaf F B Jaartsveld Vet Rec 74(40) 1070-1076, 14 REFS., 5 TAES. 06 Oct 1962 41.8 V641 Brucella abortus vaccines. 7537-68 PROFBYLACTIC ACTIVITY OF BERENIL AGAINST TRYPANOSOMES IN TREATED CATTLE. K Van Hoeve M P Cunningham Vet Rec 76(9) 260, 3 REFS. 29 Pet 1964 41.8 V641 Berenil, Cattle, Trypanosomiasis. 7538-68 THE RADIOGRAPHIC FEATURES OF CALCINOSIS CIRCUMSCRIPTA (KALKGICHT, CALCIUM GOUT) IN THE DOG. (ALKGICHT, CALCIAN COST, LA L L C Vaughn Vet Rec 74(37) 988-989, 4 REFS. 15 Sep 1962 41.8 V641 Calcinosis, Dogs, Radiography. 7539-68 NUTRITICNAL AND BIOCBEMICAL ASPECTS OF ARABINOSE AND XYLOSE FOR CHICKS. P V Wagh Diss Abstr Sect B 27 (12,PT.1), 4288B Jun 1967 Z5055.049D53 Animal nutrition, Arabinose, L-, Biochemistry, Chicks, Wcod sugar. 7540-68 INFLUENCE OF PORCINE TRANSMISSIBLE GASTROENTERITIS ON CBLORIEIRACYCLINE BLOOD VALUES. L J Wallace C K Whitehair Amer Vet Med Ass J 147(9) 952-957, 7 FIGS. 01 Nov 1965 41.8 AM3 Chlortetracycline, Swine. 7541-68 STUDIES ON THE PATHOGENESIS OF VIBRIO COLI INFECTION IN SWINE. D Warner Diss Abstr Sect B 27 (12,PT.1), 4459B Jun 1967 25055.049D53 Swine dysentery, Vibrio coli. 7542-68 CONGENITAL GOITRE IN DORSET-BORN LAMBS. W A Watson G D Broadhead R Kilpatrick Vet Rec 74 (17) 506-509, 20 REFS., 4 TABS. 28 Apr 1962 41.8 V641 Dorset Born sheep, Goiter. 7543-68 STAPBYLOCOCCAL INFECTION IN LAMES A STUDY OF LIVE AND DEAD LAMBS FEOM TICK-INFESTED FARMS IN NORTH-WEST YORKSHIRE AND NCRIB-EAST LANCASHIRE. A W A Watson
W A Watson
Vet Rec 76(29) 793-797, 17 REFS., 8 TABS.
18 Jul 1964 41.8 V641
Lambs, Penicillin, Pyemia.

7544-68 TOXOPLASMOSIS IN MINK. Vet Rec 74 (38) 1027, 9 REFS. 22 Aug 1962 41.8 V641 Minks, Toxoplasmosis. 7545-68 P45-68 BISTOLOGIC AND ELECTRON MICROSCOPIC STUDIES OF AGRANULOCYTES AND HEMAL AND HEMOLYMPB NODES IN CATTLE. A F Weber D Joel R S Hammer Amer Vet Med Ass J 147(12) 1656 15 Dec 1965 41.8 AM3 Agranulocytosis, Cattle, Electron microscopy, Hemolymph nodes, Histology. 7546-68 NEW INVESTIGATIONS ON COLD-BLOODED ANIMALS AS SALMONELLA SOURCES. W Wesselinoff Amer Vet Med Ass J 147(6) 676-677 15 Sep 1965 41.8 AM3 Animal vectors, Salmonella, Salmonellosis, Turtles. 7547-68 SULPHUR POISONING IN EWES. J B White Vet Rec 76(10) 278-279, 2 REFS., 1 TAB. 07 Mar 1964 41.8 V641 Poisoning, Sheep, Sulfur. 7548-68 INTESTINAL BERNIATION IN THE EWE. Vet Rec 74 (30) 842-843, 1 TAB. 28 Jul 1962 41.8 V641 Intestinal hernia, Sheep. 7549-68 METALDEHYDE POISONING. R B Whiteford Vet Rec 74(15) 467 14 Apr 1962 41.8 V641 Dogs, Metaldehyde, Poisoning. 7550-68 A NON-TUBERCULOUS GRANULOMA OF THE CAT ASSOCIATED WITH AN ACID-FAST BACILLUS. G T Wilkinson Vet Rec 76(30) 833-834, 1 REF. 25 Jul 1964 41.8 V641 Acid fast bacteria, Cats, Granuloma. 7551-68 A NON-TUBERCULOUS GRANULOMA OF THE CAT ASSOCIATED WITH AN ACID-FAST BACILLUS. G T Wilkinson Vet Rec 76(28) 777-778, 1 REF. 11 Jul 1964 41.8 V641 Acid fast bacteria, Cats, Granuloma. 7552-68 A SUCCESSFUL ANAPLASMOSIS ERADICATION PROGRAM. B B Willers Amer Vet Med Ass J 147(12) 1573-1575 Anaplasmosis, Cattle, Germ-free life, Insect vectors. 7553-68 SALMONELLOSIS IN TURTLES IN MINNESOTA. L P Williams Jr B L Helsdon Amer Vet Med Ass J 147(10) 1048 15 Nov 1965 41.8 AM3 Minnesota, Salmonellosis, Turtles. 7554-68 LAPARO-CYSTOTOMY IN A GELDING. K R Williams Vet Rec 76(3) 83-84, 2 REFS. 18 Jan 1964 41.8 V641 Calculi, Horses. 7555-68 FIBROUS DYSPLASIA IN & MONKEY AND & KUDU. W M Williamson L S Lombard B S Firfer Amer Vet Med Ass J 147(10) 1049-1052, 8 FIGS. 15 Nov 1965 41.8 AM3 Fibrous dyplasia, Monkeys, Neoplasms.

30 7556-68

7556-68 STODIES OF A NEW FENICILLIN, BRL 1921, FOR THE TREATMENT AND CONTROL OF STAPHYLOCOCCAL MASTITIS IN COWS. C D Wilson W A Coats G C Brander Vet Rec 77 (42) 1120-1126, 17 REFS., 5 TABS. 20 Oct 1962 41.8 V641 Dairy cattle, Mastitis, Penicillin. 7557-68 TICK-BORNE FEVER AS A CAUSE OF ABORTION AND STILLBIRTHS IN CATTLE. Vet Rec 76 (39) 1081-1084, 10 REFS., 1 TAB. 26 Sep 1964 41.8 V641 Abortion, Cattle, Firoplasmosis. 7558-68 DOB-DB A FIELD TRIAL OF A HEAVY MAGNESIUM PELLET. R K Wilson M F Maguire D B R Poole Vet Rec 74 (39) 1041-1043, 14 REFS., 3 TABS. 29 Sep 1962 41.8 V641 Hypomagnesemia, Magnesium. 7559-68 HAEMOFHILUS GALLINARUM - INTRAFLOCK SPREAD. R Yamamoto G I Clark Amer Vet Med Ass J 147(12) 1672 15 Dec 1965 41.8 AM3 Animal vectors, Haemophilus, Poultry. 7560-68 HISTOPATHOLOGY OF GUINEA PIGS WITH CHOLESTEROL-INDUCED ANEMIA. NEMIA. W Yamanaka E Ostwald S W French Soc Exp Biol Med Froc 125 (1), 303-306 May 1967 442.9 SO1 May 1967 442.9 SO1 Cholesterol, Guinea pigs, Hemolytic anemia.

## Arthropods

7561-68 A SYSTEMIC INSECTICIDE AND EAIT FOR FLEA AND RAT CONTROL. B Bennington J Econ Entomol 53(1) 169-170, BIBL. Peb 1960 421 J822 Baits, Insecticides, Rats, Ronnel, Siphonaptera. 7562-68 LABORATORY AND PIFLD TESTS AGAINST MITES AND LICE ATTACKING POULTRY . W S Bigley A R Both G W Eddy J Econ Entomol 53(1) 12-14, BIBL., TABS., PL. Peb 1960 421 J822 Anoplura, Barthrin, Diethyltoluamide, Malathion, Menacanthus stramineus, Mites, Ornithonyssus sylviarum, Poultry, Ronnel. 7563-68 563-68 SELECTIVE TOXICITY AND ANIMAL SYSTEMIC EFFECTIVENESS OF SEVERAL ORGANOPHOSEHATES. U E Brady Jr. H W Dorough B W Arthur J Econ Entomol 53(1) 6-8, BIBL., TABS. Peb 1960 421 J822 Bayer 23453, Bayer 24498, Bayer 25198, Dimethoate, Fentl Husca domestica, Naled, Rabbits, Rats, Shell SD 3562, Toxicology. Fenthion. 7564-68 FACE FLY CONTROL. W N Bruce S Moore III g C Decker J Econ Entomol 53 (3) 450-451, TABS. Jun 1960 421 J822 Di-n-butyl succinate, Diazinon, Dichlorvos, Dimethoate, Livestock, Musca, Tabatrey. 7565-68 EFFECT OF PARATHION ON PARASITES OF ORIENTAL PRUIT MOTH COCOONS AND TRICHOGRAMMA MINUTUM IN PEACH ORCHARDS. H Brunson J Econ Entomol 53(2) 304-306, BIBL., TABS. Apr 1960 421 J822 Parathion, Peaches, Plums. PAGE 54

7566-68 HOUSE FLY CONTROL IN PIG PARLORS. BC Burns W A Nipper J Econ Entomol 53(4) 539-540, BIBL. 539-540 Aug 1960 421 J822 Baby pigs, Diazinon, Penthion, Musca domestica, Ronnel, Swine houses. 7567-68 DEVELOPMENT OF A SYNTBETIC MEDIUM FOR ASEPTIC REARING OF LARVAE OF STOMOXYS CALCITRANS (L.). R E Gingrich J Econ Entomol 53(3) 408-411, BIBL., TABS. Jun 1960 421 J822 Human diseases, Larvae, Livestock, Stomoxys. 7568-68 USE OF AN ANIMAL MEMBRANE IN THE EVALUATION OF CHEMICAL REPELLENTS AGAINST THE STABLE FLY. P Granett J Econ Entomol 53(3) 432-435, BIBL. Jun 1960 421 J822 Aedes aegypti, Animal membranes, Butoxy polypropylene glycol, Delphene, Draft cattle, Equipment, Indalone, Insect repellents, Stomoxys, Tabatrex. 7569-68 FIELD STUDIES OF HOUSE FLY RESISTANCE TO ORGANOPHOSPHORUS INSECTICIDES. E J Hansens J Econ Entomol 53(2) 313-317, BIBL. Apr 1960 421 J822 Diazinon, DDT , Insecticide resistant insects, Lindane, Musca domestica, Ronnel. 7570-68 A STUDY OF THE HISTOLOGICAL EFFECTS OF BYPODERMA LINEATUM (DE VILL.) ON GULLET TISSUE TAKEN FROM SYSTEMICALLY TREATED AND UNTREATED CATTLE. J J HAITIS W W Neel L L Ellis J Econ Entomol 53(2) 280-282, BIBL. Apr 1960 421 J822 Apr 1960 421 J822 Cattle, Coumaphos. 7571-68 INSECTICIDAL BAITS FOR CONTROL OF THE IMPORTED FIRE ANT, S DE HOPSIS SAEVISSIMA RICETERI. S B Hays F S Arant J Econ Entomol 53(2) 188-191, BIBL., TABS. Apr 1960 421 J822 Baits, Heptachlor, Kepone, Peanut butter, Solenopsis. 7572-68 RESIDUAL EFFECTIVENESS OF CERTAIN INSECTICIDES IN HORN FLY CONTROL. W T Johnson G S Langford J Econ Entomol 53(3) 477-478 Jun 1960 421 J822 Carbaryl, Cattle, Malathion, Methoxychlor, Ronnel. 7573-68 (C. + P.), WITH NORTHERN FOWL MITE, ORNITBONISSUS SYLVIARUM (C. + P.), WITH RONNEL, BAYER 113/59, AND BAYER 21/199. F W KNAPP G F KRAUSE J Econ Entomol 53 (1) 4-5, BIBL. Feb 1960 421 J822 Birds, Chickens, Cocks, Coumaphos, Ornithonyssus sylviarum, Ronnel, Trichlorfon. 7574-68 SYSTEMIC INSECTICIDES FOR CATTLE GRUB CONTROL. P W Knapp C J Terhaar C C Roan J Econ Entomol 53(4) 541-546, BIBL., TABS. Aug 1960 421 J822 Cattle, Coumaphos, Dimethoate, DOWCO 109, Hypoderma, Phosphoramidothioic acid. 7575-68 HOUSE FLY PUPATION UNDER BASEBOARDS. J L Minkin H G Scott J Econ Entomol 53 (3) 479-480, BIBL., PL. Jun 1960 421 J822 Baseboards, DDT, Guinea pigs, Malathion, Musca domestica, Parathion, Pupae. 7576-68 CHLORINATED HYDROCARBON INSECTICIDES AS SOIL TREATMENTS AGAINST THE EYE GNAT HIPPELATES COLLUSOR (TOWNSEND) IN THE LABORATORY. M S Mulla

30 7597-68

J Econ Entomol 53(3) 367-372, BIBL., TABS. Jun 1960 421 J822 Aldrin, Chlorine, Dieldrin, DDT , Heptachlor, Lindane, Toxaphene. 7577-68 ORGANOPHOSPHATE SYSTEMICS AS SPRAYS AND FEED ADDITIVES FOR CATTLE GRUB CONTROL. E S Raun J B Herrick J Econ Entomol 53(1) 125-126, BIBL. Feb 1960 421 J822 Cattle, Coumaphos, Food additives, Ronnel, Spraying. 7578-68 TOXAPHENE RESIDUES IN HOGS. R H Roberts R D Radeleff J Econ Entomol 53(2) 322, BIBL. Apr 1960 421 J822 Residues, Swine, Toxaphene. 7579-68 METHODS FOR THE EVALUATION OF STABLE FLY TOXICANTS AND REPELLENTS. R H Roberts C M Jones E E Gless A h Hobers C h Gress h h Gress J Econ Entomol 53(2) 301-303, BIBL., PL. Apr 1960 421 J822 Allethrin, Butyl 2-methyl-3-(3,4-methylenedioxphenyl), Cattle, Insect regellents, Musca domestica, Toxicology. 7580-68 MALATHION DUST FOR CHICKEN MITE CONTROL. J L Rodriguez L A Riehl J Econ Entomol 53(2) 328-329, BIBL. Apr 1960 421 J822 Chickens, Dermanyssus, Malathion. 7581-68 THE MALATHION DUST-BATH FOR CONTROL OF FIVE SPECIES OF LICE ON CHICKENS. J L Rodriguez L A Riehl J Econ Entomol 53(2) 328, BIBL. Apr 1960 421 J822 Anoplura, Chickens, Malathion. 7582-68 THE IN VIVO ACTIVITY OF SEVERAL SYSTEMIC INSECTICIDES AGAINST CATTLE GRUBS IN SOUTH DAKOTA. W M Regoff P H Kohler R N Duxbury J Econ Entomol 53(2) 183-187, BIBL., TABS. Apr 1960 421 3822 Aminoacridine HCL, 9-, Cattle, Coumaphos, Dimethoate, Dowco 109, Midothioate), Monacrin, O-(4-tert-butyl-2-chlorophenyl) O-methyl methyl-phosphora-, Ronnel, South Dakota. 7583-68 CONTROL OF MYOCOPTES MUSCULINUS ON GUINEA PIGS. H G Senabusch J Econ Entomol 53(1) 168, BIBL. Feb 1960 421 J822 Aramite, DMC , Guinea pigs, Mange, Myocoptes, Radiation. 7584-68 TOXICITY TO HOUSE FLY LARVAE OF DROPPINGS FROM CHICKENS FED INSECTICIDE-TREATED RATIONS. M Sherman E Ross J Econ Entomol 53(3) 429-432, BIBL. 1960 421 J822 Chickens, Coumphos, Diazinon, Feces, Musca domestica, Toxicology, Trichlorfon. 7585-68 ECONOMIC IMPORTANCE OF THE CHICKEN BODY LOUSE. H J Stockdale E S Raun J Econ Entomol 53 (3) 421-423, BIBL. Jun 1960 421 J822 Animal nutrition, Chickens, Egg production, Menacanthus. 7586-68 FEED LOT TESTS WITH RONNEL FCR CONTROL OF CATTLE GRUBS. H E Thurber G D Peterson Jr J Econ Entomol 53(3) 339-341, BIBL. 340-341, PL. Jun 1960 421 J822 Cattle, Hypoderma, Ronnel.

### **Parasites**

7587-68 LESIONS ASSOCIATED WITH LIVER FLOKE INFECTION IN A CAT. Amer Vet Med Ass J 142(6) 661 15 Mar 1963 41.8 AM3 Cats, Clonorchis, Platynosomum. 7588-68 THIABENDAZOLE AS AN ANTHELMINTIC IN CATTLE AND SHEEP. Amer Vet Med Ass J 142(6) 655 15 Mar 1963 41.8 AM3 Anthelmintics, Cattle, Cooperia, Nematodirus, Ostertagia, Sheep, Thiabendazole, Trichostrongylus. 7589-68 SWINE ASCARIDS INFECT CATTLE. Amer Vet Med Ass J 142(8) 887 15 Apr 1963 41.8 AM3 Animal disease transmission, Ascaris, Cattle, Swine. 7590-68 SWINE KIDNEY WORM PERSISTENT AND RESISTANT. Amer Vet Med Ass J 142(6) 638 15 Mar 1963 41.8 AM3 Stephanurus dentatus, Swine. 7591-68 EFFECT OF DIETHYLCARBAMAZINE ON PARASITIC BRONCHITIS IN CALVES. Amer Vet Med Ass J 142(6) 658 15 Mar 1963 41.8 AM3 Calves, Dictyocaulus, Diethylcarbamazine, Parasitic bronchitis. 7592-68 IMMUNIZATION EXPERIMENTS WITH LUNGWORM LARVAE. Amer Vet Med Ass J 142(7) 782-783 01 Apr 1963 41.8 AM3 Calves, Dictyocaulus, Immunization, Verminous bronchitis. 7593-68 THE ZOONOSIS OF ANIMAL PARASITES IN IRAQ. IV. SOME UNUSU-AL LESIONS ASSOCIATED WITH OPISTHORCHIS TENUICOLLIS INFEC-TION. M A Al-Dabagh B B Babero M El-Hashimi Vet Rec 76(4) 116-119, 8 REFS. 25 Jan 1964 41.8 V641 Cats, Dogs, Helminthiasis. 7594-68 CONTROL OF DERMATOBIA HOMINIS IN CENTRAL AMERICA. E H Anderson Vet Rec 74(27) 784-787, 9 REFS. 07 Jul 1962 41.8 V641 Cattle, Insect biology, Oestridae. 7595-68 THE ANTHELMINTIC ACTIVITY OF A PHENOTHIAZINE-PHENZIDOLE MIX-TURE COMPARED WITH THAT OF THIABENDAZOLE IN LAMES IN KENYA. S F Barnett C Rodrigues Vet Rec 76(3) 81-83, 2 REFS., 1 TAB. 18 Jan 1964 41.8 V641 Anthelmintics, Helminthiasis, Lambs. 7596-68 FURTHER STUDIES ON TOXOPLASMOSIS AND OVINE ABORTION IN VORKSHIRE. J K A Beverley W A Watson Vet Rec 74(19) 548-552, 3 REFS., 8 TABS. 12 May 1962 41.8 V641 Abortion, Sheep, Toxoplasmosis. 7597-68 OVINE ABORTION AND TOXOPLASMOSIS IN THE EAST MIDLANDS. J K A Beverley R R Mackay Vet Rec 74 (17) 499-501, 3 REFS., 1 TAB. 28 Apr 1962 41.8 V641

```
Abortion, Sheep, Toxoplasmosis.
```

7609-68

7610-68

GERIA.

30 7598-68 7598-68 FURTHER ATTEMPTS TO INFECT ANIMALS WITH THEILERIA PARVA. D W Brocklesby B O Vidler Vet Rec 74(46) 1277, 1 REF. 17 Nov 1962 41.8 V641 Ixodides, Laboratory animals, Theileriasis. 7599-68 THENIUM AND FIPERAZINE COMBINED, IN THE TREATMENT OF BOOK-WORM AND ROUNDWORM INFESTATION IN THE DOG. C G D BIOWD Vet Rec 74(28) 787-791, 16 REFS., 4 TABS. 14 Jul 1962 41.8 V641 Ancylostomatidae, Ascaris, Dogs, Piperazine. 7600-68 FURTHER EXPERIENCES WITH THE SYSTEMIC INSECTICIDES ETROLENE AND RUELENE IN 1960-61. F C Brown Vet Rec 74(20) 577-582, 18REFS., 10 TABS. 19 May 1962 41.8 V641 Cattle, Oestridae, Ronnel, Ruelene. 7601-68 FIELD TRIALS COMPARING THE ANTBELMINTIC EFFECT OF RUELENE (4-TERT-BUTYL-2-CHLOGOPHENYLMETHYL METHYLPHOSPBORAMIDATE) WITH THAT OF PHENCTBIAZINE. F G Brown Vet Rec 74(18) 524-526, 5 TABS. 05 May 1962 41.8 V641 Lambs, Ehenothiazine, Ruelene, Trichostrongylosis. 7602-68 AN EXPERIMENTAL INVESTIGATION INTO THE USE OF METHYRIDINE AS AN ANTHELMINTIC FOR CATS. K Brown Vet Rec 74(30) 829-831, 7 REFS., 1 TAB. 28 Jul 1962 41.8 V641 Anthelmintics, Cats. 7603-68 PRE-PARTUM INFESTATION OF PUPPIES WITH ANCYLOSTOMA CANINUM. PA Clapham Vet Rec 74(26) 754-755, 1 TAB. 30 Jun 1962 41.8 V641 Ancylostomiasis, Dogs. 7604-68 A MIXTURE OF DIAVERIDINE AND SULPHAQUINOXALINE AS A COCCIDI-OSTAT FOR FOULTRY. M L Clarke Vet Rec 76(30) 818-822, 7 REFS. 25 Jul 1964 41.8 V641 Chickens, Coccidiosis, Sulfaguinoxaline. 7605-68 HUSK IN CATTLE LABORATORY AND FIELD STUDIES ON CALVES VAC-CINATED WITE IRRADIATED WITE LUNGWORM LARVAE. R L Cornwell Vet Rec 74(22) 622-628, 20 REFS., 4 TABS. 02 Jun 1962 41.8 V641 Cattle, Vaccines, Verminous bronchitis. 7606-68 THIABENDAZCLE AS AN ANTHELMINTIC IN RESEARCH MONKEYS. L E Cullum B R Hamilton Amer Vet Med Ass J 147(10) 1052 15 Nov 1965 41.8 AM3 Anthelmintics, Monkeys, Oesophagostomum, Strongyloides, Thiabendazole, Trichurus. 7607-68 THE TREATMENT OF ANKYLOSTOMIASIS AND OF SPIROCERCOSIS IN DOGS BY THE NEW COMPOUND, 2,6-DIIODC-4-NITROPHENOL. A Darne J L Webb Vet Rec 76(6) 171-172, 4 REFS., 2 TABS. 08 Feb 1964 41.8 V641 Ancylostomiasis, Dogs, Nitrophenol. 7608-68 INJECTAELE CARBONTETRACHLORIDE IN THE TREATMENT OF PASCIOLA HEPATICA INFESTATION IN LAMBS. N E Downey Vet Rec 74(15) 453-455, 5 REFS., 1 TAB. 14 Apr 1962 41.8 V641 Carbon tetrachloride, Fascioliasis, Lambs.

INFECTION OF GOATS WITH EIMERIA SPP. OF SHEEP ORIGIN. W M Fitzsimmons Vet Rec 76(39) 1099-1100, 4 REPS. 26 Sep 1964 41.8 V641 Coccidiosis, Goats, Sheep. 7611-68 INCIDENCE OF INFECTION WITH TRICHINELLA SPIRALIS IN DOGS. A Geller H Zaiman Amer Vet Med Ass J 147 (3) 253-254, 15 REFS. 01 Aug 1965 41.8 AM3 Culture media, Dogs, Mice, Trichinella. 7612-68 THE ACTION OF PURE MICROBIAL PHENOTHIAZINE ON THE INFESTA-TIONS OF NEMATODIRUS BATTUS IN LAMBS. T E Gibson Vet Rec 74(27) 766-767, 10 REFS., 2 TABS. 07 Jul 1962 41.8 V641 Lambs, Nematodiasis, Phenothiazine. 7613-68 EXPERIENCE WITH AN ANTHELMINTIC. P B Balpin W W Kirkby Vet Rec 74(16) 495 21 Apr 1962 41.8 V641 Anthelmintics, Cattle, Thelaziasis. 7614-68 TBE ANTHELMINTIC EFFICIENCY OF HALOXON AGAINST THE ADULT AND IMMATURE STAGES OF TBE GASTRO-INTESTINAL STRONGYLES OF NIGERIAN ZEBU CATTLE. J A Hart Vet Rec 76(12) 337-340, 12 REFS., 7 TABS. 21 Mar 1964 41.8 V641 Anthelmintics, Cooperia, Baemonchosis, Zebu cattle. 7615-68 DERMATOBTASTS IN CATTLE IN SOUTH AMERICA. M E Hugh-Jones Vet Rec 74(35) 961, 1 01 Sep 1962 41.8 V641 Cattle, Dermatobiasis. 1 REF. 7616-68 INFESTATION OF A PARAKEET WITB KNEMIDOKOPTES PILAE. V Ivens D D Myers N D Levine E I Pilchard Amer Vet Med Ass J 147(9) 968-969, 2 PLS. 01 Nov 1965 41.8 AM3 Knemidokoptes, Mites, Parakeets. 7617-68 BACILLARY HEMOGLOBINURIA (REDWATER DISEASE) IN FLORIDA. G R Jones B C Swindle Amer Vet Med Ass J 147 (2) 146-147 15 Jul 1965 41.8 AM3 Cattle, Clostridium, Florida, Red water disease, Sheep, Trematoda. 7618-68 A SURVEY AND REVIEW OF PARASITIC DISEASES OF WILD AND GAME BIRDS IN GREAT BRITAIN. I F Keymer J R Rose W N Beesley S F M Davies Vet Rec 74(33) 887-894, 56 REFS., 7 TABS. 18 Aug 1962 41.8 V641 Game birds, Parasitism. 7619-68 DIMETRIDAZOLE PART II. THERAPEUTIC ACTIVITY AND TOXICITY IN THE TREATMENT OF EXPERIMENTAL HISTOMONIASIS IN TURKEYS. In The Index and it Extractantial distort J M S Lucas Vet Rec 74(27) 759-763, 3 REFS., 6 TABS. 07 Jul 1962 41.8 V641 Anthelmintics, Blackhead, Turkeys. 7620-68 BOVINE STREPTOTHRICOSIS PRODUCTION OF LESIONS BY THE BITES OF THE TICK AMBLYOMMA VARIEGATUM. I Macadam

.

Vet Rec 74(23) 643-646, 7 REFS. 09 Jun 1962 41.8 V641

THE OCCURRENCE OF RAILLIETIA AURIS IN ZEBU CATTLE IN NI-

W Ferguson M M J LaVoipierre Vet Rec 74(24) 678, 4 REFS. 16 Jun 1962 41.8 V641 Otitis, Raillietiniasis, Zebu cattle.

Cattle, Ixodides, Streptotrichosis. 7621-68 TICK TRANSMISSION OF BOVINE PASTEURELLOSIS. TICK INARGALOUT I Macadam Vet Rec 74(24) 685-690, 4 RFFS. 16 Jun 1962 41.8 V641 Cattle, Ixodides, Shipping fever. 7622-68 THE EFFECTS OF ECTOPARASITES AND HUMIDITY ON NATURAL LESIONS OF STREPIOTERICOSIS. T Macadan Vet Rec 76(12) 354, 1 REF 21 Mar 1964 41.8 V641 Cattle, Streptotrichosis. 1 REF. 7623-68 THE APPLICATION OF BLOOD TRANSFUSION IN CATTLE WITH PARTICU-LAR REFERENCE TO BEDWATER (LABESIA BOVIS). J C MacKellar Vet Rec 74(27) 763-765, 7 REFS. 07 Jul 1962 41.8 V641 Blocd transfusions, Cattle, Firoplasmosis. 7624-68 MORPHOLOGICAL CBANGES IN A PARASITIC NEMATODE DUE TO ACQUIRED RESISTANCE OF THE HCST. J F Michel Nature 215 (5100), 520-521 29 Jul 1967 472 N21 Cattle, Morphology, Nematodes, Parasitism, Resistance. 7625-68 TRICHINCSIS DECLINES. H Most Amer Vet Med Ass J 147(11) 1262 01 Dec 1965 41.8 AM3 Swine, Trichinella, Trichinosis. 7626-68 PARAFILARIA MULTIFAPILLOSA IN THE HORSE. D F Oliver Vet Rec 76(30) 834 25 Jul 1964 41.8 V641 Diethylcarbamazine, Borses, Ringworm. 7627-68 LUNGWORM INFECTION IN CATTLE-CONTROL AND TREATMENT. W H Parker W H FARKEr Amer Vet Med Ass J 142(7) 743-750, 25 REFS., 4 TABS., 7 FIGS. 01 Apr 1963 41.8 AM3 Calves, Diethylcarbamazine, Vermincus bronchitis. 7628-68 GRISECFULVIN IN THE TREATMENT OF BOVINE RINGWORM. J K L Pearson J E F Rankin Vet Rec 74(19) 564 12 May 1962 41.8 V641 Cattle, Griseofulvin, Ringworm. 7629-68 EFFICACY OF MICRONIZED PBENOTHIAZINE AGAINST HETERAKIS GAL-LINAE IN CHICKENS. K G Powers E W Marty Poultry Sci 43(1) 174-178 Jan 1964 47.8 AM33F Cecal worms, Chickens, Heterakis, Phenothiazine. 7630-68 PROPHYLAXIS AGAINST TRYPANOSOMIASIS IN ZEBU CATTLE. III. POTENTIATICN TRIALS AND A TRIAL OF R.D. 2902 IN AN AREA OF MEDIUM TRYPANGSOME RISK. J Robson Vet Rec 74(16) 481-482, 1 TAH. 21 Apr 1962 41.8 V641 Glossina, Trypanosomiasis, Zebu cattle. EFFICACY OF TELABENDAZOLE AGAINST COOPERIA SPP. AND OSTERTAGIA OSTERTAGI IN CATTLE. R Rubin Amer Vet Med Ass J 147(8) 860 15 Oct 1965 41.8 AM3 Cattle, Cooperia, Ostertagia, Thiabendazole.

7632-68 SURVIVAL OF ENCYSTED EGGS AND LARVAE OF THE SOTHEAN CYST NEMATODE, HETERODERA GLYCINES, INGESTED HY SWINE. G C Smart Jr Phytopathology 53(8) 889-890 Aug 1963 464.8 P56 Eggs, Larvae, Nematodes, Soybeans, Swine. 7633-68 PATAL STRIKE CAUSED BY CHRYSOMIA BEZZIANA IN CATTLE AND HUPPALOES. H Stoddard E F Peck Vet Rec 74 (20) 591-592 19 May 1962 41.8 V641 Huffaloes, Cattle, Foot-and-mouth disease, Rinderpest. 7634-68 VACCINATION OF CALVES AGAINST RINDERPEST. K L Strickland Vet Rec 74(22) 630-631, 1 REF., 1 TAB. 02 Jun 1962 41.8 V641 Calves, Rinderpest, Vaccines. 7635-68 ECONOMIC PARASITOLOGY. ECONOMIC PARASITOLOGI. E L Taylor Vet Rec 74(30) 844, 1 REF. 28 Jul 1962 41.8 V641 Cattle, Economics, Parasitology. 7636-68 A SIMPLE METHOD FOR THE CULTURE AND RECOVERY OF LARVAE OF INTESTINAL NEMATODES OF SHEEP. V J Theodorides Vet Rec 76(12) 353, 4 REFS. 21 Mar 1964 41.8 V641 Culture media, Nematodiasis, Sheep. 7637-68 METHYRIDINE IN THE CONTROL OF INTESTINAL CAPILLARIASIS IN BIRDS. D Thienpont J Mortelmans Vet Rec 74(31) 850-852, 10 REFS., 2 TAHS. 04 Aug 1962 41.8 V641 Anthelmintics, Capillaria, Pigeons. 7638-68 IMMUNITY TO FASCIOLA HEPATICA INFECTION IN ALHINO RATS VAC-CINATED WITH IRRADIATED METACERCARIAE. E Thorpe A W J Broome Vet Rec 74 (26) 755-756, 4 REFS., 2 TABS. 30 Jun 1962 41.8 V641 Fasciola, Immunity, Rats. 7639-68 539-68 A TAENACIDE FOR DOGS AND CATS. T Turner Vet Rec 76(6) 186 08 Feb 1964 41.8 ¥641 Anthelmintics, Cats, Dogs, Taeniasis. 7640-68 THE ANTHELMINTIC ACTIVITY OF METHYRIDINE HY INTRAPERITONEAL INJECTION IN SHEEP AND CATTLE. J K Walley Vet Rec 74 (35) 927-932, 12 REFS., 7 TAHS. 01 Sep 1962 41.8 V641 Anthelmintics, Cattle, Sheep. 7641-68 STUDIES ON THE DISTRIBUTION OF THE SHEEP TICK (IXODES RICI-NUS L.) AND THE OCCURRENCE OF ENZOOTIC STAPHYLOCOCCAL IN-FECTION OF LAMHS IN NORTH-WEST YORKSHIRE AND NORTH-EAST LANCASHIRE. W A Watson Vet Rec 76 (27) 743-747, 15 REFS., 7 TABS. 04 Jul 1964 41.8 V641 Ixodides, Sheep.

7642-68 THE ROLE OF SELECTED MANAGEMENT SYSTEMS IN THE CONTROL OF SHEEP PARASITES. W J Zimmerman Amer Vet Med Ass J 147(5) 499-505, 4 FIGS. 01 Sep 1965 41.8 AM3 Helminthiasis, Parasitism, Phenothiazine, Sheep.

PAGE 57

30 7642-68

**40 COMMODITY PROTECTION** 

7643-68

DEVELOPMENT OF GRANARY WEEVILS AND STORAGE FUNGI IN COLUMNS DF WERAT II. . C M Christensen A C Hodson J Econ Entomol 53(3) 375-380, BIBL., TABS., PL. Jun 1960 421 J822

Aspergillus, Food storage, Fungi, Sitophilus, Wheat.

### **Storage Diseases**

7644-68

- PACTORS AFFECTING INVASION OF GRAINS AND SEEDS BY ASPERGIL-LUS FLAVUS AND EFFECTS OF THE FUNGUS ON GERMINATION OF THE SEEDS. L C Lopez-Frias Diss Abstr Sect B 27 (12, PT. 1), 4208B Jun 1967 25055.049D53

Aspergillus flavus, Corn, Grain, Bumidity, Oats, Peanuts, Rice, Seed germination, Seeds, Temperature, Wheat.

7645-68

- GERMINATION OF CEREAL, SORGHUM, AND SMALL LEGUME SEEDS AFTER FUMIGATION WITH HYDROGEN PHOSPHIDE. R G Strong D L Lindgren J Econ Entomol 53(1) 1-4, BIBL. Peb 1960 421 J822 Pumigation, Grain, Legumes, Phosphine, Seed germination,
- Sorghum.

## Arthropods

7646-68 FUMIGATION OF BUILDINGS TO CONTROL THE DRY-WOOD TERMITE. CRYPTCTERMES BREVIS. B A Bess A K Cta J ECON Entomol 53(4) 503-510, BIBL., TABS., PL. Aug 1960 421 J822 Buildings, Cryptotermes, Fumigation, Furniture, Methyl brcmide, Termites. 7647-68 STORED-GRAIN INSECTS AND THEIR CONTROL IN NEW JERSEY. H C Charman J Econ Entomol 53(4) 536-539, TABS. Aug 1960 421 J822 Coleoptera, Fumigants, Grain, Heteroptera, Bymenoptera, Lepidoptera, Malathion, New Jersey, Psocoptera, Pyrethrum, Stored products. 7648-68 TRELIMINARY EVIDENCE OF RESISTANCE OF HIGH-AMYLOSE CORN TO THE ANGOUMOIS GRAIN MOTH. J C Peters M S Zuber V Fergason J Econ Entomol 53 (4) 573-574, BIBL. Aug 1960 421 J822 Amyloses, Corn, Stored products. 7649-68 INFLUENCE CF GRAIN MOISTURE AND STORAGE TEMPEBATURE ON THE EFFECTIVENESS OF MALATHION AS A GRAIN PROTECTANT. R G Strong D E Sbur J Econ Entomol 53(3) 341-349, DIBL. Jun 1960 421 J822

PAGE 58 Food storage, Humidity, Malathion, Temperature.

7650-68 EFFECT OF METHYL BROMIDE AND HYDROCYANIC ACID FUMIGATION ON THE GERMINATION OF FLAX SEEDS. R G Strong D L Lindgren J Econ Entomol 53(1) 17-19, BIBL. 18-19, TABS. Feb 1960 421 J822 Flazsed, Funigation, Hydrocyanic acid, Methyl bromide, Seed germination, Storage.

**Microbial Contamination** 

7651-68 THE MICROBIOLOGICAL CONTAMINATION OF EGG SHELLS AND EGG PACKING MATERIALS. R 6 Board J C Ayres A A Kraft R H Porsythe Poultry Sci 43(3) 584-595 May 1964 47.8 AM33P Bacteria, Egg containers, Eggs. 7652-68

THE EFFECT OF 2 HEPTA-5-METBYLBENZINIDAZOLE AND BYDROCHLORIC ACID ON THE GROWTH OF MICRCFLORA FOUND ON POULTRY CARCASSES. G J Mountney U B Blackwood R N Kinsley J E O Malley Poultry Sci 43(3) 778-780 May 1964 47.8 AM33P Bacillar Corriging Corriging Control Hay 1964 4765 ABSI Bacillus, Candida, Chickens, Chlortetracycline, Cornybacterium, Bepta-5-methylbenzimidazole, 2-, Hydrochloric acid, Peptococcus, Poultry meat, Pseudomonas, Rhodotorula, Staphylococcus.

7653-68

THE EFFECT OF FOOD GRADE FOLYPBOSPBATES ON THE MICROBIAL POPULATION OF CHICKEN MEAT. J E Steinhauer G J Banwart Poultry Sci 43(3) 618-625 May 1964 47.8 AM33P Bacteria, Chickens.

## **50 ENVIRONMENTAL CONTAMINATION**

7654-68 SOME FACTORS THAT INFLUENCE THE DEACTIVATION OF ATRAZINE IN SOIL. O Agundis Diss Abstr Sect B 27 (12, PT. 1), 4187B Jun 1967 Z5055.049D53 Atrazine, Environment, Herbicide residues, Nitrogen, Soil air, Soil contamination, Soil moisture, Soil temperature, Soybeans, Theses. 7655-68 OXYGEN BALANCE IN A STREAM RECEIVING DOMESTIC AND OIL REFIN-ERY EFFLUENTS. K Baumgardner Diss Abstr Sect B 27 (12,PT.1), 4595B Jun 1967 25055.049D53 Algae, Industrial Wastes, Oxygen, Streams, Water pollution. 7656-68 PESTICIDES AND THE SOIL FAUNA. I. EFFECTS OF ALDRIN AND DDT IN AN ARABLE FIELD. C A Edwards E B Dennis D W Empson Ann Appl Biol 60 (1), 11-22 REF Aug 1967 442.8 AN72 DDT , Pesticide residues, Soil contamination, Soil fauna. 7657-68 THE EFFECT OF OILS ON HERBICIDAL ACTIVITY OF ATRAZINE AND LINURCN ANE OF WAXES AND OILS ON THE MOVEMENT OF EPTC IN SOIL. L C Liu Diss Abstr Sect B 27 (12,PT.1), 4212B-4213B Jun 1967 25055.049D53 Atrazine, Corn, Crop yields, Ethyl N.N-dipropylthiocarbamate, Herbicides, Linuron, Naphthenes, Oats, Cils, Paraffin oils, Paraffin wax, Pesticide application, Soil leaching, Thiocarbamates. 7658-68 DECOMPOSITION OF 2,4-D AND RELATED PHENOXYACETIC ACIDS BY AN ARTHROPACTER SPECIES. A LOOS Diss Abstr Sect B 27 (12,PT.1) 4232B-4233B Jun 1967 25055.U49D53 Arthrobacter, D, 2,4-, Enzymes, Herbicides, Phenoxyacetic acid compounds, Soil bacteria.

## 55 RESIDUES

7659-68 PESTICIDE RESIDUES IN POULTRY SAMPLES, USDA STUDY SHOWS. Amer Vet Hed Ass J 147(11) 1253-1254 01 Dec 1965 41.8 AM3 Animal nutrition, Pesticide residues, Poultry. 7660-68 THE SAFE USE OF TOXIC CHEMICALS. Vet Rec 76(10) 273-275 07 Mar 1964 41.8 V641 Accident prevention, Legislation, Pesticides, Public health. 7661-68 NICOTINE RESIDUES IN FIELD-TREATED CAULIFLOWER, CELERY, GREEN BEANS, KALE, MUSTARD GREENS AND SPINACE. L D Anderson F A Gunther J Econ Entomol 53(1) 64-65, BIBL., TABS. Peb 1960 421 J822 Beans, Black Leaf 40, Cauliflower, Celery, Kale, Hustard greens, Nicotine, Residues, Spinach. 7662-68 DIPYRIDYLIUM RESIDUES IN AN AQUATIC ENVIRONMENT. P G Beasley Diss Abstr Sect B 27 (12,PT.1), 4596B Jun 1967 25055.U49D53 Dipyridylium, Diguat, Fish, Herbicide residues, Paraguat, Roe, Soil contamination, Water pollution. 7663-68 INSECTICIDES IN HUMAN FAT IN NEW ZEALAND. B V Brewerton B J W McGrath New Zeal J Sci 10 (2), 486-492 REF Jun 1967 514 N482 Children, Chlorinated hydrocarbons, Chromatography, Fats, Bumans, Insecticide residues, DDE, DDT, New Zealand. Abstract included 7664-68 TOXIC CHEMICALS. W M Brownlie Vet Rec 76(5) 164 01 Feb 1964 41.8 V641 Pesticide residues. 7665-68 A COLORIMETRIC METBOD FOR THE DETERMINATION OF CO-RAL IN ANIMAL TISSUES. B V Claborn M C Ivey H D Mann J Econ Entomol 53(2) 263-265, BIBL. Apr 1960 421 J822 Coumaphos, Residues. 7666-68 MEASURING THE SURFACE AREA OF APPLES FOR EXPRESSION OF PESTICIDE RESIDUES. R J Daum J E Dewey J Econ Entomol 53(3) 462-467, BIBL., TABS. Jun 1960 421 J822 Apples, Pesticides, Residues, Statistics. 7667-68 RESIDUES IN ESTABLISBED ALFALFA TREATED WITE GRANULATED PBORATE (THIMET) AND TBEIR EFFECT ON CATTLE FED THE BAY. R C Dobson G O Throneberry T E Belling J Econ Entomol 53(2) 306-310, BIBL., TABS. Apr 1960 421 J822 Alfalfa, Cattle, Bay, Phorate, Residues. 7668-68 THE EXCRETION OF DIELDEIN, DDT, AND BEPTACHLOR EPOXIDE IN MILK OF DAIRY COWS FED ON PASTURES TREATED WITH DIELDEIN, DDT, AND BEPTACHLOR. N Gannon G C Decker J Econ Entomol 53(3) 411-415, BIBL. 414-415, TABS. Jun 1960 421 J822 Cattle, Dieldrin, DDT , Heptachlor, Beptachlor epoxide, Milk, Residues.

55 7668-68

55 7669-68 7669-68 SEVIN RESIDUES ON SOYBEANS FOLLOWING ITS USE FOR ARMYWORM CONTRCL. L J Hardin W W Stanley D E Gonzalez S E Bennett J Econ Entomol 53(3) 481-482, BIBL. Jun 1960 421 J822 Carbaryl, Fseudaletia, Residues, Soybeans. 7670-68 HEPTACHIOR RESIDUES ON CORN STOVER IN RELATION TO DAIRY CATTLE FEDING. R E Johnsen P A Dahm H W Rusk M L Fairchild A E Freeman J Econ Entomol 53(1) 19-22, BIBL. Peb 1960 421 J822 Animal nutrition, Cattle, Corn, Corn stover, Dairy cattle, Heptachlor, Heptachlor epoxide, Milk analysis, Ostrinia nubilalis, Residues. 7671-68 THE EFFECT OF SOIL TREATMENTS OF CHLORDANE OR HEPTACHLOR ON THE FLAVOR OF TURNIPS, PARSNIPS, AND CARROTS. M E Kirkpatrick J L Brogdon G J DeViney J Econ Entemol 53(2) 285-287, BIBL. Apr 1960 421 J822 Carrots, Chlordane, Heptachlor, Parsnips, Residues, Turnips. 7672-68 PERSISTENCE OF DDT, ALDRIN, AND LINDANE IN SOME MIDWESTERN SOILS. E P Lichtenstein L J De Pew F L Eshbaugh J P Sleesman J Econ Entomol 53(1) 136-142, BIBL. 141-142, TABS., PL. 1960 421 J822 Aldrin, DDI , Lindane, Residues, Soils. 7673-68 73-68
 EPOXIDATION OF ALDRIN AND HEPTACHLOR IN SOILS AS INFLUENCED BY AUTOCLAVING, MOISTURE, AND SOIL TYPES.
 P Lichtenstein K B Schulz J Econ Entomol 53(2) 192-197, BIBL. 196-197, TABS. Apr 1960 421 J822 Aldrin, Autoclaves, Dieldrin, Epoxy resins, Heptachlor, Humidity, Residues, Soils. 7674-68 MALATHION RESIDUES ON AND IN THE LEAVES OF PHASEOLUS VULGARIS. F Matsumura J Econ Entomol 53(3) 452-454, BIBL. Jun 1960 421 J822 Beans, Malathion, Residues. 7675-68 DIT RESIDUE STUDIES CN FEPPFRS. R E Menzer P F Burbutis R N Hofmaster L P Ditman J Econ Entomol 53 (4) 622-624, BIBL., TABS. Aug 1960 421 J822 DDI , Redpeppers (vegetable), Residues. 7676-68 STUDIES ON THE METABOLISM AND RESIDUES OF P32-LABELED DEINAV IN A HEREFORE STEER. F W Plapp Jr W S Bigley D I Darrow J Econ Entomol 53(1) 60-64, BIBL. 63-64, TABS. Feb 1960 421 J822 Rereford cattle, Mice, P-dioxanedithiol s,S-bis (0,0-diethyl phosphorodithioate), P32-delnav, Residues, Spraying. ACUIE TOXIC EFFECTS UPON LIVESTOCK AND MEAT AND MILK ACULE TOXIC EFFECTS UPON LIVESTOCK AND HEAT AND MILK RESIDUES OF DIELDENN. R D Radeleff W J Nickerson R W Wells J Econ Entomol 53(3) 425-429, TABS. Jun 1960 421 J822 Calves, Dieldrin, Goats, Lambs, Beat, Milk, Residues, Sheep. 7678-68 RESIDUE STUDIES OF LIVESTOCK SPEAYS CONTAINING SEVIN. R H Roberts J B Jackson W E Westlake A J Ackerman J Econ Entomol 53(2) 326-327, BIBL. 1960 421 J822 Carbaryl, Livestock, Residues, Spraying. 7679-68 DISSIPATION OF MALATHION RESIDUES ON TOMATO AND PEA. P Singh & Lal Indian J Entomol 28 (3), 332-338 REF Sep 1966 420 IN23 Insecticide residues, Malathion, Peas, Tomatoes. PAGE 60

7680-68 RESIDUES OF MALATHION ON ALFALFA AND IN MILK AND MEAT. C T Smith F Shaw R Lavigne J Archibald H Penner D Stern J Econ Entomol 53(4) 495-496, BIBL. Aug 1960 421 J822 Alfalfa, Malathion, Meat, Milk, Residues. 7681-68 ANALYSIS OF EGG YOLK AND POULTRY TISSUES FOR CHLORINATED IN-SECTICIDE RESIDUES. A B Stemp B J Liska B E Langlois W J Stadelman Poultry Sci 43(1) 273-275 Jan 1964 47.8 AM33P Chromatography, Florisil, Insecticide residues, Poultry. 7682-68 DDT DEPOSITS ON GRAPES AS AFFECTED BY GROWTH AND WEATHERING. E F Taschenberg A W Avens J Econ Entomol 53(2) 269-276, BIBL., TABS. Apr 1960 421 J822 DDT , Grapes, Plant growth inhibitors, Residues, Weather. 7683-68 PARATHION AND EPN RESIDUE STUDIES ON CONCORD GRAPES. E F Taschenberg A W Avens J Econ Entomol 53(3) 441-445, BIBL. 444-445, TABS. Jun 1960 421 J822 EPN , Grapes, Parathion, Residues. 7684-68 ORGANOCHLORINE PESTICIDES IN ANTARCTICA. NANGENGENERAL PERFERENCE J O Tatton J H A Ruzicka Nature 215 (5099), 346-348,MAP REF Jul 1967 472 N21 Antarctica, Birds, DDE, DDT, Fish, Insecticide residues, Organophosphorus compounds. 7685-68 TOXIC CHEMICALS.

- Woodford Wet Rec 76(6) 189, 1 REF. 08 Feb 1964 41.8 V641 Benzene hexachloride, DDT , Lindane, Pesticide residues.

60 TOXICOLOGY

7686-68 DEFFECT OF MINERAL OIL SOLVENT ON TRE TOXICITY AND SPEED OF ACTION OF MALATRION. R Ahmed R G Gardiner Nature 214 (5095), 1338-1335 24 Jun 1967 472 N21 Malathion, Mineral oil, Schistocerca gregaria, Toxicology. 7687-68 EVIDENCE FOR A DIFFERENCE IN TOXICITY BETWEEN COMMON AND HAIRY VETCE SEEDS FOR CRICKS. G E Arscott J A Rarper Poultry Sci 43(1) 271-272 Jan 1964 47.8 AM33F Chicks, Feed, Hairy vetch, Poisoning, Vetch. 7688-68 RELATIONSRIPS RETWEEN STRUCTURE AND INSECTICIDAL ACTIVITY OF SCME ORGANOTIN COMPOUNDS. M S Blum J J Fratt Jr I Solum J J Fratt Jr J Econ Entomol 53(3) 445-448, RIRL. Jun 1960 421 J822 Insecticides, Musca domestica, Organotin compounds, Toxicology, Triethyl chloride. 7689-68 CONTROL OF TRAR (BEMITRAGUS JEMLAHICUS), EVALUATION OF A POISONING IECRNIQUE. M H Douglas New Zeal J Sci 10 (2), 511-526, MAP REF Jun 1967 514 N482 Carrots, Poisoning, Sodium monofluoroacetate, Thab. 7690-68 PYRETRRINS AND RELATED COMPCUNDS. IX. ALKENBENZYL AND BENZYLRENZYL CHRYSANTREMATES. M Ellicit N F Janes & C Pearson J Sci Food Agr 18 (8), 325-331 REF Aug 1967 382 S012 Alkenylbenzyl, Benzylbenzyl chrysanthemates, Musca domestica, Olefins, Pyrethrum, Toxicology. 7691-68 697-68 TRE SFARCE FOR VETERINARY INSECTICIDES. II. CARBAMATES ACTIVE AGAINST SHEEP RLCWFLY. J Fraser D Greenwood I R Barrison D F Wells J Sci Food Agr 18 (8), 372-376 REF Aug 1967 382 S012 Rutacarb(3,5-di-)-butylphenyl n-methylcarbamate, Calliphoridae, Carbamates, Insecticides, Fest control, Sheep, Toxicology, Veterinary medicine. 7692-68 EFFECT OF LATRODECTUS MACTANS TREDECIMGUTTATUS VENOM ON TRE CRAYFISH STRETCH RECEPTOR NEURONE. A Grasso F Paggi Toxicon 5 (1), 1-4 REF Jul 1567 391.8 166 Crayfish, Latrodectus, Nervous system, Picrotoxin, Spider vencm, Toxicclogy. Abstract included 7693-68 HERITABLE RESISTANCE TO WARFARIN IN RATS. J R Greaves P Ayres Nature 215 (5103), 877-878 19 Aug 1967 472 N21 Reredity, Kats, Resistance, Locent control, Rodenticides, Warfarin 7694-68 TOXICITY OF ORGANIC PROSPRORUS INSECTICIDES TO RORSES. J R Jackson R O Drummond W R Ruck L M Runt J Econ Entomol 53(4) 602-604, BIRL. 603-604 Aug 1960 421 J822 Coumaphos, Dichlorvos, DOWCO 105, Horses, O-methyl O-(4-tert-butyl chlorophenyl) ethylphosphoramido-, Organic compounds, Fhosphorus, Ronnel, Ruelene, Thioate, Toxicology, Trichlorfon,

7695-68 TRE EFFECTIVENESS OF EDTA AS A FISE PRESERVATIVE. R E Levin J Milk Food Technol 30 (9), 277-283 REF Sep 1967 44.8 3824 Ethylenediaminetetraacetic acid, Fish, Food preservation, Toxicology. 7696-68 STRUCTURE AND PESTICIDAL ACTIVITIES OF DERIVATIVES OF DINI-TROPEROLS. TIL. STRUCTURE AND ACARICIDAL ACTIVITY OF CER-TAIN CAERONATES OF 2-ALKYL-5-METRYL-4,6-DINITROPHENOIS AND RELATED COMPCUNDS. M Pianka J D Edwards J Sci Food Agr 18 (8), 355-360 Aug 1967 382 S012 Acaricides, Alkyl-5-methyl-4,6-dinitrophenols, 2-, Dinitrophenols, Manmals, Terranjchus telarias, foxicology. 7697-68 THE TOXICOLOGY OF TRIODAN IN SEVERAL FISF AND AQUATIC LAVES-TERRATES. R A Schoettger Jun JSchoett Sect R 27 (12,PT.1), 4609B-4610B Jun 1967 Z5055.U49D53 Aquatic animals, Chemical control (fish), Chlorinated hydrocarbons, Endosulfan, Fish, Theses, Toxicology. 7698-68 TRE MECRANISM OF TRE INTERACTION RETWEEN SOIL ORGANIC MATTER AND HERRICIDE TOXICITY AND TRE INFLUENCE OF PR ON HEFRICIDE PHYTOTOXICITY. F L Selman Diss Abstr Sect B 27 (12,PT.1), 4189R Jun 1967 25055.049D53 Chloro-N,N-diallyacetamide, 2-, D, 2,4-, Dalapon, Dinitrobutylphenol, Rerbicides, Rydrogen-ion concentration, Phytotoxicity, Prometone, Simazine, Soil cation exchange, Soil organic matter. 7699-68 TOXICOLOGICAL ASPECTS OF 2,2-DICRLOROVINYL DIMETHYL PROSPRATE (DDVP) IN COWS, RORSES, AND WRITE RATS. R L Tracy J G Woodcock S Chodroff J Econ Entomol 53 (4) 593-601, BIBL., TARS. Aug 1960 421 J822 Cattle, Dichlorvos, Borses, Musca domestica, Rats, Toxicology.

4-tert-buty1-2-chlorophenyl methyl methylphosphoramidate.

# 65 PLANT PHYSIOLOGY & BIOCHEMISTRY

```
7700-68
   EFFECI OF METHYL BRCMIDE SALMONELLA PULLORUM.
Amer Vet Med Ass J 142(6) 660
15 Mar 1963 41.8 AM3
   Methyl bromide, Salmonella.
7701-68
   THE MACERATING ENZYME OF RHIZCCTONIA SOLANI.
D F Bateman
   Phytograthology 53(10) 1178-1186. BIBL., TABS.
Oct 1963 464.8 P56
Beans, Enzymes, Hydrogen-ion concentration, Maceration,
   Pectinase, Rhizoctonia, Tissues.
7702-68
   INTERACTION OF GROWTH REGULATORS IN THE SENESCENCE OF
   NASIDRTION LEAF DISKS.
L Beevers F S Guernsey
   Nature 214 (5091), 941-942 REP 27 May 1967 472 N21
    Leaves, Plant regulators, Plant senescence,
   Trapacolum majus.
7703-68
    AN INVESTIGATION OF THE TOXIC PLANT - RAYLESS GOLDENROD (APLCFAFFUS HETEROFHYLLUS).
      I Burke
   Diss Abstr Sect B 27 (12, PT. 1), 4302B
   Jun 1967 25055.049D53
Aplopaprus heterophyllus, Plant composition,
Poisonous flants.
7704-68
   RESFIRATORY ACTIVITY AND ENZYMES FOR GLUCOSE CATABOLISM IN
   FUNGUS SPCRES.
P G Caltrider D Gottlieb
   Phytopathology 53(9) 1021-1030, BIBL., TABS.
Sep 1963 464.8 F56
Enzymes, Glucose, Metabolism, Respiration,
    Spore germination.
7705-68
   PHYSICLOGICAL AND METABOLIC CHANGES INDUCED BY LETHAL CON-
CENTRATIONS OF 2,4-D IN THE COCKLEBUR (XANTBIUM SPP.).
J Cardenas-Gonzalez
   Diss Abstr Sect B 27 (12,PT.1), 4203B
Jun 1967 25055.U49D53
D, 2,4-, Herbicides, Plant metabolism, Plant physiology,
Xanthium.
7706-68
   SPORE GERMINABILITY IN SOIL AS AN INHERENT CHARACTER OF COCBLIDECLUS SATIVUS.
   S H F Chinn R D Tinline
Phytopathology 53(9) 1109-1112, BIBL., TABS., PL.
Sep 1963 464.8 P56
Bipolaris, Cochliobolus, Helminthosporium, Soils,
Spore germination.
7707-68
   PLANT POLYPHENOLS AS ANTIOXIDANTS FOR ASCORBIC ACID.
C A B Clemetson L Andersen
N Y Acad Sci Ann 136 (14), 341-376 REF
30 Sep 1966 500 N484
Antioxidants, Ascorbic acid, Phenols, Plants.
7708-68
    TRANSLOCATION OF C14-LABELED COMPOUNDS IN COTTON AND OAKS.
    M & Clor & S Crafts S Yamaguchi
Weeds 12(3) 194-200
Jul 1964 79.8 W41
    Amitrole, Carbon isotopes, Cotton, Plant translocation,
Quercus, Radioisotopes, Seedlings, Sucrose, Drea, 2,4-D.
 7709-68
    SPORE GERMINATION AND CARBON METABOLISM IN FUSABIUM SOLANI.
I. RECUIREMENTS FOR SPORE GERMINATION.
J C Cochrane V W Cochrane F G Simon J Spaeth
Phytopathology 53(10) 1155-1160, BIBL., TABS.
```

Oct 1963 464.8 P56 Carbon, Fusarium, Metabolism, Spore germination. 7710-68 CHLOROSIS INDUCED BY SUBSTITUTED BENZOIC ACIDS AND RELATED COMPOUNDS. J R Dimmock J Sci Pood Agr 18 (8), 368-372 REF Aug 1967 382 So12 Chlorophylls, Chlorosis (plants). 7711-68 ELECTRON MICROSCOPY OF THE SHEATH SURROUNDING THE HAUSTORIUM OF ERYSIPHE GRAMINIS. H G Ehrlich M A Ehrlich Phytopathology 53(11) 1378-1380, BIBL., PL. Nov 1963 464.8 P56 Electron microscopy, Erysiphe, Haustorium, Puccinia. 7712-68 RAPID PLANT VIRUS ASSAY COMBINES DENSITY-GRADIENT CENTRIFUGATION AND OUCHTERLONY AGAR DIFFUSION SEROLOGICAL TESTS. R E Ford Phytopathology 53(10) 1138 Oct 1963 464.8 P56 Assay, Centrifugation, Density, Ouchterlony agar, Serological tests. 7713-68 PATHOGENICITY OF CHLORINATED-NITROBENZENE-TOLEBANT STRAINS OF HYPOMYCES SOLANI F. CUCURBITAE RACE 2. S G Georgopoulos Phytopathology 53(9) 1081-1085, BIBL., PL. Sep 1963 464.8 P56 Chlorine, Fusarium, Genetics, Hypomyces, Nitrobenzene. 7714-68 EFFECTS OF RELATIVE HUMIDITY AND TEMPERATURE ON THE DEGRADA-TION OF PEANUT SUGAR AND OIL BY ASPERGILLUS FLAVUS. A W Hayes A W Hayes Diss Abstr Sect B 27 (12,PT.1), 4278B Jun 1967 25055.049D53 Aspergillus flavus, Humidity, Oils, Peanuts, Plant metabolism, Seeds, Sugars, Temperature. 7715-68 CORALLOID ROOT SYSTEMS IN PLANTS SHOWING LIME-INDUCED CHLOR-OSIS. T C Hutchinson Nature 214 (5091), 943-945 REF 27 May 1967 472 N21 Chlorosis (plants), Lime. 7716-68 IN VITRO SPORIDIAL GERMINATION OF CRONARTIUM FUSIFORME. A G Kais Phytopathology 53(8) 987, BIBL. Aug 1963 464.8 P56 ∆ug Cronartium, Metamorphosis, Spore germination. 7717-68 METABOLISM OF METHYLCARBAMATE INSECTICIDE CHEMICALS IN PLANTS. PLANTS. R J Kuhr Diss Abstr Sect B 27 (12,PT.1), 4437B Jun 1967 25055.U49D53 Beans, Carbamates, Insecticides, Metabolites, Plant metabolism, Radioactive tracers. 7718-68 THE MICROBIAL HYDROLYSIS OF CELLULOSE AND SOME FACTORS AF-FECTING THE PRODUCTION OF CELLULASE IN A SUBMERGED CULTURE OF ALTERNARIA SP. R M Logan R M Logan Diss Abstr Sect B 27 (12,PT.1), 4489B Jun 1967 Z5055.U49D53 Alternaria, Cellulase, Cellulose, Hydrolysis, Quercus, Sawdust, Wood destroying fungi. 7719-68 THE ACTIVITY OF THE FUNGUS, CATANARIA ANGUILLULAE, AGAINST PLANT-PARASITIC NEMATODES. R Mankau S A Sweeney Phytopathology 53(10) 1140 Oct 1963 464.8 P56 Catanaria, Nematodes.

65 7733-68

7720-68 COMPARATIVE ANATOMICAL STUDY OF LEAVES OF YOUNG AND MATURE BANANA FLANTS IN RELATION TO THE MORPHOLOGY OF CERCOSPORA MUSAE LESIONS. M W McGahan R R Fulton Phytopathology 53(8) 882 Aug 1963 464.8 P56 Bananas, Cercospora, Leaves, Plant anatomy, Plant mcrphology. 7721-68 ISOLATION AND CRARACTERIZATION OF A GERMINATION INRIBITOR FROM SUGAR BEET FRUIT. E D Mitchell Diss Abstr Sect B 27 (12, PT. 1), 4284B Jun 1967 25055.049053 Cyclohexene-1,2-dicarboximide, cis-4-, Plant growth inhibitors, Seed germination, Sugar beets. 7722-68 BIOLOGICAL RACES OF ALBUGO CANDIDA. G S Pound P B Williams Phytopathology 53(10) 1146-1149, BIBL. Oct 1963 464.8 P56 Albugo, Reviews. 7723-68 723-68 INFLUENCE OF OAT AND ALFALFA RESIDUES ON SOIL RESPIRATION, FUNGISTASIS, AND SUBVIVAL OF VERTICILLIUM ALBO-ATRUM. R L Powelson S S Fatil Phytopathology 53(10) 1141 Oct 1963 464.8 P56 Alfalfa, Fungicides, Oats, Plant residues, Respiration, Soils, Verticillium. 7724-68 OOGONIUM GERMINATION IN PHYTOPHTHOHA INFESTANS. S Romero M E Gallegly Phytogathology 53 (8) 899-903, BIBL., TABS., PL. Aug 1963 464.8 P56 Oogonium germination, Oospores, Phytophthora. 7725-68 TRE RAPIOID BERAVIOR OF UROCYSTIS COLCHICI TELIOSPORES. E Tachibana E Duran Phytopathology 53(10) 1142-1143 Oct 1963 464.8 P56 Polyploidy, Reproduction, Smut (onions), Teliospores, Urocystis. 7726-68 PROLONGING THE MOTILITY AND VIRUS-THANSMITTING ABILITY OF DIFUDIUM ZOOSFORES WITH CREMICALS. D S Teakle A B Gold Phytopathclogy 53(10) 1143 Oct 1963 464.8 E56 Olpidium, Plant disease transmission, Zoospores. 7727-68 COMPARISON OF VARIOUS ISOLATION MEDIA FOR THE ENUMERATION OF TRIELAVIOPSIS BASICCLA IN SOIL DILUTION PLATES. P R Tsao Phytopathology 53(10)1143 Oct 1963 464.8 P56 Thielaviopsis. 7728-68 A SLENDER-SPORED DACTYLELLA PARASITIC ON PYTHIUM OOSPORES. DRECESSIER, C. Phytopathology 53 (9) 1050-1052, BIBL. Sep 1963 464.8 P56 Dactylella, Oospores, Phytophthora, Pythium. 7729-68 TRE MCDE OF ACTION OF 2,6 DICHLCRO-4-NITROANILINE IN REIZOPUS ARREIZUS SPORES. D J Weber Phytopathology 53 (10) 1144 Oct 1963 464.8 P56 Dichloro-4-nitroaniline, 2,6-, Metabolism, Rhizopus, Spores. 7730-68 INRIBITION OF ENZYMES BY THE ANTROCYANIN MALVIDIN-3-MONOGLU-COSIDE. O E Wheeler J A Carpenter J J Powers M K Ramdy Soc Exp Biol Med Froc 125 (2), 651-657 REF Jun 1967 442.9 Sol Anthocyanins, Escherichia coli bacterin, Folic acid, Grapes, Malvidin-3-monoglucoside, Plant growth inhibitors, Salmonella enteritidis, Staphylococcus aureus.

7731-68
PHYSIOLOGICAL RACES OF ALBUGO CANDIDA.
P H Williams G S Pound
Phytopathology 53(8) 893
Aug 1963 464.8 P56
Albugo, Taxonomy.
7732-68
A QUALITATIVE COMPARISON OF THE AMINO ACID CONTENT OF ACID
HYDROLYSATES FROM THE MYCELIUM OF CUCURBIT ANTHRACNOSE
FUNGI.
N N Winstead C I MCCombs I B Lowie
Phytopathology 53(11) 1365-1367, BIBL.
Nov 1963 464.8 P56
Amino acids, Anthracnose (cucurbita), Colletotrichum, Cucurbita.
7733-68
ASPERYELLONE, A NEW YELLOW PIGMENT OF ASPERGILLUS AWAMORI AND ASPERGILLUS NIGER. II. THE CHEMICAL STRUCTURE OF ASPERFELIONE.
J YU G Tamura N Takahashi K Arima

Agr Biol Chem 31 (7), 831-836 Jul 1967 385 AG8B

Aspergillus awamori, Aspergillus niger, Asperyellone.

7744-68

## 70 CHEMISTRY

7734-68 TOXIC CHEMICALS. TOXIC CHEMICALS. P S Bramley Vet Rec 76(2) 67 11 Jan 1964 41.8 V641 Pesticides, Toxicology, Wildlife. 7735-68 TOXIC CHEMICALS. C A E Briggs Vet Rec 76(1) 17, 2 REFS. 04 Jan 1964 41.8 V641 Pesticides, Toxicology. 7736-68 PRODUCTION OF 3-METHYL-6-METHOXY-8-HYDROXY-3,4-DIHYDROISO-COUMARIN BY CARROT RCOT TISSUE. P Condon J Kuc H N Draudt Phytograthology 53(11) 1244-1250, BIBL. 1249-1250, TABS. Nov 1963 464.8 P56 Carrots, Methyl-6-methoxy-8-hydroxy-3,4-dihydroisocoumarin, 3-, Roots, Tissues. 7737-68 COMPARATIVE BACTERICIDAL PROPERTIES OF N-FOLYHALOETBYLTHIO HYDANTOINS. P H Eastburg F T Maurer W D Thomas Jr Phytopathclogy 53(10) 1138 Oct 1963 464.8 256 Agrobacterium, Bactericides, Corynebacterium, Erwinia, N-polyhaloethylthio hydantoins, Pseudomonas, Xanthamonas. 7738-68 TOLERANCE TO CHLORINATED NITROBENZENES IN HYPOMYCES SOLANI F. CUCURBITAE AND ITS MODE OF INBERITANCE. S G Georgopoulos Phytopathology 53 (9) 1086-1093, BIBL., TABS., PL. Sep 1963 464.8 P56 Chlorine, Fusarium, Heredity, Hypomyces, Nitrobenzene. 7739-68 TOXICITY OF ORGANIC FLUORINE COMPOUNDS. F T D Good Vet Rec 76(1) 17-18 04 Jan 1964 41.8 V641 Fluorine compounds, Toxicology. 7740-68 TOXIC CHEMICALS. H E Harbour Wet Rec 76(4) 134 25 Jan 1964 41.8 V641 Fluorine, Pesticide residues, Poisoning. 7741+68 A1-66 STUDIES ON THE DECOMPOSITION OF SINALBIN. II. THE COMPOSI-TION FRCDUCTS OF SINALBIN AND THEIR DEGRADATION PATHWAYS. S Kawakishi M Namiki B Watanabe K Muramatsu Agr Biol Chem 31 (7), 823-830 REF Jul 1967 385 AG8B Decomposition, Sinalbin. 7742-68 BIOASSAY METBODS FOR 4-AMINO-3,5,6-TRICHLOROPICOLINIC ACID. J K Leasure Weeds 12(3) 232-233 Jul 1964 79.8 W41 Jul 1964 73.0 #41 Amino-3,5,6-trichloropicolinic acid, 4-, Beans, Biological assay, Seedlings, Soils, Tordon. 7743-68 PHYSIOLOGY OF ASEXUAL REPRODUCTION IN APHANOMYCES Philotogi of Postal Line J E Mitchell C Y Yang Phytopathology 53(8) 883 Aug 1963 464.8 P56 Aphanemyces, Asexual reproduction, Physiology. PAGE 64

RELEASE OF METBYLISOTHIOCYANATE FROM SOILS TREATED WITH MYLONE (3,5-DIMETBYL-TETRABYDRG-1,3,5,2H THIADIAZINE-2-TBIONE). D E Munnecke Phytopathology 53(10) 1140 Oct 1963 464.8 P56 Dimethyl-tetrahydro-1,3,5,28 thiadiazine-2-thione, 3,5-, Bethylisothiocyanate, Bylone, Soils. 7745-68 RELEASE OF RIBONUCLEIC AND AMINO ACIDS BY PHYTOPHTBORA. O T Page F A Wood Phytopathology 53(8) 946-949, BIBL. 948-949, TAES. Aug 1963 464.8 P56 Bypoxanthine, Phytophthora, Ribonucleic acid, Solanum. 7746-68 CARBONYL SULPHIDE FROM THE DECOMPOSITION OF CAPTAN. E Somers D V Richmond J A Pickard Nature 215 (5097), 214 08 Jul 1967 472 N21 Captan, Carbonyl sulphide, Decomposition, Fungicides. 7747-68 EFFECT OF SOIL EXCBANGEABLE HYDROGEN AND CALCIUM RATIO AND THE RESULTING PH ON INFECTION OF CITRUS FIBROUS ROOTS BY PHYTOPHTORA PARASITICA. P B Tsao J P Martin Phytopathology 53(10) 1143 Oct 1963 464.8 P56 Calcium, Citrus, Hydrogen, Hydrogen-ion concentration, Phytophthora. 7748-68 DECOMPOSITION OF SODIUM N-METBYLDITBIOCARBAMATE IN SOIL. N J TUTNET M E COIDEN N-METBYLDITBIOCARBANATE IN SOI N J TUTNET M E COIDEN Phytopathology 53(12) 1388-1394, BIBL., TABS. Dec 1963 464.8 P56 Decomposition, Sodium, Sodium N-methyldithiocarbamate, Soils. Wanam. Soils, Vapam. 7749-68 THE EFFECT OF N-DODECYLGUANIDINE ACETATE ON ENZYME ACTIVITY AND THE NUCLEOTIDES OF RIBONUCLEIC ACID. AND THE NOCLESTICS IT SHOWS IT 7750-68 MODE OF ACTION OF 2,6 DICHLORO-4-NITROANILINE (DCNA) IN RBIZOPUS ARRHIZUS. D J Weber J M Ogawa Phytopathology 53(8) 893 Aug 1963 464.8 P56 Aug 1963 464.6 P36 Decxyribonucleic acid, Dichloro-4-nitroaniline, 2,6-, Proteins, Rhizopus, Ribonucleic acid.

BIBLIOGRAPBY

90 7760-68

# 90 INDUSTRY

# 80 ENGINEERING

# Education

7751-68 MICROSCCPIC STUDY CF BOVINE ENDCMETRIUM. Amer Vet Med Ass J 142(6) 657-658 15 Mar 1963 41.8 AM3 Electron microscopes, Endometrium, Bistology. 7752-68 LOCALITY AND DATA LABELS FOR INSECTS. R B Arnett Entonol Soc Amer Ann 60 (5), 1111-1112 Sep 1967 420 EN82 Insect collecting equipment. 7753-68 /33-68 APPARATUS FOR INSECTICIDE ASSAY. C C Bassett R Kirk G B Craig J Econ Entomol 53(3) 483, BIBL: Jun 1960 421 J822 Aedes aegypti, Equipment, Insecticides. 7754-68 DOSIMETRY FOR STUDIES ON THE RADIOBIOLOGY OF TRIBOLIUM CASTANEUM USING THE VAN DE GRAAFF ELECTRON ACCELERATOR. J D Bilchey R D Cooper J Econ Entomol 53(4) 496-500, BIBL. Aug 1960 421 J822 Radiobiology, Tribolium, Van de Graaff generators. 7755-68 PURIFICATION OF THE SELECTIVE TOXIN OF PERICONIA CIRCINATA. R B Pringle R F Scheffer Phytorathology 53(7) 785-787 Jul 1963 464.8 P56 Blight (sorghum), Periconia, Roots, Toxicology, Toxins. 7756-68 756-68 AN INEXFENSIVE, VERSATILE OXYGEN ELECTRODE. H W Spurr Jr A C Bildebrandt A J Riker Phytopathology 53(7) 782-784, TABS Jul 1963 464.8 P56 Chlorogenic acid oxidases, Crown galls (plants), Electric circuits, Electrochemistry, Electrodes, Oxidases, Oxygen, Oxygen electrodes, Fhytopathology, Tagetes. 7757-68 DEW, ITS SIGNIFICANCE AND MEASUREMENT IN PHYTOPATBOLOGY. J R Wallin Phytopathology 53(10) 1210-1216, BIBL. 1215-1216, TABS. Oct 1963 464.8 P56 Dew, Measurement, Measuring equipment, Phytopathology. 7758-68 A FORIGANT VAPORIZER UNIT FOR USE IN LABORATORY EXPERIMENTS. W K Whitney O K Jantz J Econ Entomol 53(4) 562-564, BIBL., PL. Aug 1960 421 J822 Equipment, Fumigants, Grain, Vaporizer.

7759-68
PESTICIDE SAFETY EDUCATION.
<et. al.</li>
Agr Chem 22 (9), 28-30,32
Sep 1967 381 AG8
Accident prevention, Education, Pesticides.
7760-68
TBE SAFE USE OF MODERN PESTICIDES. 2.
L Lykken
Agr Chem 22 (9), 35-36
Sep 1967 381 AG8
Accident prevention, Bumans, Pesticides, Poisoning.

-

 CTI	NO	DU	C

		ACTINOPH	AGE
Studies on the metabolism and residues of P32-labeled Delnaw in a Hereford steer. 7	676	ACALYMMA A mosaic virus transmitted by beetles and a grasshopper. 692	:6
ABDOMEN Effect of age of vector and of abdomen punctures on virus transmission. 6		ACARACIDES Soil injection as a means of applying systemic acaricides t fruit trees. 699	
ABIES Fomes annosus. 6	5705	ACARICIDES Structure and pesticidal activities of derivatives of dini-	
Some characteristics of dwarf mistletoe populations on re	ed 5850	trophenols. iII. structure and acaricidal activity of cer- tain carbonates of 2-alkyl-5-methyl-4,6-dinitrophenols and related compounds. 769	
ABLES CONCOLOR		ACARINA	
Control of the charcoal root disease of white fir by fall soil fumigation. 6	5913	Acarina associated with Michigan Bombinae. I-II 645 ACCIDENT PREVENTION	8
ABNORMALITIES Studies on a virus causing stem grooving and graft-union		The safe use of toxic chemicals. 766	0
	5843	Pesticide safety education. 775	9
Some congenital abnormalities in the beaks and skulls of vildfowl. 7	7343	The safe use of modern pesticides. 2. 776	0
	7383	ACERATAGALLIA Vectors of alfalfa and bean yellow mosaic viruses in Ladino white clover. 680	
ABOMASUM Abomasal impaction. 7	7383	ACETALDEHYDE	
ABORTIFACIENTS		Screening tests with synthetic compounds as synergists for house fly sprays. 668	2
Injected saponins as abortifacients. 7	203	ACETHION	
ABORTION Detection of bovine brucellosis by acidified plate test antigens. 7	7 18 1	Relationship between metabolism and differential toxicity i insects and mice of Diazinon, dimethoate, parathion, and acethion. 657	
Brucella-vaccinated cattle have fewer abortions, infected	1 7 18 8	ACHAEN JANATA Norphology of the alimentary canal and associated glands of	
Ovine abortion virus in ewes and fetuses. 7	7 19 5	the mature larva of Achaea janata L. (Lepidoptera, noc- tuidae). 658	3
Injected saronins as abortifacients. 7	7203	ACHATINA FULICA Leucodermia-like disease in the culture of giant African	
Infectious bowine rhinotracheitis abortion and its relati ship to nutrition in California beef cattle. 7	7278	snail Achatina fulica Bowdich. 713	4
Equine viral abortion in western Montana. 7	7334	ACHETA The house cricket, Acheta domesticus, and the house fly, Musca domestica, as a model predator-prey system. 661	3
Abortion and infertility in sows in Ireland apparently du to infection by Leptospira canicola. 7		ACHRONOBACTERACEAE	
IBBUNGLOGIC and epizootiologic studies of epizootic bovin abortion. 7	ne 7425	Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families. 650	3
Abortion in the sow due to infection by Leptospira canico	ola	100111105.	5
- A preliminary report. 7 The economic loss associated with infectious bovine Rhino	7428	ACID FAST BACTERIA A non-tuberculous granuloma of the cat associated with an acid-fast bacillus. 755	0
	7463	A non-tuberculous granuloma of the cat associated with an	1
	7493	acid-fast bacillus. 755	
Tick-borne fewer as a cause of abortion and stillbirths i cattle. 7	7557	Acorn poisoning in a cow and a sheep. 730	8
Further studies on toxoplasmosis and ovine abortion in Yorkshire. 7	7596	ACRAEA BONASIA Note on the biology of Acraea bonasia Pabricius from east- ern Nigeria (Lepidoptera, Nymphalidae. 656	1
Ovine abortion and toxoplasmosis in the East Midlands. 7	7597	ACRIDIDAE Nechanism of locust jumping. 649	8
ABSCESSES Evaluation of bacterins for control of swine abscesses. 7	7276	The bacterium Coccobacillus acridiorum d Herelle Its taxonomic position and status as a pathogen of locusts and grasshoppers. 650	4
The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations	ids	Transmission of tumors in Locusta migratoria Linnaeus by nucleic acid extracted from the tumors. 658	6
		ACRYLONITEILE Effectiveness of mixtures of acrylonitrile and carbon	
ABSTRACTS		tetrachloride against three pests of stored corn. 705	5
Abstracts of papers accepted for presentation at the fift fifth annual meeting of the American Phytopathological		ACTINOPHAGES	
Society, Amherst, Mass., August 26, 27, 28, 29, 1963. 6	5690	Seminal vesticulitis in bulls associated with infection by Actinobacillus actinoides. 738	4

0

AGRANULOCYTOSIS

Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).	i- 6528
ADENOSIBETRIFHOSPHATASE ATPase activity of the erythrocytic membrane in anaplas sis and of Anaplasma marginale.	mo- 7317
ADRENAL GLANDS Calcification of the adrenal glands in a dog.	7370
Bffects of cortiscl and adrenalec Jmy on induction of i feron by endotoxin.	nter- 7468
ADVERTISING Advertisements, antibiotics and mastitis.	7524
AEDES Toxicological action of DDT on three species of mosquit larvae.	o 6658
Suspected cases of western encephalitis on increase.	7 17 4
Rift valley fever in lambs and sheep.	7206
AEDES AEGYPTI Preliminary laboratory results on the susceptibility of Aedes aegypti (Linnaeus) to Bacillus thuringiensis Ber- liner.	6575
Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
Apparatus for insecticide assay.	7753
AEBIAL PLANT DISEASE CONTROL Chemical control of bacterial blights of dry field bean Michigan by foliage sprays applied by ground and air eq ment.	
ABRIAL SPRAYING Field control of cotton mites with Aramite aerial spray California.	in 6998

ACYRTHOSIFHON PISUM ACYRTHOSIPRON PISUM

Residues of Sevin and 1-naphthol on forage from aerial	
applications of Sevin in oil.	7020
Aerial forest spraying against spruce budworm- A proble mutual interest in Canada and the United States.	m of 7117
AFLATOXIN	
Toxicity in groundnuts.	7156
Groundnut toxicity. Aspergillus flavus toxin (aflatoxin) animal products preliminary communication.	) in 7225
Groundnut toxicity.	7264
Groundnut toxicity Aspergillus flavus toxin (aflatoxin) animal products.	) in 7322
Groundnut toxicity.	7323
The presence of aflatoxin in a sample of cotton-seed ca	ke. 7406

Factors other than groundnut in the production of aflatoxin 7476

AFRICAN HCRSE SICKNESS African horse-sickness.	7200
AGAR Growth inhibition of Phytophthora cinnamomi by soil diffusates on agar medium.	6946
Influence of light on growth of Aspergillus restrictus agar culture.	in 695
AGAVE Injected saponins as abortifacients.	720
AGGLUTIBATION TEST Brucella agglutinins in East African game animals.	748
AGING	

Histopathological changes with age in the flight muscles of the African mosquito, Eretmapodites chrysogaster. 6 6554

RANDLOCYTOSIS Histologic and electron microscopic studies of agranulocytes 7545 and hemal and hemolymph nodes in cattle. AGRICULTURAL ADMINISTRATION Science and education a new awareness. 7122 AGRICULTURAL EDUCATION Science and education a new awareness. 7122 AGRICULTURAL OUTLOOK Weed science - revolution in agricultural technology. 7131 AGRICULTURAL PRODUCTION ECONOMICS Weed science - revolution in agricultural technology. 7131 AGRICULTURAL PRODUCTIVITY Weed science - revolution in agricultural technology. 7131 AGRICULTURAL RESEARCH Science and education a new awareness. 7122 AGROBACTERIUM Addition of fungal cell-wall components to soil for biological disease control. 6822 Hairy root (Agrobacterium rhizogenes) of field roses. 6829 Comparative bactericidal properties of N-polyhaloethylthio hydantoins. 7737 AGROPYRON Relation of Agropyron repens mosaic and wheat streak mosaic 6922 virus. Plant extracts, residues, and soil minerals in relation to competition of guackgrass (Agropyron repens) with oats and alfalfa. 71: 7128 AIR POLLUTION Response of plants to air pollutants. II. Effects of ozone concentration and leaf maturity on injury to Nicotiana 6815 tabacum. AIRCRAFT RCHAFT Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equipment. 6881 ALABAMA ABAMA Purther tests on the use of a polyhedrosis virus in the control of the cotton leafworm Prodenia litura, Fabricius. 6445 Boll weevil susceptibility to toxaphene, endrin, and guthion in five Alabama localities. 6505 ALBERTA Effects of low temperature on the survival of the alfalfa weevil from Alberta and Utah. 7 7047 ALBUGO Nature and inheritance of resistance to Albugo candida in radish. 6965 Biological races of Albugo candida. 7722 Physiological races of Albugo candida. 7731 ALDRIN Control of the woolly apple aphid on roots of apple nursery 7011 stock. Control of root maggots in swede turnips in Newfoundland with heptachlor and aldrin and the effect on parasites and overwintering pupae. 7039

Further studies on control of the clover root borer in 7080 Virginia.

Small amounts of insecticides effective in controlling grubs of the Japanese beetle. 7105

Experiments on control of the sugar-beet wireworm in southern California bean fields. 7111

Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in the labcratory. 7576	Development of Meloidogyne hapla and M. incognita in alfalfa. 7086
Persistence of DDT, aldrin, and lindane in some midwestern soils. 7672	Evaluation of several techniques for screening alfalfa for resistance to Ditylenchus dipsaci. 7090
Epoxidation of aldrin and heptachlor in soils as influenced by autoclaving, mcisture, and scil types. 7673	Control of army cutworms in alfalfa during 1959. 7104
ALEUTIAN DISEASE Blood serum protein from mink with alcutian disease. 7185	Plant extracts, residues, and soil minerals in relation to competition of guackgrass (Agropyron repens) with oats and alfalfa. 7128
Experimental transmission of Aleutian disease of mink. 7210	Residues in established alfalfa treated with granulated phorate (Thimet) and their effect on cattle fed the hay.
ALEUTIAN MINKS Blood serum protein from mink with aleutian disease. 7185	7667 Residues of malathion on alfalfa and in milk and meat.
ALEYRODIDAE	7680
North American species of Aschersonia parasitic on Aley- rodidae. 6464	Influence of oat and alfalfa residues on soil respiration, fungistasis, and survival of Verticillium albo-atrum. 7723
ALFALFA Distance from the apiary as a factor in alfalfa pollination.	ALGAE
6461 Potential use of Dylox and other insecticides in a control	Dispersal of viable algae and protozoa by horse flies and mosquitoes (Diptera, Tabanidae, Culicidae). 6616
program for field crop pests in California. 6687	Oxygen balance in a stream receiving domestic and oil refin-
Behavior of Phoma herbarum var. medicaginis on resistant and susceptible species of medicago. 6702	ery effluents. 7655 ALKENYLBENZYL
A simple method of measuring rate of plant virus movement from incculated tobacco leaves to stem tips. 6750	Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates. 7690
Phytophthcra root rot of alfalfa in Minnesota. 6751	ALKYL-5-METHYL-4,6-DINITROPHENOLS, 2- Structure and pesticidal activities of derivatives of dini-
Infecting seven-day-old alfalfa seedlings with wilt bacteria through wcunded Cotyledons. 6789	trophenols. iII. structure and acaricidal activity of cer- tain carbonates of 2-alkyl-5-methyl-4,6-dinitrophenols and related compounds. 7696
A physiogenic leaf and stem spot of some forage legumes. 6790	ALLETHRIN Methods for the evaluation of stable fly toxicants and repellents. 7579
Vectors of alfalfa and bean yellow mosaic viruses in Ladino white clower. 6803	ALTERNARIA
Factors affecting growth, sporulation, pathogenicity, and dissemination of Leptosphaerulina briosiana. 6804	Inhibition of germination of spores of Alternaria porri f. sp. solani. 6874
An investigation of thermal inactivation of alfalfa mosaic virus. 6817	Effects of sodium fluoride on growth of some pathogenic fungi. 6943
Persistence of Corynebacterium insidiosum in soil. 6833	Inhibition of fungi by culture media previously exposed to light. 6954
Relation of decomposing plant residues to root growth of	Relation of seed-borne fungi to boll rots of cotton. 6960
alfalfa. 6840	The microbial hydrolysis of cellulose and some factors af-
Recognition of Phymatotrichum root rot of cotton and alfalfa in an aerial survey. 6858	fecting the production of cellulase in a submerged culture of Alternaria sp. 7718
Spring black stem of alfalfa in relation to temperature, moisture, wounding, and nutrients and some observations on pathogen dissemination. 6866	AB. CYANABID 12008 Insecticidal control of the Hessian fly. 6987
Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum. 6916	MMIDES           Free amino acid and amide content of tobacco and oats infec- ted by wildfire and halo blight bacteria.         6851
Infection of alfalfa by Leptosphaerulina briosiana. 6935	AMINES
Biological control of Phytophthora root rot of avocado with alfalfa meal. 6978	Control of Penicillium decay of oranges with certain volatile alighatic amines. 6741
Influence of plant age on the survival of alfalfa varieties differing in resistance to the spotted alfalfa aphid.	AMINO ACIDS Pree amino acid and amide content of tobacco and oats infec- ted by wildfire and halo blight bacteria. 6851
7018	Hostiparasite interaction in blackspot disease of roses
Spotted alfalfa aphid resistance in mature growth of alfalfa varieties. 7019	caused by Diplocarpon rosae Wolf. 6886 A qualitative comparison of the amino acid content of acid
A biotype of the spotted alfalfa aphid on alfalfa. 7046	hydrolysates from the mycelium of cucurbit anthracnose fungi. 7732
Effects of low temperature on the survival of the alfalfa weevil from Alberta and Utah. 7047	AMINO-3,5,6-TRICHLOROPICINOLINIC ACID, 4-
A three-year overwintering study of the spotted alfalfa aphid. 7061	Herbicidal activity of vapors of 4-amino-3,5,6-trichloropic- olinic acid. 7123
Sampling alfalfa seed for clover seed chalcid damage. 7067	

AMINO-3,5,6-TRICHLOROPICOLINIC ACID, 4-	
AMINO-3,5,6-TRICHLOROPICOLINIC ACID, 4- Bioassay methods for 4-amino-3,5,6-trichloropicolinic a	
ATTROLOGIDING DOL O	7742
AMINOACHIDINE HCL, 9- The in vivo activity of several systemic insecticides against cattle grubs in South Dakota.	A1 7582
AMITROLE Chlorophyll formation in Euglena as a test for herbicid	es. 7129
Translocation of C14-labeled compounds in cotton and oa	ks. 7708
AMMONIA Control of Penicillium decay of oranges with certain	
volatile aliphatic amines.	6741 Al
The flight range of the European chafer.	6453
Viıulence of species and strains of milky disease bacte in the European chafer, Amphimallon majalis (Razoumowsky).	ria
AMYLOIDOSIS Huscle necrosis and amyloidosis in the White Pekin duck	- AI
	7220
AMYLOSES Preliminary evidence of resistance of high-amylose corn the Angoumois grain moth.	to Al 7648
ANABROS SIMPLEX The free fatty acids and neutral lipids of the cuticula of the Mormon cricket, Anabrus simplex, Hald.	r wax Al 6605
ANAPLASMA MARGINALE Base composition and thermal denaturation of DNA isolat from Anaplasma marginale.	۸۱ ed 7295
ATPase activity of the erythrocytic membrane in anaplas sis and of Anaplasma marginale.	no− Al 7317
ANAPLASMOSIS Anaplasmosis vaccine announced.	7 168
Ticks in the united states serve as vectors of disease.	7187
Anaplasmosis complement-fixation response in calves.	7209
Chlortetracycline for elimination of anaplasmosis in ca cattle.	7311
ATPase activity of the erythrocytic membrane in anaplas sis and of Anaplasma marginale.	∆1 no− 7317
Anaplasmosis control preventing the introduction and spread in Anaplasmosis-free areas.	7387
Problems of anaplasmosis control in tick-infested areas the Northwest.	of 7474
Problems of establishing anaplasmosis-free herds in Mon Na.	ta- 7491
A successful anaplasmosis eradication program.	7552
ANAPLASMOSIS VACCINES The preservation of Babesia bigemina, Anaplasma central and A. marginale by deep-freezing.	۸۱ e 7239
A vaccine for anaplasmosis.	₹ 7 25 8
ANASTREPEA Susceptibility of life stages of the Mexican fruit fly fumigation with ethylene chlorobromide.	to A1 6985
ANCYLOSIONATIDAE Thenium and piperazine combined, in the treatment of ho worm and roundworm infestation in the dog.	ok- 7599
ANCYLOSTOMIASIS Pre-partum infestation of puppies with Ancylostoma cani	
The treatment of ankylostomiasis and of spirocercosis i	7603
dogs by the new compound, 2,6-diiodo-4-nitrophenol. PAGE 70	7607

AN	DROMEDA Systemic insecticides for control of scales, leaf miner	5,
	and lace bugs.	7059
Ał	IEMIA Common problems in the pig.	7144
	Response of cows and calves to a Psittacosis-Lympho- granuloma group agents.	7186
	Haemoglobinaemia of cattle associated with the feeding Brassicae species.	of 7272
	Iron deficiency anemia as a cause of stillbirths in swi	ne. 7437
	Observations on the blood picture of cattle, sheep and bits fed on kale.	rab- 7458
AP	RESTRESIA A report on the dosage of pentobarbitone sodium require induce anaesthesia in ferrets.	d to 7440
AB	NEURYSMS The incidence of spontaneous pathologic changes in aort growing turkeys.	as of 7138
	GUINA	
	Biological studies of a new species of Anguina (Nematod Tylenchidae) parasitic on Plantago aristata Michx.	a0 7115
AB	GULAR LEAFSPOT (COTTON) Internally infected seed as a source of inoculum for th primary cycle of bacterial blight of cotton.	e 6712
AB	IIMAL ABNORMALITIES Elbow dysplasia in the German Shepherd dog.	7277
A 1	NIMAL DISEASE RESISTANCE Susceptibility to hog cholera may be related to breed.	7179
AI	NIMAL DISEASE TRANSMISSION Rift valley fever in lambs and sheep.	7206
	Anaplasmosis complement-fixation response in calves.	7209
	Experimental transmission of Aleutian disease of mink.	7210
	Transmission of equine piroplasmosis by Dermacentor nit Neumann.	ens 7483
	Swine ascarids infect cattle.	7589
A	IMAL DISEASES	7150
	Disease on a large scale.	
	Mycotoxicosis and animal disease.	7152
	Sixth international symposium on diseases of zoo animal	s. 7158
	Suspected myasthenia gravis in a dog.	7336
	To veterinary surgeons in equine practice Survey of ut ine infections.	er- 7430
	Oterine infections in mares1964 survey.	7432
AB	NIMAL GENETICS Elbow dysplasia in the German Shepherd dog.	7277
AP	NIMAL MEMBRANES Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
	IIMAL NUTRITION Calcium requirements of turkey breeder hens.	7135
	Salmonella problem receives primary attention at AVMA co cil meeting.	oun- 7170
	Toxicity of copper sulfate in beef cattle.	7199
	Salmonellosis in the dog.	7221
	Infectious bovine rhinotracheitis abortion and its rela- ship to nutrition in California beef cattle.	tion- 7278

AN	TI	BIC	)TI	CS
----	----	-----	-----	----

	Effect of feeding varions levels Crotalaria spectabilis seed on the performance of chicks, thrkeys, and phllets.	7342	
	Malformed calf syndrome on Kodiak Island, Alaska.	7394	
1	Feline dermatology.	7439	
	Diagnosis and canses of nitrate poisoning.	7513	
	Nntritional and biochemical aspects cf arabinose and xyl for chicks.	.ose 7539	
	Economic importance of the chicken body louse.	7585	
	Pesticide residues in poultry samples, USDA study shows.	7659	
	Heptachlor residues on corn stower in relation to dairy cattle feeding.	7670	A
	IMAL VECTORS		A
	Sknnks and cows are rabies threat in Iowa.	7172	
	Brush technique for detection of fnngns diseases.	7327	A
	Tuberculosis in deer.	7421	
	Salmonellosis in animals threatens man.	7467	
	Salmonellosis, a pet-implicated zoonosis.	7527	
	New investigations on cold-blooded animals as Salmonella sources.	7546	
	Haemophilns gallinarnm - Intraflock spread.	7559	
	IMALS An ontbreak of acnte disease in Chester Zoo diagnosed as anthrax.	7385	
	Diphenoxylate a useful drng in the symptomatic treatment acute and chronic diarrhoea in domestic and wild animals	of 7414	
	Pesticides and animal poisoning.	7497	
	Pesticides and animal poisoning. OPHELES	7497	
AN			
AN	OPHELES Toxicological action of DDT on three species of mosquite	6658	
AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra	6658 11n 6677	А
AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Ancpheles gnadrimacnlatus say. OFHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPLORA Preliminary biological observations on Linognathus afric	6658 6677 6531	А
A N A N A N	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Ancpheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus.	6658 6677 6531	A
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Ancpheles gnadrimacnlatus say. OFFELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OFIURA Preliminary biological observations on Linognathus afric nus Kellog and Paine with a description of the first in-	6658 11n 6677 6531	
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPLURA Preliminary biological observations on Linognathus afric nns Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura).	6658 11 n 6677 6531 24- 6482 7230	
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPIDEA Preliminary biological observations on Linognathus afric ns Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac)	6658 11n 6677 6531 2a- 6482 7230 11ng 7562 11ce 7581	A
AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPIDEA Preliminary biological observations on Linognathus afric ns Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac) poultry. The malathion dnst-bath for control of five species of D	6658 11n 6677 6531 2a- 6482 7230 11ng 7562 11ce 7581	
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquito larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPIDEM Preliminary biological observations on Linognathus afric ns Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac) poultry. The malathion dnst-bath for control of five species of 1 on chickens.	6658 11n 6677 6531 2a- 6482 7230 11ng 7562 11ce 7581 7684	A
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquite larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OPTORA Preliminary biological observations on Linognathus afric ns Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac) poultry. The malathion dnst-bath for control of five species of 1 on chickens. TARCTICA Organochlorine pesticides in Antarctica.	6658 iin 6677 6531 ca- 6482 7230 Cing 7562 Lice 7581 7684 7588 mix- ya.	A
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquite larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OFFELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OFFELM Preliminary biological observations on Linognathus africe nus Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac) poultry. The malathion dust-bath for control of five species of 1 on chickens. TARCTICA Organochlorine pesticides in Antarctica. THELMINTICS Thiabendazole as an anthelmintic in cattle and sheep. Th anthelmintic activity of a phenothiazine-phenzidole tuu : compared with that of thiabendazole in lambs in Ker	6658 iin 6677 6531 ca- 6482 7230 cing 7562 lice 7581 7684 7588 mix- ya. 7595 ne as	A
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquite larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OPHELES ATROPARVOS Behavionral responses to contact with DDT in Anopheles atroparvus. OPHENA Preliminary biological observations on Linognathus africe nus Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attack poultry. The malathion dust-bath for control of five species of 1 on chickens. TARCTICA Organochlorine pesticides in Antarctica. THARCTICS Thiabendazole as an anthelmintic in cattle and sheep. Th anthelmintic activity of a phenothiazine-phenzidole tu : compared with that of thiabendazole in lambs in Ker An experimental investigation into the use of methyridin an anthelmintic for cats.	6658 iin 6677 6531 ca- 6482 7230 iing 7562 lice 7581 7684 7588 mix- 7595	2
AN AN AN	OPHELES Toxicological action of DDT on three species of mosquite larvae. Colonization and production of a dieldrin-resistant stra of Anopheles gnadrimacnlatus say. OFFELES ATROPARVUS Behavionral responses to contact with DDT in Anopheles atroparvus. OFFELM Preliminary biological observations on Linognathus africe nus Kellog and Paine with a description of the first in- star nymph (Haematopinidae, Anoplura). Cattle lice eradication studies- A-3-year evaluation. Laboratory and field tests against mites and lice attac) poultry. The malathion dust-bath for control of five species of 1 on chickens. TARCTICA Organochlorine pesticides in Antarctica. THELMINTICS Thiabendazole as an anthelmintic in cattle and sheep. Th anthelmintic activity of a phenothiazine-phenzidole tuu : compared with that of thiabendazole in lambs in Ker	6658 iin 6677 6531 ca- 6482 7230 cing 7562 lice 7581 7684 7588 mix- ya. 7595 ne as	2

	The anthelmintic efficiency of Haloxon against the adult and immature stages of the gastro-intestinal strongyles Nigerian Zebn cattle.	of 7614
	Dimetridazole part II. Therapeùtic activity and toxicit in the treatment of experimental histomoniasis in turkey	y s. 7619
	Methyridine in the control of intestinal capillariasis i birds.	.в 7637
	A taenacide for dogs and cats.	7639
	The anthelmintic activity of methyridine by intraperiton injection in sheep and cattle.	eal 7640
1	THOCORIS ANTEVOLENS An artificial ovipositional site for some Heteroptera th insert their eggs into plant tissue.	at 6627
2	THOCYANINS Inhibition of enzymes by the anthocyanin malvidin-3-mono coside.	gln- 7730
1	THENNORUS GRANDIS A seasonal study of diapanse, reproductive activity and seasonal tolerance to insecticides in the boll weevil.	
	Seasonal tolerance to insecticities in the boil weevil.	6496
	Boll weevil susceptibility to toxaphene, endrin, and gut in five Alabama localities.	hion 6505
	Bacteria and fungi associated with dead boll weevils (An thonomus grandis) in a natural population.	6589
	Some effects of age, preimaginal habitat, and adult food susceptibility of boll weevil to certain insecticides.	on 6983
	The effectiveness of chlorinated hydrocarbon insecticide mixtures for control of resistant and snsceptible boll weevils.	6986
	Cotton insects in Nicaragna.	7036
	Increased tolerance of the boll weevil and cotton fleaho	pper
	to some chlorinated hydrocarbon insecticides in Central Texas in 1958.	7042
	Laboratory studies on the effectiveness of Chipman R-619 against some cotton pests.	7070
	Control of boll weewils resistant to chlorinated hydrocarbons.	7074
. 1	WTHRACNOSE (COTTON) Susceptibilty of Gossypinm arboreum and Gossypium hirsnt to seedling anthracnose.	ստ 6710
11	WTHRACNOSE (CUCURBITA) Mycelial protein comparisons of isolates of cucurbit anthracnose fungi.	6808
	Production of pectinolytic and cellulolytic enzymes by cucurbit anthracnose fnngi.	6968
	A qualitative comparison of the amino acid content of ac hydrolysates from the mycelium of cncurbit anthracnose fungi.	id 7732
1	NTHBAX Suspected anthrax in a bitch.	7223
	An outbreak of acute disease in Chester Zoo diagnosed as anthrax.	7385
	Anthrax vaccination.	7402
	Anthrax in Chester Zoo.	7506
1	NTIBIOTICS Growth and survival of the pathogen cansing russet scab potatoes.	on 6709
	On the fungistatic and fungicidal properties of an anti- biotic produced by Penicillium rnbrnm.	6791
	Disinfection of tomato seed infested with Xanthomonas ve catoria.	

ANTIBODIES

ANTIBODIES	
A toxic metabolite from Ascochyta fabae having antibiotic activity. 6841	ANTIOXIDANTS Plant polyp
Antibiotic production by Streptomyces sp. in corn rhizosphere. 6864	ANTIRRHINUM A visit to d december, 19
Studies on the dietary requirement and interaction of mag- nesium with antibiotics in turkeys to 4 weeks of age. 7141	ANTISBPTICS Disinfectio: catoria.
Possible hazards in the veterinary use of antibiotics with particular reference to their use as food additives. 7146	ANURAPHIS Vectors of a white clove:
Antibiotics in milkPostponement of M.B.B. reduced price scheme. 7154	ANURAPHIS HEL
Antibiotics in slow- and quick-release bases. 7256	Evaluation of peach curl a
The effect of Tylosin against experimental and natural in- fection with Mycoplasma in goats. 7294	AORTA Neurosecreto
The influence of physical form of roughages and antibiotic administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty acids and liver abscesses of steers fed all-concentrate rations.	role of the The incidency growing turk
7347	Potentiation of turkeys
The control of an outbreak of Salmonella dublin in calves. 7401	APANTELES The bean lea
Salmonella resistance increases. 7424	control on 1
Prophylactic use of Framycetin sulphate in calves. 7442 Advertisements, antibiotics and mastitis. 7524	APHANOMYCES Physiology
	euteiches.
ANTIBODIES Progressive distribution of southern bean mosaic virus antiget in bean leaves determined with a fluorescent anti- body stain. 6969	APHIDIDAE Morphologica ulations of
Cockers and labradors more resistant to distemper. 7197	Flow relation
Detection of antibodies to staphylococcus aureus in cattle. 7201	Biology and maculata (Bu
Response of rabbits and guinea rigs to vesicular stomatitis	Beet ring me
virus. 7217 The occurrence and distribution in the United Kingdom of	Transmission probes by ap probes.
antibodies to parainfluenza 3 and infectious bovine rhino- tracheitis viruses in bovine sera. 7282	The effect of development
Effect of revaccination on distemper antibody levels. 7368	Effectivenes
Diagnosis antigens for the detection of nocardiosis in ani-	borer and gi
mals. 7460	Response of malathion.
ANTIBODY-COATED ERTHROCYTES Hemagglutination test for diagnosis of hog cholera. 7196	The use of p winter whea
ANTIDOTES Antidote for tannic acid poisoning in rabbits. 7191	APHIDIUS SMITH
Antidote for tannic acid poisoning in rabbits. 7208	Laboratory s (Bymenoptera phon pisum
ANTIGENS Common antigens in Xanthomonas malvacearum and Gossypium hirsutum and their possible relationship to host specificity and disease resistance. 6891	APIARIES Distance fro
Bentonite flocculation a rapid, sensitive serological test for the detection of plant virus antigens. 6897	APIS MELLIFER The effect of the mortali
Progressive distribution of southern bean mosaic virus antigen in bean leaves determined with a fluorescent anti- body stain. 6969	The incidence
Foot-and-mouth disease vaccine-produ .on of antigen in	Distance fro
culture. 7177	The natural
Diagnosis antigens for the detection of nocardiosis in ani- mals. 7460	in enzootica mellifera Li
ANTINETABOLITES Mortality and fertility response of Musca domestica Lin- naeus to certain known mutagenic or anti-tumor agents.	An improved pluton, and
6566 PAGE 72	

NTIOXIDANTS Plant polyphenols as antioxidants for ascorbic acid.	7707
WTIRBHINUM A visit to M. W. Beijerinck at his home laboratory in december, 1925.	6763
WTISBPTICS Disinfection of tomato seed infested with Manthomonas ve catoria.	esi- 6797
NURAPHIS Vectors of alfalfa and bean yellow mosaic viruses in Lac white clover.	lino 6803
NURAPHIS HELICHRYSI Evaluation of commonly used insecticides for the contro peach curl aphid, Anuraphis helichrysi Kalt.	l of 6996
ORTA Neurosecretory system of Heteroptera (Hemiptera) and a role of the aorta as a neurohaemal organ.	6520
The incidence of spontaneous pathologic changes in aorta growing turkeys.	
Potentiation of diethylstilbestrol induced aortic ruptur of turkeys with thiouracil.	res 7509
PANTELES The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
PHANOMYCES Physiology of asexual reproduction in Aphanomyces euteiches.	7743
PHIDIDAE Morphological and physiological distinction between two ulations of the peach-potato aphid.	pop- 6523
Flow relationships for hemipterous stylets.	6593
Biology and evaluation of certain predators of Therioaph maculata (Buckton).	nis 6628
Beet ring mottle disease.	6738
Transmission of bean mosaic virus in relation to length probes by aphids allowed either one or several acquisit: probes.	of Ion 6980
The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum.	7005
Effectiveness of insecticides against the European corn borer and green peach aphid on peppers.	7017
Response of different strains of the green peach aphid t malathion.	.o 7060
The use of phorate to control aphids and the Hessian fly winter wheat.	on 7078
PHIDIUS SATTHI Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythosi phon pisum (Homoptera, Aphididae).	- 6528
PIARIES Distance from the apiary as a factor in alfalfa pollinat	ion. 6461
PIS MELLIFERA	n
The effect of infestation with Acarapis woodi (Rennie) of the mortality of honey bees.	6447
The incidence of virus diseases in honey bees.	6448
Distance from the apiary as a factor in alfalfa pollinat	ion. 6461
The natural mechanism of suppression of Nosema apis Zand in enzootically infected colonies of the honey bee, Apis mellifera Linnaeus.	6483
An improved method for the isolation of Streptococcus pluton, and observations on its distribution and ecology	6484

RT		

Mortality of the honey bee, Apis mellifera, in colonies treated with certain biological insecticides. 6508 The influence of environmental and nutritional factors on growth and caste determination of female honey bees. 6519 The effect of foraging behavior of moving honey bee colonies to crops before or after flowering has begun. 6529 Amoeba disease of the honey bee, Apis mellifera Linnaeus, and an attempt at its chemical control. 6533 Flagellated protozoa (Trypanosomidae) in the honey bee, Apis mellifera, in Australia. 6573 6611 Pollination of red clover in Minnesota. A conopid fly parasite found in the honey bee. 6617 Surveys for nosema disease of honey bees in California. 7021 APLOPAPPUS HETEROPHYLLUS investigation of the toxic plant - rayless goldenrod 7703 (Aplopappus heterophyllus). APPLE TREES Soil injection as a means of applying systemic acaricides to fruit trees. 6997 APPLES Prevalence of Erwinia amylovora in apple buds as detected 6701 by phage typing. The flat apple disease. 6729 Antifungal phenolic acids in apple fruits after infection 6746 with Sclerctinia fructigena. Approach graft transmission of Tulare apple mosaic virus between apple and Gomphrena globosa. 6753 Chemotherapy of the apple scab disease with butyric acid 6801 derivatives. Some biochemical changes associated with virus infection in apple. 6820 6821 Properties of tulare apple mosaic virus. The effect of dapple apple and stem pitting on apple tree growth and yields in New Hampshire over a fourteen-year 6868 period. Venturia inaequalis (Cke.) Wint. xvi. amino acids in relation to pathogenicity of two wild-type lines to two apple varieties. 6962 Control of the woolly apple aphid on roots of apple nursery 7011 Control of pear borer and American plum borer in apple 7024 trees. Effects of soil insecticides on apple trees and resulting 7053 Measuring the surface area of apples for expression of pesticide residues. 7666 APRICOTS The inactivation of Verticillium albo-atrum in apricot 6938 trees. Control of the grape mealybug on apricots. 7030 Thiodan, a promising chemical for control of the lesser peach tree borer. 7038 APSYLLA CISTELLATA New record of the occurrence of mango shoot-gall disease in the Upper Indo-Gangetic Plain. 692 6921 AQUATIC ABIMALS The toxicology of thiodan in several fish and aquatic inver tebrates. 7697

AQUATIC INSECTS A limnological investigation of the Aufwuchs community in two mainstem Missouri River reservoirs. 6451 The aquatic and semi-aquatic Hemiptera of Oklahoma. the Lygaeidae of Oklahoma (Hemiptera). 6468 Taxonomy and biology of the subfamily Berosinae of North and Central America and the West Indies (Coleoptera0 Hydrophilidae. 6471 Effects of an aerial DDT spray on aquatic insects in Connecticut. 7016 ARABINOSE, L-Nutritional and biochemical aspects of arabinose and xylose for chicks. 7539 ARACHIS HYPOGEA Two new species of parasites reared from Stomopteryx nerte nerteria (Meyrick) (Lepidoptera, Gelechidae). 66 6615 ARACHNOIDISM Loxosceles reclusa in southern California. 6472 ARAMITE Selection response and genetics of parathion resistance in the Pacific spider mite, Tetranychus pacificus. 66 6667 Field control of cotton mites with Aramite aerial spray in 6998 Control of Myocoptes musculinus on guinea pigs. 7583 ARANEIDAE Karyological studies on the Indian spiders. VI. chromo-some number and sex-determining mechanism in the family Araneidae). 6675 ARCEUTHOBIUM Some characteristics of dwarf mistletoe populations on red fir. 6850 ARHYSSUS The higher classification of the family Rhopalidae (Hemiptera) together with a revision of the genus Arhyssus Stal (Rhopalidae0 Hemiptera). 6450 ARTZONA Salt-marsh caterpillar control on cotton in Arizona. 7118 ARKANSAS Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 6906 ARMILLARIA Inhibition of fungi by culture media previously exposed to light. 6954 ARBHENODES Biology of the oak timberworm, Arrhenodes minutus. 7085 ARSENIC Arsenical poisoning of race horses. 7252 Arsenical poisoning of racehorses. 7279 Arsenical poisoning of racehorses. 7523 ARTHRITIS Polyarthritis and epiphyseolysis of pigs in England. 7290 ARTHROBACTER THROBACTER Decomposition of 2,4-D and related phenoxyacetic acids by 7658 an Arthrobacter species. ARTHROPODA A sampling technique for estimating populations of small arthropods in soil and vegetation. 6455 Potential use of Dylox and other insecticides in a control program for field crop pests in California. 66 6687 The influence of seasonal DDT applications upon arthropod populations in jack pine stands 7056 ARTICHOKES Starvation tests with larvae of the cinnabar moth. 7043

tests.

# ARTIFICIAL INSEMINATION

ARTIFICIAL INSEMINATION	
ARTIFICIAL INSEMINATION The effect of intraspecific and interspecific inseminat on fecundity in Drosophila malerkotliana and Drosophila bipectinata.	ion 6601 4
ASCARIASIS Pig diseases in the Rhodesias.	7241
ASCARIS Swine ascarids infect cattle.	7589
Thenium and piperazine combined, in the treatment of ho	
worm and roundworm infestation in the dog.	7599
ASCOCHYTA A toxic metabolite from Ascochyta fabae having antibiot activity.	ic 6841
ASCORBIC ACID Suspected skeletal scurvy in the dog.	7360
Suspected skeletal scurvy in the dog.	7464
Suspected skeletal scurvy in a dog.	7490
Plant polyphenols as antioxidants for ascorbic acid.	7707
ASCOSFORE Studies on ascospore production by Mycosphaerella music in Honduras.	ola 6930 #
ASEXUAL REPRODUCTION Physiolcgy of asexual reproduction in Aphanomyces euteiches.	7743 1
ASPABAGUS BACEMOSUS Effect of root extract of Asparagus racemosus and Taget	es
erecta on batching of eggs of Meloidogyne javanica and Meloidogyne arenaria.	7113
ASPEBGILLOSIS Pulmonary aspergillosis in a cow.	7435
ASPEBGILLUS Fungi attacking seeds in dry seed-beds.	6759 <b>1</b>
Influence of light on growth of Aspergillus restrictus agar culture.	6957
Relation of seed-borne fungi to boll rcts of cotton.	6960
Xanthcmatosis in laying hens - a case report.	7391
Pulmonary aspergillosis in a cow.	7435
Development of granary weevils and storage fungi in col of wheat- II	umns 7643 1
ASPERGILLUS AWAMORI Asperyellone, a new yellow pigment of Aspergillus awamo	
and Aspergillus niger. II. The chemical structure of asperyellone.	7733 1
ASPERGILLUS CANDIDUS The mode of action of diphenamid (N, N-dimethyl 2, 2-di	
phenylacetamide) in plants. ASPERGILLUS PLAVUS	7126
Factors affecting invasion of grains and seeds by Asper- lus flavus and effects of the fungus on germination of seeds.	gil- the 7644
Effects of relative humidity and temperature on the deg tion of peanut sugar and oil by Aspergillus flavus.	rada <del>-</del> 7714
ASPERGILLUS NIGER Asperyellone, a new yellow pigment of Aspergillus awamo and Aspergillus niger. II. The chemical structure of asperyellone.	ri 7733
ASPERTELLONE Asperyellone, a new yellow pigment or Aspergillus awamo and Aspergillus niger. II. The chemical structure of asperyellone.	ri 7733
ASSAY Streptomycin resistance a technique for the direct a of potato scab organisms from soil.	ssay 6953
Rapid plant virus assay combines density-gradient	
PAGE 74	

ASTER YELLOWS (CALLISTEPHUS CHINENSIS) Recovery of aster yellows from excised organs of insect vec tors. 6770 ASTEROLECANIUM TEBOLECANIUM Systemic insecticides for control of scales, leaf miners, 7059 and lace bugs. ASTERS Starvation tests with larvae of the cinnabar moth. 7043 ATRAZINE Influence of tillage, row spacing, and atrazine on sorghum and weed yields from nonirrigated sorghum across Nebraska. 7120 An evaluation of atrazine, simazine, monuron and diuron on ten Hawaiian sugar cane plantations. 71 7132 Some factors that influence the deactivation of atrazine in 7654 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in 7657 soil. AUTOCLAVES Epoxidation of aldrin and heptachlor in soils as influenced by autoclaving, moisture, and soil types. 767 7673 AUTOPSIES The enteropathogenic effect of Escherichia ccli in rabbits and pigs. 7324 AUTORADIOGRAPHY TORADIOGRAPHY Incorporation of radioactive Uridine into the RNA of the 6599 lepidopteran Barathra brassicae. Cytological and autoradiographic studies on Sciara copro-phila salivary gland chromosomes. 6671 AVIAN LYMPHOMATOSIS Chemical changes in nerves from birds affected by fowl para-usis. 7351 lysis. AVIAN NEPHROSIS Pattern of mortality in avian nephrosis. 7454 AVITAMINOSIS Bracken poisoning of farm animals. 7300 Unusual cerebellar conditions in pigs. Part 1. Cerebellar herniation associated with vitamin A deficiency. 7 7326 AVOCADOS Biological control of Phytophthora root rot of avocado with alfalfa meal. 6978 AZALEA ALEA Systemic insecticides for control of scales, leaf miners, 7059 and lace bugs. ZINPHOSMETHYL A seasonal study of diapause, reproductive activity and seasonal tolerance to insecticides in the boll weevil. 6496 Boll weevil susceptibility to toxaphene, endrin, and guthion in five Alabama localities. 6505 Some effects of age, preimaginal habitat, and adult food on susceptibility of boll weevil to certain insecticides. 6983 Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 69 6988 Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 6991 6991 Field testing of insecticides for control of the Nantucket pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana. 700

centrifugation and Ouchterlony agar diffusion serological

7712

shoot moth, R. buoliana. 7001 Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003

### BACTERIAL CANKER (PEACHES)

6532

tions of a commercial preparation of Bacillus thuringien-Evaluation of insecticides for control of the Fuller rose sis. beetle on citrus in California. 7004 Hyperodes humilis, a new pest of sweet corn in the everglades, and its control. 7013 Effectiveness of insecticides against the European corn borer and green peach aphid on peppers. 7017 Increased tolerance of the boll weevil and cotton fleahopper to some chlorinated hydrocarbon insecticides in Central Texas in 1958. 7042 Plum curculio control experiments in 1955-58. 7062 A comparison of the toxicity of insecticides for the control of corn earworm on sweet corn. 7084 AZTEC TOBACCO Some effects of supplying benzylademine to leaves and plants inoculated with viruses. 6695 BABY PIGS A simple test for deprivation of colostrum in piglets. 7292 House fly control in pig parlors. 7566 BACILLIS Infection inhibition and germ-tube lysis of three cereal rusts by Bacillus pumilus. 6827 Anthrax vaccination. 7402 The effect of 2 hepta-5-methylbenzimidazole and hydrochloric acid on the growth of microflora found on poultry carcasses. 7652 BACILLUS THURINGIENSIS utilization of Bacillus thuringiensis Berliner as a biotic insecticide to suppress the alfalfa caterpillar. 6640 The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006 Effectiveness of insecticides against the European corn 7017 borer and green peach aphid on peppers. BACTERIA The occurrence of species of the genus Brevibacterium in 6463 insects. Nosema laphymae n. sp. and the internal structure of the microsporidian spore. 6473 Separation of bacterial spores and parasporal bodies with a fluorccarbon. -6480 improved method for the isolation of Streptococcus An improved method for the isolation of Streptoneous pluton, and observations on its distribution and ecology. 6484 On the in-vitro culture of intracellular symbiotes of cock-6497 roaches. Bacteria of grasshcppers of western Canada III. Frequency of occurrence, pathogenicity. 6499 Bacteria of grasshoppers of western Canada I. The entero-6501 bacteriaceae. Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families. 6503 The bacterium Coccobacillus acridiorum d Herelle taxonomic position and status as a pathogen of locusts and grasshoppers. 6504 Inactivation by irradiation of spores of Bacillus thuringi ensis war. thuringiensis. **ล์**506 Silicon content of the paraspora crystal of several crytalliferous bacteria. 6527 Preliminary report on the larval development of the horn fly, Haematobia irritans, in feces from cattle given frac-

The susceptibility of the house fly, Musca domestica Linnaeus, to Bacillus thuringiensis var. thuringiensis Berliner. 6539 The site of action of crystalliferous bacteria in Leridor-6543 A microsporidian, Thelohania sp., in Pieris rapae. 6571 Variations in total hemocyte counts as induced by a nosemosis in the cabbage looper, Trichoplusia ni. 6572 Preliminary laboratory results on the susceptibility of Aedes aegypti (Linnaeus) to Bacillus thuringiensis Berliner. 6575 The relation between oxygen consumption and bacterial infec tion in sawflies. 6580 Bacteria and fungi associated with dead boll weevils (An-thonomus grandis) in a natural population. 6589 A simplified purification technique for parasporal inclu-sions from certain varieties of Bacillus thurengiensis. 6600 The utilization of Bacillus thuringiensis Berliner as a biotic insecticide to suppress the alfalfa caterpillar. 6640 Morile streptococci from the desert locust, schistocerca 6641 gregaria. The normal bacterial flora of the alimentary canal of labor-atory stocks of the desert locust, Schistocerca gregaria Forskal. 6643 Epizootiology of a disease of the desert locust, Schistocerca gregaria (Forskal), caused by nonchromogenic strains of Serratia marcescens Bizio. 66 6644 visit to M. W. Beijerinck at his home laboratory in december, 1925. 6763 Hog cholera Breaks influenced by bacterial infection. 7219 7222 Clostridium chavoei common in normal adult dogs. A new penicillin. 7261 The effect of staphylococcal toxins on ruminant erythrocytes treated with diffusable substances formed by corynebacteria. 7312 The pathogenesis of gastro-enteritis associated with Esche-7333 richia coli. Factors influencing the survival of coliforms in the dust of deep litter houses. 7344 7374 Bacterial gastro-enteritis outbreaks in cats. Microbiological studies on a new penicillin, BRL 1621. 7382 Bacterial gastro-enteritis in cats. 7400 The pathogenesis of gastro-enteritis associated with Esche 7526 richia coli. The microbiological contamination of egg shells and egg 7651 packing materials. The effect of food grade polyphosphates on the microbial population of chicken meat. 7653 BACTERIAL BLIGHT (SOYBEANS) Variability in pathogenicity in the bacterial blight patho-gen of soybeans. 67: 6731

BACTERIAL CANKER (PEACHES) Transmission of Pseudomonas syringae in peach trees by bud 6736 propagation. .

BAITS

## BACTERIAL DISEASES (ANIMALS)

BACTERIAL DISEASES (ANIMALS)	
BACTERIAL DISEASES (ANIMALS) Newer knowledge of ovine vibriosis.	7310
Piagnesis antigens for the detection of nocardiosis in mals.	ani- 7460
BACTEBIAL DISEASES (PLANTS) Sources of resistance to halo blight in Phaseolus vulgaris.	6698
Variability in pathogenicity in the bacterial blight p gen of soybeans.	atho- 6731
Transmission of Pseudomonas syringae in peach trees by propagation.	bud 6736
Bacterial spot of ivy caused by Xanthomonas hederae (Arnaud, 1920, Dowson 1939, in New Zealand.	6740
Effect of crganic phosphorous pesticides on certain ph pathogenic bacteria.	yto- 6743 .
An evaluation of Solanum nigrum and Physalis minima as suscepts of Xanthomonas vesicatoria.	6792
BACTEBIAL SOFT ROT (IBIS) Relation of the iris borer to bacterial soft rot of ir	is. 6774
BACTERIAL SPOT (IVY) Bacterial spot of ivy caused by Xanthomonas hederae	(7))
(Arnaud, 1920, Dowson 1939, in New Zealand. BACTERIAL SFCT (PEACBES)	6740
Control of peach bacterial spot with Xanthomonas pruni teriophage.	bac- 6730
BACTEBIAL SPOT (PHYSALIS MINIMA) An evaluation of Solanum nigrum and Physalis minima as suscepts of Xanthomonas vesicatoria.	6792
BACTEBIAL SPCT (REDFEPERS) Inheritance of resistance in pepper to bacterial spot.	6725
BACTERIAL SPCT (SOLANUM NIGRUM) An evaluation of Solanum nigrum and Physalis minima as suscepts of Kanthomonas vesicatoria.	6792
BACTERIAL SPOT (TOMATOES) Survival of Xanthomonas vesicatoria in soil and diseas tomato plants.	ed 6854
BACTERIAL WILT (ALPALPA) Infecting seven-day-old alfalfa seedlings with wilt ba through wounded Cotyledons.	cteria 6789
Persistence of Corynebacterium insidiosum in soil.	6833
BACTERIAL WILT (STRELITZIA) Bacterial wilt of bird-of-paradise caused by Pseudomon solanacearum.	as 6863
BACTERICIDES Effect of organic phosphorous pesticides on certain ph pathogenic bacteria.	yto- 6743
Bairy root (Agrobacterium rhizogenes) of field roses.	6829
Comparative bactericidal properties of N-polyhaloethyl hydantoins.	thio 7737
BACTEBINS Effect of pasteurella bacterin on mortality and pneumo in lambs.	nia 7339
BACTEBIOLOGY Multiplication of Xanthomonas vesicatoria on tomato se lings.	ed- 6796
BACTEBIOPHAGES Prevalence of Erwinia amylovora in apple buds as detec	
by phage typing.	6701 7169
Phage typing of Staphylococcus aureus. Apparent canine distemper caused by Klebsiella organis.	
	7452

A systemic insecticide and bait for flea and rat control. 7561 Insecticidal baits for control of the imported fire ant, Solenopsis saevissima richteri. 7571 BANANAS Studies on ascospore production by Mycosphaerella musicola in Honduras. 6930 Comparative anatomical study of leaves of young and mature banana plants in relation to the morphology of Cercospora musae lesions. 7720 BARATBRA BATBRA Incorporation of radioactive Uridine into the RNA of the 6599 lepidopteran Barathra brassicae. BARLEY Effects of barley yellow dwarf virus on yield of oats as influenced by variety, virus strain, and developmental stage of plants at inoculation. 6744 Studies on the nature of barley resistance to Helmintho-6780 sporium teres. Heterothallism in Pyrenophora teres. 6809 Relationship of genes conditioning pathogenicity of Erysiphe graminis f. sp. hordei on barley. 6828 Relationship of the genes conditioning resistance to Erysiphe graminis f. sp. hordei in some varieties of barley used to differentiate races of this pathogen. 6856 BARTHRIN Comparative value of some synthetic compounds as synergists with barthrin in house fly sprays. 668 6680 Laboratory and field tests against mites and lice attacking poultry. 7562 BASEBOARDS House fly pupation under baseboards. 7575 BASIC SLAG 7280 Basic slaq toxicity in cattle and sheep. BASIDIOCARPS Autumn and winter sporulation by basidiocarps of Fomes 6871 annosus. **BAYER 22408** Control of the grape leaf folder in California. 7064 BAYER 23453 Selective toxicity and animal systemic effectiveness of several organophosphates. 7563 BAYER 24498 Selective toxicity and animal systemic effectiveness of several organophosphates. 7563 BAYER 25198 Selective toxicity and animal systemic effectiveness of several organophosphates. 7563 BEAGLE DOGS Cockers and labradors more resistant to distemper. 7197 BEAK Some congenital abnormalities in the beaks and skulls of 7343 wildfowl. BEANS Sources of resistance to halo blight in Phaseolus vulgaris. 6698 Influence of host and nonhost plants upon populations of Thielaviopsis basicola in soil. 6704 Chitin-liquin amendments for control of bean root rot. 6807 Microbial antagonism in bean rhizosphere as affected by oat straw and supplemental nitrogen. 6847 Effects of oat straw and supplemental nitrogen on microbial antagonism in bean rhizosphere. 6848

6974

6975

BELLIS

Comparisons of pea enation mosaic virus isolates. 6878

Changes in multiple molecular enzymes in rusted bean leave 6923

Progressive distribution of southern bean mosaic virus antigen in bean leaves determined with a fluorescent anti body stain. 6969

Heat activation of different strains of tobacco mosaic virus infection on varieties of beans (Phaseolus vulgaris). 6970

Heat therapy of bean rust.

Predisposition to powdery mildew.

Transmission of bean mosaic virus in relation to length of probes by aphids allowed either one or several acquisitio 6980 probes.

The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006

Effectiveness of insecticides against the European corn borer and green peach aphid on peppers. 7017

Effects of soil insecticides and absorbents on plant sugars 7054 and resulting effect on mite nutrition.

Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach. 7661

Malathion residues on and in the leaves of Phaseolus 7674 vulgaris.

The macerating enzyme of Rhizoctonia solani. 7701

Metabolism of methylcarbamate insecticide chemicals in 7717 plants.

Bioassay methods for 4-amino-3,5,6-trichloropicolinic acid. 7742

#### BEE DISEASES

The incidence of virus diseases in honey bees. 6448

The natural mechanism of suppression of Nosema apis Zander in enzootically infected colonies of the honey bee, Apis mellifera Linnaeus. 644 6483

Amoeba disease of the honey bee, Apis mellifera Linnaeus, and an attempt at its chemical control. 6533

The toxicity of extracts from foulbrood scale residues for 6609 honey-bee larvae maintained in-vitro.

A conopid fly parasite found in the honey bee. 6617

BEEF CATTLE 7215 Gastrointestinal nematodes in beef yearlings.

The influence of physical form of roughages and antibiotic administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty acids and liver abscesses of steers fed all-concentrate rations. 7347

A study of the effects of various hormone treatments on the reproductive activity of prepuberal and post-puberal beef heifers and lactating beef cows. 7528 7528

#### BEES

Nests and social behavior of halictine bees of India (Hy-6486 menoptera, Balictidae).

Moisture sensitivity, mechanical injury and gibberellin treatment of Beta vulgaris seeds. 6721

Beet ring mottle disease. 6738

The beet armyworm, Spodoptera exigua, an economic pest of 6982 citrus in California.

Influence of soil and moisture on the beet webworm, Loxostege sticticalis, and its parasites. 7112

Starvation tests with larvae of the cinnabar moth. 7043 BELONOLAIMUS A comparison of Fusarium wilt indices of cotton varieties with root-knot and sting nematodes as predisposing agents. 6727 BEHISIA TABACI Inter-relationship between whitefly (Bemisia tabaci Gien) population and the incidence of leaf curl in bidi tobacco (nicotiana tabacum L) in relation to different planting dates. 7044 BENTONITE Bentonite flocculation a rapid, sensitive serological test for the detection of plant virus antigens. 689 6897 BENZENE HEXACHLORIDE Some effects of age, preimaginal habitat, and adult food on susceptibility of boll weevil to certain insecticides. 6983 Toxicity of BHC to loblolly pine seedlings. 7068 Further studies on control of the clover root borer in Virginia. 7080 Small amounts of insecticides effective in controlling grubs of the Japanese beetle. 7105

## Toxic chemicals.

BENZIMIDAZOLE Effects of some cytokinins on tobacco and their relation to tobacco mosaic virus infection. 6915

## BENZINE HEXACHLORIDE

BHC translocation from treated soil and the effect on growth of red clover. 6686

Control of the woolly apple aphid on roots of apple nursery 7011

BENZYL-9- (TETRAHYDROPYRAN-2-YL) -ADENINE, N-

Effects of some cytokinins on tobacco and their relation to tobacco mosaic virus infection. 6915

BENZYLADENINE Some effects of supplying benzylademine to leaves and plants inoculated with viruses. 6695

BENZYLBENZYL CHRYSANTHEMATES Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates. 7690

BEPHENIUM HYDROXYNAPHTHOATE The control of Nematodirus fillicollis infection by strate-gic anthelmintic medication. 732

7321

BERENIL Prophylactic activity of Berenil against trypanosomes in 7537 treated cattle.

BEROSTNAR Taxonomy and biology of the subfamily Berosinae of North and Central America and the West Indies (Coleoptera0 Hydrophilidae. 6471

BIOCHEMISTRY

Some biochemical changes associated with virus infection in 6820 apple.

Purification, morphology, and biochemical characterization of the Wisconsin pea streak virus. 68 6872

Nutritional and biochemical aspects of arabinose and xylose for chicks. 7539

BIOLOGICAL ASSAY

Laboratory technique and apparatus for testing viruses applied as dusts. 6596

Toxins from the entomogenous fungus Metarrhizium anisopliae I. Production in submerged and surface cultures, and in inorganic and organic nitrogen media. 6618

The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana (Linn.). 6639

> PAGE 77

### BIOLOGICAL ASSAY

7685

# BIOLOGICAL CONTROL (DISEASES)

Herbicidal activity of vapors of 4-amino-3,5,6-trichlor olinic acid.	copic- 7123
Chlorophyll formation in Buglena as a test for herbicit	des. 7129
Bioassay methods for 4-amino-3,5,6-trichloropicolinic a	acid. 7742
PTOTOCTORI COMMENT (DICPACPC)	
BIOLOGICAL CONTROL (DISEASES) Addition of fungal cell-wall components to soil for biological disease control.	6822
Biological control of Phytophthcra root rot of avocado alfalfa meal.	with 6978
BIOLOGICAL CONTROL (INSECTS)	
Forther tests on the use of a polyhedrosis virns in the	e
control of the cotton leafworm Prodenia litura, Fabric.	
	6445
Pythium sp. (Fhycomycetes Pythiales) pathogenic to most to larvae.	qui- 6515
Hemerocampa pseudotsugata McDunnongh, a new host for Beauveria bassiana (Balsamo) Vuillemin.	6524
Microbial control of two cabbage insects.	6588
Pathogenicity of externally occurring fungi to Reticul mes flavipes.	iter- 6634
The ntilization of Bacillus thuringiensis Berliner as	a
biotic insecticide to suppress the alfalfa caterpillar	6640
Infection of the garden symphylan, Scutigerella immacu	lata
with the DD-136 nematode.	6645
BIOLOGICAL CCHTEOL (PLANT DISEASES)	
Control of peach bacterial spot with Xanthomonas pruni teriophage.	bac- 6730
	0750
BIOLOGY	- hia
Biology and evaluation of certain predators of Therioa maculata (Buckton).	6628
Observations on the biology of Psorophora cyanescens.	
ubservations on the biology of restorational clanescens.	6635
Biology and control of the apple seed chalcid in North Carolina.	7072
Curotinus	1012
The biology of the pine webworm, Tetralopha robnstella	, in 7116
Wisconsin.	7110
BIOBETECROLOGY	
Symposium on requirements and interpretations of	
biometeorological cbservations. invitational papers presented at the fifty-fourth annu	al
meeting of the Maerican Phytopathological Society.	
corvallis, oregon, august 26-29, 1962.	6691
BIOTIN	
Effect of biotin on growth and sporulation of Verticil	
albo-atrum.	6777
BIPHENYL	
Biphenyl-resistant citrus green mold reported in Flori	da. 6914
BIPOLARIS	£
Spore germinability in soil as an inherent character o Cochliobolus sativus.	7706
BIRDS	
Thyroid dysplasia in the budgeriar.	7242
Control of the northern fowl mite, Ornithonissus sylvi	arum
(C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199	•
	7573
Organochlorine pesticides in Antarctica.	7684
BIRDSFOCT TREFOIL	
Host-parasite relations of Stemphylinm leafspot and st canker of birdsfoct trefoil (Lotns cornicnlatns).	em 6737
A physiogenic leaf and stem spot of some forage legume	s.
- I-I-rolowed rout and been shot of some fordie redune	

	ACK LEAF 40	
	Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach.	7661
	ACK ROOT ROT (PINUS) Black root rot of pine.	6771
0	ACK SHANK (TOBACCO) Calcium nutrition in relation to the black shank disease tobacco.	e of 6825
]	ACK SPOT (ROSA) Hostiparasite interaction in blackspot disease of roses caused by Diplocarpon rosae Wolf.	6886
	ACKHEAD Effects of paromomycin sulfate on blackhead in turkeys.	7159
1	Histomoniasis ( Blackhead ) in broiler chickens.	7353
1	Dimetridazole part II. Therapeutic activity and toxici in the treatment of experimental histomoniasis in turke	ty ys. 7619
	ADDER Rupture of the bladder in a calf.	7287
1	ATTELLA GERMANICA Evaluation of compounds of cadmium and related metals a: production inhibitors in insects.	s re- 6476
(	Laboratory selection of normal and chlordane-resistant German cockroaches for resistance to Malathion and Diazinon.	6535
1	The biological evaluation of spray additives and solven with Blattella germanica (Linn) and Periplaneta america: (Linn.).	
	ATTIDAE On the in-vitro culture of intracellular symbiotes of co roaches.	ock- 6497
;	Studies of water conservation in cockroaches.	6653
	IGHT (SORGHUM) Purification of the selective toxin of Periconia circin.	ata. 7755
	OAT An analysis of the bloat complex and progress towards i prevention.	ts 7236
:	OOD Establishment of an insect cell strain persistently inf with an insect wirns.	ected 6592
	Blood loss caused by Haemonchus contortus in sheep.	7216
	The recovery of Pasteurella multocida from lyophilised of tures.	cul- 7265
	Role of aggregated bovine serum albnmin in pathogenesis sernm sickness nephritis in rabbits.	of 7403
	OOD CELLS Variations in total hemocyte counts as induced by a nosemosis in the cabbage looper, Trichoplusia ni.	6572
	OOD SERUM Blood serum protein from mink with aleutian disease.	7185
	OOD TRANSFUSIONS The application of blood transfusion in cattle with par lar reference to redwater (Babesia bovis).	ticu- 7623
	UEBEBERIES Relationships of viruses associated with ringspot disea of blueberry.	ses 6798
	Currant fruit weewil, Pseudanthonomus validus, a pest o cultivated highbush blueberry.	f 7069

PAGE 78

BOARS Evaluation of problems related to introduction of secondary specific-pathogen-free (SPF) boars into SPF and Non-SPF herds. 7534

6790

BROWN SPOT (BROADBEANS)

BOLL ROT (COTTON) Relation of seed-borne fungi to boll rots of cotton.	6960	BOTH
BOMBINAE Acarina associated with Michigan Bombinae. I-II	6458	BOVI
BOBBYY BORI Mode of multiplication of silkworm nuclear polyhedrosis		Ca
virus II. Multiplication of the virus in the early perio of the LD50 time curve.	od 6478	BOVI De ai
On the structure cf cytoplasmic polyhedra cf some lefidoptera.	6489	BOVI L
Fungus infection of insects via the alimentary tract.	6530	BO VI Re
Serological studies of the cytoplasmic- and nuclear- polyhedrosis viruses of the silkworm, Bombyx mori.	6552	BOXI Cl
Studies of two strains of cytoplasmic-polyhedrosis viru:	s. 6553	BRAC
Studies on lipids in the hemolymph of the silkworm, Bom mori, during the course of nucleopolyhedrosis.	byx 6567	Ste
Toxins from the entomogenous fungi Metarrhizium anisopl II. Symptoms and detection in moribund hosts.	iae. 6619	BRAC
Postembryonic development of the optic ganglia in Bomby mori.	x 6623	BRAI Yi
Postembryonic development of the brain in Bombyx mori.	6624	1: BRAI
BONE DISEASES Suspected skeletal scurvy in the dog.	7360	Po
Osteogenesis imperfecta in lambs.	7362	Hi
Suspected skeletal scurvy in the dog.	7464	BREI
Suspected skeletal scurvy in a dog.	7490	Bi V:
BONE DISLOCATION Congenital detachment of the processus anconeus in the o	dog. 7341	A Ti
BONES		DI
Influence of dietary zinc, calcium and vitamin D for he on zinc content of tissues "and eggs and on bone composi-	ns tion. 7137	Di
BOOPHILUS		Ti BREV
Ticks in the united states serve as vectors of disease.	7187	Ba Ps
BOOPHILUS ANNULATUS Resistance of Boophilus microplus to organo-phosphorus : secticides.	in- 7503	BI fa
BORDEAUX HIXTURE Control of Cylindrosporium leaf spot disease of Rhus tr:	i-	BREV Th
lobath and Shepherdia argentea seedlings.	6855	BRO
BORDER DISEASE Hypomyelinogenesis congenita in lambs.	7240	a
BORDETELLA Comparison of pathogenicity of various isolates of Borde tella bronchiseptica in young pigs.	e- 7488	BROC Re Ma
BOTBAN Control of Botrytis neck rot of onions by fungicidal duant and desiccant chemicals.	sts 6779	BRON Su
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus spec and its comparison with other fungicides on control of	ies	BRO
Rhizopus rot of peaches.	6838	BRO
BOTRITIS Studies on levels of reducing sugars and hydrolytic enzy in relation to Botrytis head rot on safflower.	ymes 6703	P] DI DI
Effects of sodium fluoride on growth of some pathogenic fungi.	6943	BRON

PTONE 2101 (PTO	AUDLAS.
BOTRYTIS ALLII Control of Botrytis neck rot of onions by fungicidal du and desiccant chemicals.	sts 6779
BOVICOLA Cattle lice eradication studies- A-3-year evaluation.	7230
BOVINE BRUCELLOSIS Detection of bovine brucellosis by acidified plate test antigens.	7181
BOVINE LYMPHOSARCOMA Lymphocyte counts relating to bovine lymphosarcoma.	7165
BOVINE RHINOTRACHEITIS VACCINES Respiratory disease in vaccinated feeder cattle.	7211
BOXER DOGS Cholelithiasis causing obstructive jaundice in a Boxer	dog. 7248
BRACON HEBETOR Succinoxidase activity in two species of Bracon (Hymeno tera, Braconidae).	p 6595
BRACON SERINOPAE Succinoxidase activity in two species of Bracon (Hymeno tera, Braconidae).	p- 6595
BRADISIA Yield and quality of mushrooms from beds treated with lindane.	7075
BRAIN Postembryonic development of the brain in Bombyx mori.	6624
Histology of the brain of Labidura riparia (Pallas) Der maptera).	6630
BREEDING Breeding Pieris brassicae apparently free from granulos virus.	is 6670
A method of using mycelial, monosporidial isolates of Tilletia controversa in pedigreed hybrid crosses.	6908
Drosophila breeding in refuse from tomato canneries.	7031
Disease on a large scale.	7150
Tick-borne disease control.	7309
BREVIBACTERIACEAE Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families.	6503
BREVIBACTERIUM	
The occurrence of species of the genus Brevibacterium is insects.	n 6463
BROADBEANS A toxic metabolite from Ascochyta fabae having antibiot: activity.	ic 6841
BROCCOLI Response of different strains of the green peach aphid malathion.	to 7060
BROMOCHLOROETHANE Susceptibility of life stages of the Mexican fruit fly fumigation with ethylene chlorobromide.	to 6985
BROMUS Purification and properties of bromegrass mosaic virus.	6723
BROWN ROT (CHERRIES) Plant introduction sour cherry selections - probable so of brown rot resistance.	urces 6823
BROWN SPOT (BROADBEANS) A toxic metabolite from Ascochyta fabae having antibiot: activity.	ic 6841

BK	U	C.	EI	LA

BRUCELLA Detection of bovine brucellosis by acidified plate test antigens.	7 18 1	BŪ
Combined serologic tests most accurate for identifying brucellosis reactors.	7183	<sup>:</sup> BO
Ram epididymitis versus brucellosis.	7184	
A swine brucellosis epizootic.	7407	BO
BRUCELLA ABORTUS ANTIGENS		
Detection of bovine brucellosis by acidified plate test antigens.	7 18 1	BU
Brucella agglutinins in East African game animals.	7484	~
BRUCELLA ABORTUS VACCINES Brucella-vaccinated cattle have fewer abortions, infecte less easily.	ed 7188	CA
The relative immunising value of mucoid L and S19 strain	c	
of Brucella abortus with comparative observations on the agglutination and complement fixation tests.		
BRUCELLOSIS Wisconsin eradicates brucellosis.	7176	
Detection of bovine brucellosis by acidified plate test antigens.	7 18 1	CA
Combined serologic tests most accurate for identifying brucellosis reactors.	7183	
Ram epididymitis versus brucellosis.	7184	
Pregnancy hormones and brucellacidal activity in bovine serum.	7213	CA
Fetal skin harbors most microorganisms.	7214	
Brucellosis control and eradication Notes and proposals the Oxford working group.	of 7255	CA
A swine brucellosis epizootic.	7407	CA
A swine brucellosis epizootic.	7407	CA
A swine brucellosis epizootic. BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).		CA CA
BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (F.) (Bruchidae, Coleoptera). BRUCHOPHAGUS	.10-	
BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (F.) (Bruchidae, Coleoptera).	.10-	CA
BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (F.) (Bruchidae, Coleoptera). BRUCHOPHAGUS	10- 6606	
BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (F.) (Bruchidae, Coleoptera). BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.	10- 6606	CA CA
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE</li> </ul>	10- 6606 7067 7000	CA
BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera). BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage. BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis. BRUSH TECHNIQUE Brush technique for detection of fungus diseases.	10- 6606 7067	CA CA
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPFALOES Incidence of mastitis in cows and buffaloes in north wes</li> </ul>	10- 6606 7067 7000 7327 t	CA CA
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUFPALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> </ul>	10- 6606 7067 7000 7327 t 7389	CA CA
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPFALOES Incidence of mastitis in cows and buffaloes in north wes</li> </ul>	10- 6606 7067 7000 7327 t 7389	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPENAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPPALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Patal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Funigation of buildings to control the dry-wood termite,</li> </ul>	10- 6606 7067 7000 7327 t 7389 a	CA CA
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUFPALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Patal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Punigation of buildings to control the dry-wood termite, Cryptotermes brevis.</li> </ul>	10- 6606 7067 7000 7327 t 7389 a 7633	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPENAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPPALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Patal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Funigation of buildings to control the dry-wood termite,</li> </ul>	10- 6606 7067 7000 7327 t 7389 d 7633 7646	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mottality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPPALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Fatal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Funigation of buildings to control the dry-wood termite, Cryptotermes brevis.</li> <li>BULLS Seminal vesticulitis in bulls associated with infection</li> </ul>	10- 6606 7067 7000 7327 t 7389 d 7633 7646 by	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUFFALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Patal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Funigation of buildings to control the dry-wood termite, Cryptotermes brevis.</li> <li>BULLS Seminal vesticulitis in bulls associated with infection Actinobacillus actinoides.</li> <li>BUSHBUSH VIRUS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.</li> <li>BUTACARB(3.5-DI-)-BUTULPHENVL N-RETHYLICARBAMATE</li> </ul>	10- 6606 7067 7000 7327 t 7389 d 7633 7646 by 7384	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUPFALOES Incidence of mastitis in cows and buffaloes in north wes India.</li> <li>Fatal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Funigation of buildings to control the dry-wood termite, Cryptotermes brevis.</li> <li>BULLS Seminal vesticulitis in bulls associated with infection Actinobacillus actinoides.</li> <li>BUSHBUSH VIRUS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.</li> </ul>	10- 6606 7067 7000 7327 t 7389 d 7633 7646 by 7384	
<ul> <li>BRUCHIDAE Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (P.) (Bruchidae, Coleoptera).</li> <li>BRUCHOPHAGUS Sampling alfalfa seed for clover seed chalcid damage.</li> <li>BRUCHUS Mortality factors for the vetch bruchid, Bruchus brachialis.</li> <li>BRUSH TECHNIQUE Brush technique for detection of fungus diseases.</li> <li>BUFPALOES Incidence of mastitis in cows and buffaloes in north west India.</li> <li>Patal strike caused by Chrysomia bezziana in cattle an buffaloes.</li> <li>BUILDINGS Punigation of buildings to control the dry-wood termite, Cryptotermes brevis.</li> <li>BULLS Seminal vesticulitis in bulls associated with infection Actinobacillus actinoides.</li> <li>BUSHBUSH VIRUS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.</li> <li>BUTACARB (3,5-DI-)-BUTYLPHENYL N-BETHYLCARBAMATE The search for veterinary insecticides. iI. carbamates</li> </ul>	10- 6606 7067 7000 7327 t 7389 d 7633 7646 by 7384 6683	

E	NUTYL 2-METHYL-3-(3,4-METHYLENEDIOXPHENYL) Methods for the evaluation of stable fly toxicants and repellents.	7579
Έ	NUTYL 2-METHYL-3-(3,4-METHYLENEDIOXYPHENYL) PROPYL ACID Screening tests with synthetic compounds as synergists a house fly sprays.	or 6682
B	NUTYRIC ACID Chemotherapy of the apple scab disease with butyric acid derivatives.	1 6801
B	NUXUS Systemic insecticides for control of scales, leaf miners and lace bugs.	3 <b>,</b> 7059
C	CABBAGE Persistence of a granulosis virus of Pieris brassicae of cabbage leaves.	6517
	The response to temperature of cabbage virus A infection Nicotiana glutinosa.	n in 6758
	A new race of Plasmodiophora brassicae affecting badger shipper cabbage.	6898
	The fate of phorate in soils.	7008
C	CACAO Influence of root exudates of cacao and other plants on spore development of Phytophthora palmivora.	6947
	Diurnal emergence of Xyleborus ferrugineus (Coleoptera, Scolytidae) from cacao trunks in Ecuador and Costa Rica.	7057
C	ADNIUM Evaluation of compounds of cadmium and related metals as production inhibitors in insects.	5 re- 6476
C	ADBA CAUTELLA Effect of temperature and humidity on the fecundity and velopment of Cadra cautella Wlk. in wheat.	de <del>-</del> 7071
С	APPEINE Aminophylline poisoning in dogs.	7350
C	AJANUS INDICUS A detailed morphological study of the external and inter genital organs of female Melanagromyza obtusa (Malloch) serious pest of Cajanus indicus L. (Agromyzidae, Dip-	, a
	tera).	6560
С	ALANDRA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn.	7055
С	ALCIFICATION (PHYSIOLOGICAL) Calcification of the adrenal glands in a dog.	7370
	Metastatic calcification induced by hytakerol in chicken infected with Plasmodium gallinaceum.	ns 7427
С	ALCINOSIS	
	The radiographic features of calcinosis circumscripta (Kalkgicht, calcium gout) in the dog.	7538
С	ALCIUN Calcium nutrition in relation to the black shank disease tobacco.	of 6825
	Factors affecting the pathogenesis of Pythium species or cotton (Gossypium hirsutum L) seedlings.	6920
	Calcium requirements of turkey breeder hens.	7135
	Influence of dietary zinc, calcium and vitamin D for her on zinc content of tissues and eggs and on bone composit	s ion. 7137
	Zinc availability in the chick as affected by phytate, c cium and ethylenediaminetetraacetate.	al <del>-</del> 7139
		7139
	cium and ethylenediaminetetraacetate. Potentiation of chlortetracycline in laying chickens.	
	cium and ethylenediaminetetraacetate.	7139 7140 7143

CANINE	DISTEMPER
on warne	DADI DUL DU

nucosa.	7388
Effect of soil exchangeable hydrogen and calcium ratio a	
the resulting pH on infection of citrus fibrous roots by Phytophthora parasitica.	7747
CALCIUM CBLORIDE Control of Botrytis neck rot of onions by fungicidal dus and desiccant chemicals.	sts 6779
CALCIUM COPPER CHLORIDE Infection of spruce seedlings by Cylindrocladium scopari	um. 6715
CALCIUM HYDROXIDE Fusarium wilt (race2) of tomato0 effect of line and mich nutrient soil amendments on disease development.	co- 6775
Antidote for tannic acid poisoning in rabbits.	7191
Antidote for tannic acid poisoning in rabbits.	7208
CALCIUM SULFATE Evidence for two different pathogens of peanut pod rot.	6754
CALCULI Laparo-cystotomy in a gelding.	7554
CALIFORNIA Loxosceles reclusa in southern California.	6472
Potential use of Dylox and other insecticides in a contr program for field crop pests in California.	col 6687
Rapid-index methods for exocortis of citrus.	6718
Red leaf disorders of pear in California and their relat to pear decline.	ion 6836
A soil-borne virus disease of pepper in california.	6852
Field control of cotton mites with Aramite aerial spray California.	in 6998
Surveys for nosema disease of honey bees in California.	7021
Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California.	5 7065
A plant-parasitic nematode of the genus Rotylenchulus fo in california.	ound 7102
Paraguat for selective control of range weeds.	7125
CALIFORNIA BEEF CATTLE Infectious bovine rhinotracheitis abortion and its relat ship to nutrition in California beef cattle.	ion- 7278
CALIFORNIA MASTITIS TEST An evaluation of the California mastitis test and the Ne gretti field test as indicators of subclinical bovine ma tis.	
CALLIPHORIDAE The search for veterinary insecticides. iI. carbamates active against sheep blowfly.	7691
CALLITROGA Use of insects for their own destruction.	6672
CALLORHINUS Pathology of the Northern fur seal.	7392
CALLOSOBRUCHUS MACULATUS Structure and metamorphic changes in the fat body of Cal sobruchus maculatus (F.) (Bruchidae, Coleoptera).	10- 6606
CALLUS (PLANTS) Nematode-induced callus on carrot discs grown in witro.	7109
CALVES Experimental ornithosis in calves.	7147
Rift valley fever in calves, goats and pigs.	7194
Anaplasmosis complement-fixation response in calves.	7209

	Occurrence and etiology of infectious calf diarrhea.	7228
	Pneumonia in calves caused by parainfluenza virus type :	<sup>3</sup> . 7246
	Sudden death in a calf associated with advanced lymphat: leucosis.	ic 7266
	Rupture of the bladder in a calf.	7287
	The control of an outbreak of pneumonia in broiler calve with Virugon, a synthetic, oral anti-viral agent.	es 7301
	Muscular dystrophy in calves Simultaneous peracute and progressive types.	7316
	Intensive veal production and a hitherto untried nitrof A preliminary trial.	1ran- 7329
	Symposium on calf diseases.	7330
	Gastric dyspepsia in calves.	7337
	The control of an outbreak of Salmonella dublin in calve	es. 7401
	Dyspepsia in calves.	7411
	The pathogenisis of diarrhea in the newborn calf, with special reference to physiologic functions and environme conditions.	ental 7436
	Prophylactic use of Framycetin sulphate in calves.	7442
	White muscle disease, a selenium-responsive myopathy.	7443
	Emphysema with cardiac embassment in calves.	7453
	Mortality and morbidity in calves with salmonellosis.	7489
	The incidence of lead poisoning in calves in Northern In land.	re- 7529
	Effect of diethylcarbamazine on parasitic bronchitis in calves.	759 <b>1</b>
	Immunization experiments with lungworm larvae.	7592
	Lungworm infection in cattle-Control and treatment.	7627
	Vaccination of calves against rinderpest.	7634
	Acute toxic effects upon livestock and meat and milk residues of dieldrin.	7677
c1	NADA Bacteria of grasshoppers of western Canada III. Prequer cy of occurrence, pathogenicity.	6499
	Bacteria of grasshoppers of western Canada I. The entero bacteriaceae.	- 6501
	Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families.	6503
C1	NCROID SPOT (CITRUS) Cancroid spot of citrus.	6786
c1	NDIDA Candidiasis in pigs in northwest Wisconsin.	7235
	The effect of 2 hepta-5-methylbenzimidazole and hydrochl acid on the growth of microflora found on poultry carcas	
C	NINE DISTEMPEE Cockers and labradors more resistant to distemper.	7 <b>1</b> 97
	Effect of revaccination on distemper antibody levels.	7368
	Apparent canine distemper caused by Klebsiella organisms	

# CANINE DISTEMPER VIRUS

-

CANINE DISTEMPER VIRUS Vaccination of puppies. 7303	A comparison of the toxicity of insecticides for the control
A clinician s view of canine virus diseases. 7386	of corn earworm on sweet corn. 7084
Resistance of egg-adapted canine distemper virus to formalin*	Salt-marsh caterpillar control on cotton in Arizona. 7118
7462	Resistance of Boophilus microplus to organo-phosphorus in- secticides. 7503
CANINE HEARTWORM DISEASE Two-day treatment with Thiacetarsamide for canine heartworm disease. 7378	Residual effectiveness of certain insecticides in horn fly control. 7572
CANKER (PRUNUS DOMESTICA) First and second year effects on Cytospora canker disease of Italian prune trees sprayed with four concentrations of cycloheximide thiosemicarbazone. 6764	Sevin residues on soybeans following its use for armyworm control. 7669 Residue studies of livestock sprays containing Sevin.
CANNERIES	residue studies of fivestock sprays containing sevin. 7678
Drosophila breeding in refuse from tomato canneries. 7031	CARBOHYDRATES Muscle necrosis and amyloidosis in the White Pekin duck.
CANTALOUPES Characteristics of an unidentified virus from cucurbits. 6834	7220 CARBOMYCIN Carbomycin for pleuropneumonia-like organism infection.
CAPILLABIA Methyridine in the control of intestinal capillariasis in	7267
birds. 7637	CARBON Separation of bacterial spores and parasporal bodies with a fluorocarbon. 6480
Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 6779	Purification of insect virus inclusion bodies with a fluoro-
Effects of 2,6-dichloro-4-nitroaniline on Bhizopus species	carbon. 6490
and its comparison with other fungicides on control of Rhizopus rot of peaches. 6838	Effect of the soil carbon nitrogen ratio on soil fungi. 6778
Control of Cylindrosporium leaf spot disease of Rhus tri- lobath and Shepherdia argentea seedlings. 6855	Spore germination and carbon metabolism in Pusarium solani. i. reguirements for spore germination. 7709
Carbonyl sulphide from the decomposition of captan. 7746	CARBON DISULFIDE Distribution and sorption of liquid fumigants applied to
CARBACHOL Recovery from grass sickness. 7306	wheat by recirculation. 6688
CARBAMATES The search for veterinary insecticides. iI. carbamates active against sheep blowfly. 7691	CABBON ISOTOPES Translocation of C14-labeled compounds in cotton and oaks. 7708
Metabolism of methylcarbamate insecticide chemicals in plants. 7717	CARBON TETRACHIOBIDE Distribution and sorption of liquid fumigants applied to wheat by recirculation. 6688
CARBARYL The effects of chemical insecticides and insecticidal adju- vants of a Heliothis nuclear polyhedrosis virus. 6557	Susceptibility of certain stages of the rice weewil to a methallyl chloride fumigant formulation in wheat of various moistures. 7045
The penetration of piperonyl butoxide as a synergist and as an antagonist in Musca domestica L. 6655	Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. 7055
Methylenedioxyphenyl derivatives as synergists for carbamate insecticides on susceptible, DDT-, and parathion-resistant house-flies. 6679	Injectable Carbontetrachloride in the treatment of Fasciola hepatica infestation in lambs. 7608
Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 6988	CARBONYL SULPHIDE Carbonyl sulphide from the decomposition of captan. 7746
European corn borer control in peppers. 6990	CARBOPHENOTHION Field testing of insecticides for control of the Nantucket
Influence of timing and insect biology on the effectiveness	pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana. 7001
of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 6991	Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003
Effectiveness of insecticides against the European corn borer and green peach aphid on peppers. 7017	Plum curculio control experiments in 1955-58. 7062
Residues of Sevin and 1-naphthol on forage from aerial applications of Sevin in oil. 7020	Resistance of Boophilus microplus to organo-phosphorus in- secticides. 7503
Increased tolerance of the boll weevil and cotton fleahopper to some chlorinated hydrocarbon insecticides in Central Texas in 1958. 7042	CARCASSES The influence of physical form of roughages and antibiotic administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty acids
Plum curculio control experiments in 1955-58. 7062	and liver abscesses of steers fed all-concentrate rations. 7347
Control of the grape leaf folder in California. 7064	CARCINOGENS
Biology and control of the apple seed chalcid in North Carolina. 7072	The histopathological effects of certain carcinogenic 2-fluorenamine derivatives on larvae of the house fly.
Control of boll weevils resistant to chlorinated hydrocarbons. 7074	6507
DACE 82	

CARCINONA	7471	Dihydrostreptomycin therapy of bovine vibriosis.	7161
Tonsillar carcinoma in rural dogs.	7471	Lymphocyte counts relating to bovine lymphosarcoma.	7165
CARPOPHILUS Experiments for the control of sap beetles in sweet of		Anaplasmosis vaccine announced.	7168
grown for processing.	7014	Skunks and cows are rabies threat in Iowa.	7172
CARROTS Physiology of Rhizopus infection on carrot.	6814	Wisconsin eradicates brucellosis.	7176
Lesion nematode injury to carrot.	7 10 8	Foot-and-mouth disease vaccine-production of antigen in culture.	7177
Nematode-induced callus on carrot discs grown in with	7 10 9	Detection of bovine brucellosis by acidified plate test antigens.	
The effect of soil treatments of chlordane or heptach the flavor of turnips, parsnips, and carrots.	lor on 7671	Combined serologic tests most accurate for identifying brucellosis reactors.	7183
Control of thar (Hemitragus jemlahicus), evaluation of poisoning technique.	of a 7689	Response of cows and calves to a Psittacosis-Lympho- granuloma group agents.	7186
Production of 3-methyl-6-methoxy-8-hydroxy-3,4-dihydr coumarin by carrot root tissue.	coiso- 7736	Brucella-vaccinated cattle have fewer abortions, infect less easily.	
CASEOUS LYMPHADENITIS The occurrence of gaseous lymphadenitis and Morel s d in a sheep flock in Kenya.	lisease 7505	Changes in endometrium of vibrio fetus-infected and noninfected heifers.	7190
CASSIA Myodegeneration in cattle grazing cassia species.	7354	Significance of johnin test on naturally infected cattl	e. 7192
CATALASE		Psoroptic cattle scabies eradication activities for 196	
Inhibition of fungi by culture media previously exposing the second seco	ed to 6954		7193
CATANARIA		Toxicity of copper sulfate in beef cattle.	7199
The activity of the fungus, Catanaria anguillulae, ag plant-parasitic nematodes.	jainst 7719	Detection of antibodies to staphylococcus aureus in cat	tle. 7201
CATERPILLARS Protection of a susceptible insect host against a nuc polyhedrosis virus by ether extracts from insect larg		Three methods for controlling grass tetany in cattle an sheep.	nd 7202
polyhedrosis virus by ether extracts from insect fait	6488	Respiratory disease in vaccinated feeder cattle.	7211
Light microscopy of the virogenic stromata of cytopol ses.	lyhedro- 6663	Pregnancy hormones and brucellacidal activity in bovine serum.	7213
CATS Vertebral osteophytes in the cat.	7243	Groundnut toxicity. Aspergillus flavus toxin (aflatoxin animal products preliminary communication.	n) in 7225
Chronic rhinitis in cats.	7275	Three cases of Salmonella dublin in adult cattle on the same farm.	7227
A case of Erysipelothrix monocytogenes (Listeria mono genes) in the cat.	ocyto- 7367	Occurrence and etiology of infectious calf diarrhea.	7228
Bacterial gastro-enteritis outbreaks in cats.	7374	Cattle lice eradication studies- A-3-year evaluation.	
Bacterial gastro-enteritis in cats.	7400		7230
Feline dermatology.	7439	Diffuse lipomatosis in a heifer.	7232
Feline cryptococcosis.	7448	Cysteamine therapy of primary bovine ketosis.	7233
Metaldehyde poisoning.	7449	Perforation of the omasum and ulceration of the abomasu a cow.	n in 7244
A case of Escherichia monocytogenes (Listera monocyto genes) in a cat.	- 7533	A vaccine for anaplasmosis.	7258
A non-tuberculous granuloma of the cat associated with		Fluorosis causes lameness.	7260
acid-fast bacillus. A non-tuberculous granuloma of the cat associated wit	7550 ban	A case of bovine lymphoma. Haemoglobinaemia of cattle associated with the feeding	7271
acid-fast bacillus.	7551	Brassicae species.	7272
Lesions associated with liver fluke infection in a ca	7587	An outbreak of poisoning in store cattle attributed to zilian groundnut meal.	8ra- 7273
The zoonosis of animal parasites in Iraq. IV. Some un al lesions associated with Opisthorchis tenuicollis : tion.		Evaluation of bacterins for control of swime abscesses.	7276
An experimental investigation into the use of methyrian anthelmintic for cats.	idine as 7602	Infectious bovine rhinotracheitis abortion and its rela ship to nutrition in California beef cattle.	tion- 7278
A taenacide for dogs and cats.	7639	Basic slag toxicity in cattle and sheep.	7280
CATTLE		Base composition and thermal denaturation of DNA isolat from Anaplasma marginale.	ed 7295
Mechanism of food transport in cattle-tick, Hyalomma tium.	aegyp- 6562	An unusual spindle-cell tumour of the mandible of a cow	7296

PAGE 83

CATTLE

Acorn poisoning in a cow and a sheep.	7308
Tick-borne disease control.	7309
Chlortetracycline for elimination of anaplasmosis in car cattle.	rrier 7311
Studies on an experimental vaccine for prophylaxis of shipping fever.	7314
ATPase activity of the erythrocytic membrane in anaplast sis and of Anaplasma marginale.	™o- 7317
Pathological changes in the tarsi of cattle suffering for paresis spastica, examined by means of $X$ -rays.	гот 7318
Cypress poisoning.	7328
Myodegeneration in cattle grazing cassia species.	7354
A simple test for bovine liver dysfunction.	7355
Some examples of secondary circulatory dysfunction in cattle.	7361
Urethral calculi in a steer.	7363
Effect of fluorides in cattle.	7365
A case of distension of the omasum.	7371
Bovine lymphosarcoma.	7379
Anaplasmosis control preventing the introduction and spread in Anaplasmosis-free areas.	7387
Studies on myxovirus parainfluenza-3 vaccine for prevent of shipping fever in cattle.	tion 7395
The use of chemotherapeutic agents in animal tuberculos:	is. 7396
Epizootiology of bovine myxovirus parainfluenza 3(sf-4) Nebraska cattle as determined by antibody titers.	in 7398
A case of traumatic uterine rupture in a heifer.	7399
The presence of aflatoxin in a sample of cotton-seed cal	ke. 7406
Observations on the effects of flies and humidity on the tural lesions of streptothricosis.	е <u>па-</u> 7409
Tick-borne fewer in East Africa.	7416
Toxicity of nitrate nitrogen to cattle.	7423
Immunologic and epizootiologic studies of epizootic hove abortion.	ine 7425
Disease control in Africa.	7433
Pulmonary aspergillosis in a cow.	7435
Acute pulmonary emphysema in cattle.	7441
The responses of cows to experimentally induced hypocald mia.	ce- 7457
Mycobacterium fortuitum as a cause of bovine mastitis Tuberculin sensitivity following experimental infections	5. 7459
Diagnosis antigens for the detection of nocardiosis in a mals.	ani- 7460
Maduromycosis of the bovine nasal mucosa.	7479
Streptothricosis in cattle.	7480
Problems of establishing anaplasmosis-free herds in Mont na.	ta- 7491
Viral causes of bovine abortion in ohio.	7493
Low leukocyte levels protect cows from coliform mastiti:	5. 7494
Subendocardial haemorrhage in rinderpest-infected cattle	е.

The therapeutic use of cysteamine in bovine ketosis. 7507 A study of the effects of various hormone treatments on the reproductive activity of prepuberal and post-puberal beef heifers and lactating beef cows. 752 7528 Prophylactic activity of Berenil against trypanosomes in treated cattle. 7537 Histologic and electron microscopic studies of agranulocytes and hemal and hemolymph nodes in cattle. 7545 A successful anaplasmosis eradication program. 7552 Tick-borne fever as a cause of abortion and stillbirths in 7557 A study of the histological effects of Hypoderma lineatum (De Vill.) on gullet tissue taken from systemically treated and untreated cattle. 7570 Residual effectiveness of certain insecticides in horn fly 7572 control. Systemic insecticides for cattle grub control. 7574 Organophosphate systemics as sprays and feed additives for cattle grub control. 7577 Methods for the evaluation of stable fly toxicants and 7579 repellents. The in vivo activity of several systemic insecticides against cattle grubs in South Dakota. 7582 Feed lot tests with ronnel for control of cattle grubs. 7586 Thiabendazole as an anthelmintic in cattle and sheep. 7588 Swine ascarids infect cattle. 7589 Control of Dermatobia hominis in Central America. 7594 Further experiences with the systemic insecticides Etrolene and Ruelene in 1960-61. 7600 Husk in cattle Laboratory and field studies on calves vac-cinated with irradiated with lungworm larvae. 760 7605 Experience with an anthelmintic. 7613 Dermatobiasis in cattle in South America. 7615 Bacillary hemoglobinuria (redwater disease) in florida. 7617 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 Tick transmission of bovine pasteurellosis. 7621 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 The application of blood transfusion in cattle with particu-lar reference to redwater (Babesia bovis). 7623 Morphological changes in a parasitic nematode due to acquired resistance of the host. 7624 Griseofulvin in the treatment of bovine ringworm. 7628 Efficacy of thiabendazole against Cooperia spp. and Ostertagia ostertagi in cattle. 7631 Fatal strike caused by Chrysomia bezziana in cattle and 7633 buffaloes. Economic parasitology. 7635 The anthelmintic activity of methyridine by intraperitoneal injection in sheep and cattle. 764 7640

7495

Residues in established alfalfa treated with granulated phorate (Thimet) and their effect on cattle fed the hay. 7667

6446

6948

6762

6629

7501

7501

6778

6913

6913

7058

6563

7697

6566

6622

6672

6996

6717

6726

6743

6779

6797

6829

The excretion of dieldrin, DDT, and heptachlor epoxide in milk of dairy cows fed on pastures treated with dieldrin, 7668 CERATOPOGONIDAE The Culicoides of New Mexico (Diptera, Ceratopogonidae). DDT, and heptachlor. CERCOSPORA Relation of Cercospora infection to oil application on the dorsal or ventral side of tung leaves. 69 Heptachlor residues on corn stover in relation to dairy 7670 cattle feeding. Comparative anatomical study of leaves of young and mature banana plants in relation to the morphology of Cercospora 7720 Toxicclogical aspects of 2,2-dichlorovinyl dimethyl phosphate (DDVP) in cows, horses, and white rats. 7699 CAULIFLOWER On two plant parasitic nematodes from a cauliflower field in CERCOSPORA PERSONATA Some observations of peanut leaf rust and Cercospora leaf the Punjab. 7092 spots in Texas. Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach. 7661 CEROCOCCUS HIBISCI First records of hymenopterous parasites of yellow scale of cotton Cerococcus hibisci Green (Homoptera, Coccidae). CECAL WORMS Bfficacy of micronized phenothiazine against Heterakis gal linae in chickens. 76 7629 CESIUM ISOTOPES CEDUSA Public health aspects of cesium-137 in ruminants. A taxonomic study of the genus Cedusa in the New World (Homoptera0 Derbidae). 6454 CESIUM-137 Public health aspects of cesium-137 in ruminants. CELERY Nicotine residues in field-treated cauliflower, celery, CHAETOMIUM 7661 green beans, kale, mustard greens and spinach. Effect of the soil carbon nitrogen ratio on soil fungi. CELL NUCLEUS Synthesis of tobacco mosaic virus forms in nucleus and CHARCOAL ROOT (ABIES CONCOLOR) cytoplasm. 6700 Control of the charcoal root disease of white fir by fall soil fumigation. CELLS Establishment of an insect cell strain persistently infected CHARCOAL ROOT (PINUS PONIEROSA) Control of the charcoal root disease of white fir by fall with an insect virus. soil fumigation. Addition of fungal cell-wall components to soil for biological disease control. 6822 CHARIPS Diapause and secondary parasites nullify the effectiveness of rose-aphid parasites in riverside, california, 1957-1958 Relationship of water content and living cells to spread of 6849 Diplodia zeae in corn stalks. CELLULASE CHELONETHIDA Production of pectinolytic and cellulolytic enzymes by The spiral thread. Rhizopus stolonifer. 6919 CHEMICAL CONTROL (FISH) The toxicology of thiodan in several fish and aquatic inver-The microbial hydrolysis of cellulose and some factors af-fecting the production of cellulase in a submerged culture of Alternaria sp. 77 tebrates. 7718 CHEMICAL CONTROL (INSECTS) Mortality and fertility response of Musca domestica Lin-naeus to certain known mutagenic or anti-tumor agents. CELLULOSE Production of pectinolytic and cellulolytic enzymes by cucurbit anthracnose fungi. 6968 Testing of pesticides against cabbage aphid, Brevicoryne brassicae Linn. Purification of swine enteroviruses and swinepox viruses. 7218 The microbial hydrolysis of cellulose and some factors af-Use of insects for their own destruction. fecting the production of cellulase in a submerged culture Evaluation of commonly used insecticides for the control of peach curl aphid, Anuraphis helichrysi Kalt. 699 of Alternaria sp. 7718 CELLULOSE ACETATES Toxicity of cellulose acetate sheeting to leguminous plants. CHEMICAL CONTROL (PESTS) Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003 7026 CENTAUREA CHEMICAL CONTROL (PLANT DISEASES) Field experiments on sugar-beet downy mildew (Peronospora Nigropallidal encephalomalacia in the horse. 7307 farinosa). CENTRIFUGATION Rapid plant virus assay combines density-gradient centrifugation and Ouchterlony agar diffusion serological A probabilistic analysis of fungus control by foliar appli cation of chemicals. 67 7712 tests. Effect of organic phosphorous pesticides on certain phyto-CEPHALOSPORTUM Prevention of symptom development of Fusarium wilt of cot ton by isolates of a Cephalosporium species. 6 pathogenic bacteria. 6877 Suppression of corn head smut by in-furrow applications of 6747 pentachloronitrobenzene. Wilting of persimmon caused by Cephalosporium diospyri. 6966 Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 67 CERATOCYSTIS Ceratocystis fagacearum in roots of infected bur oaks and 6831 Disinfection of tomato seed infested with Xanthomonas vesi the recurrence and spread of oak wilt. catoria. CERATONA Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 69 Hairy root (Agrobacterium rhizogenes) of field roses. 6906

CHEMICAL CONTROL (WEEDS)
Control of Cylindrosporium leaf spot disease of Rhus tri- lobath and Shepherdia argentea seedlings. 6855
Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equip- ment. 6881
The effect of growth substances on Verticillium wilt of tomato plants. 6909
CHEMICAL CONTROL (WEEDS) The fight against weeds. 7121
Weed science - revolution in agricultural technology. 7131
CHEMICALS The designation of chemicals in terms of the responses they elicit from insects. 6518
CHEMOSTERILANTS Evaluation of compounds of cadmium and related metals as re- production inhibitors in insects. 6476
Mortality and fertility response of Musca domestica Lin- naeus to certain known mutagenic or anti-tumor agents. 6566
CHEMOTROFISM Influence of root exudates of cacao and other plants on spore development of Phytophthora palmivora. 6947
CHENOPODIUM External symptoms Giemsa-stainable cell inclusions associated with virus infection in cacti. 6720
CHENOPODIUM QUINOA Studies on a virus causing stem grooving and graft-union abnormalities in Virginia Crab apple. 6843
CHEBRIES Short-stem condition in Lambert cherries. 6693
The fungous flora of nonsuberized roots of poorly growing cherry trees. 6749
Rate and pattern of prune dwarf virus movement within inoculated cherry trees. 6761
Variability in rates of movement of different strains of the virus responsible for prune dwarf. 6818
Plant introduction sour cherry selections - probable sources of brown rot resistance. 6823
Rough fruit of sweet cherry. 6950
Control of western X-disease virus in Utah orchards. 6951
Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003
CHICKEN TYPES (MEAT) Eimeria maxima in Georgia broilers. 7175
CHICKENS Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone composition. 7137
Potentiation of chlortetracycline in laying chickens. 7140
Influence of vitamin D on avrious aspects of the reproduc- tive process in mature hens. 7142
Effect of ingested disinfectants on chicks. 7247
Characterization and classification of newly isolated avian enteric viruses. 7284
Standardized infections for laboratory evaluation of com- pounds against a chronic respiratory disease complex in chickens. 7315
Effect of feeding various levels Crotalaria spectabilis seed on the performance of chicks, turkeys, and pullets. 7342
7342 Chemical changes in nerves from birds affected by fowl para-

7351 lysis. Histomoniasis ( Blackhead ) in broiler chickens. 7353 Fowlpox virus from chickens with hemorrhagic tracheitis. 7381 Duration of immunity against Newcastle disease in chicks vaccinated with beta-propiolactone inactivated vaccine. 7390 Xanthomatosis in laying hens - a case report. 7391 Metastatic calcification induced by hytakerol in chickens infected with Plasmodium gallinaceum. 7427 Identification of Mycoplasma gallisepticum in lesion tissue by immunofluorescence. 7445 Studies on coccidiosis and vitaminA nutrition of broilers. 7451 7454 Pattern of mortality in avian nephrosis. Duration of immunity trials with betapropiolactone-inactivated Newcastle disease virus vaccines. 7461 Rous sarcoma virus infection of chicken buffy coat macro-7472 Experimental infection of chickens with Mycoplasma galli-septicum and subsequent re-isolation of the organism from the body tissues. 7478 A preliminary report on the occurence of infectious laryngo-tracheitis of poultry in India. 7510 Control of the northern fowl mite, Ornithonissus sylviarum (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199. 7573 Malathion dust for chicken mite control. 7580 The malathion dust-bath for control of five species of lice on chickens. 7581 Toxicity to house fly larvae of droppings from chickens fed insecticide-treated rations. 7584 7585 Economic importance of the chicken body louse. A mixture of diaveridine and sulphaguinoxaline as a coccidiostat for poultry. 7604 Efficacy of micronized phenothiazine against Heterakis gal-linae in chickens. 7629 The effect of 2 hepta-5-methylbenzimidazole and hydrochloric acid on the growth of microflora found on poultry carcasses. 7652 The effect of food grade polyphosphates on the microbial population of chicken meat. 7653 CHICKS Zinc availability in the chick as affected by phytate, cal-cium and ethylenediaminetetraacetate. 7139 The utilization by the chick of calcium from different 7143 sources. 7274 Zinc bacitracin and chick growth. Concurrent Salmonella typhimurium and Eimeria necatrix infections in chicks. 7518 Nutritional and biochemical aspects of arabinose and xylose 7539 for chicks. Evidence for a difference in toxicity between common and hairy vetch seeds for chicks. 7687 CHILDREN Insecticides in human fat in New Zealand. 7663

CHILO Beauveria densa, pathogenic for the larvae of Chilo zonellus. 6584

CHILO ZONELLUS Record of nematodes parasitising Chilo zonellus Swinhoe stem horer of maize.	6585	CHLC Th ai
Tetrahymena sp. parasitic in the larvae of Chilo zonell (Swinhoe).		СНГС Бр
CHIPMAN R-6199		An te
Soil injection as a means of applying systemic acaricide fruit trees.	6997	CHLC
CHIPMAN R-6199 Laboratory studies on the effectiveness of Chipman R-61 against some cotton pests.	99 7070	СНГС СНГС
CHIROMOMIDAE Mouthparts of the biting and blood-sucking type in Tanyderidae and Chironomidae (Diptera).	6521	Ch cc
CHIRONOMIDAE		CHIC
A linnological investigation of the Aufwuchs community : two mainstem Missouri River reservoirs.	in 6451	Se
CHITIN Chitin-lignin amendments for control of bean root rot.	6807	CHLO Co Vi
Addition of fungal cell-wall components to soil for	6.000	CHLC
biological disease control. CHLORAMPHENICOL	6822	St gr
A new penicillin.	7261	Ph
Salmonella resistance increases.	7424	Ch
CHLORDANE Laboratory selection of normal and chlordane-resistant German cockroaches for resistance to Malathion and		th hy
Diazinon.	6535	СЪ
Soil treatments in lieu of spraying for plum curculio control in peach orchards.	7063	CHLC
Further studies on control of the clover root borer in Virginia.	7080	CHIC
Small amounts of insecticides effective in controlling of the Japanese beetle.	grubs 7105	Mc tu
Experiments on control of the sugar-beet wireworm in southern California bean fields.	7111	CHLC Ch Cc
The effect of soil treatments of chlordane or heptachlo the flavor of turnips, parsnips, and carrots.	r on 7671	Co
CELORHEXIDINE Salmonella resistance increases.	7424	CHLC Pc
CHLORIDES Prophylaxis against trypanosomiasis in Zebu cattle. IV.	A	Su
field trial of metamidium and Isometamidium.	7482	Ch
CHLORINATED HYDROCARHONS Insecticides in human fat in New Zealand.	7663	ca
The toxicology of thiodan in several fish and aquatic in tebrates.	nver- 7697	Th ad he an
CHLORINE The effectiveness of chlorinated hydrocarbon insecticid	e	an
mixtures for control of resistant and susceptible boll weevils.	6986	In ch
Increased tolerance of the boll weevil and cotton fleah to some chlorinated hydrocarbon insecticides in Central Texas in 1958.	opper 7042	Th ac
Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in laboratory.		CHOI Hi an
Pathogenicity of chlorinated-nitrobenzene-tolerant stra of Hypomyces solani f. cucurbitae race 2.	ins 7713	CHOR
Tolerance to chlorinated nitrobenzenes in Hypomyces sol		SE
f. cucurbitae and its mode of inheritance.	7738	CHON Po do
		fu

ORO-N, N-DIALLYACETAMIDE, 2he mechanism of the interaction between soil organic matter nd herbicide toxicity and the influence of pH on herbicide hytotoxicity. 7698 ORO-4, 6-BIS (ETHYLAMINO) -6-ISOPROPHYLAMINO-S-TRIAZINE, 2e valuation of atrazine, simazine, monuron and diuron on en Hawaiian sugar cane plantations. 7132 OROGENIC ACID OXIDASES 7756 n inexpensive, versatile oxygen electrode. OROPHYLLS OBOPHYLLS hlorophyll formation in Euglena as a test for herbicides. 7129 hlorosis induced by substituted benzoic acids and related 7710 ompounds. OROPICRIN ontrol of Pythium damping-off of melons by simultaneous meeding and soil fumigation with chloropicrin. 6961 OROPIPERONYL CHRYSANTHEMUMATE omparative value of some synthetic compounds as synergists ith barthrin in house fly sprays. 668 6680 OROPLASTS tudies on the aggregation of tobacco mosaic virus in the round cytoplasm and chloroplasts of tomato. 6902 hotosynthetic phosphorylation by chloroplasts isolated from ust-infected oats. 6972 bloroplast number in leaves of normal wheat plants and hose infested with hessian fly or treated with maleic ydrazide. 7052 hlorophyll formation in Euglena as a test for herbicides. 7129 OROSIS (ALFALFA) nfection of alfalfa by Leptosphaerulina briosiana. 6935 OROSIS (CORN) onogenic chlorotic lesion resistance to Helminthosporium urcicum in corn seedlings. 6' 6767 OROSIS (PLANTS) hlorosis induced by substituted benzoic acids and related 7710 ompounds. oralloid root systems in plants showing lime-induced chlor-15 sis. ORTETRACYCLINE otentiation of chlortetracycline in laying chickens. 7140 uspected anthrax in a bitch. 7223 hlortetracycline for elimination of anaplasmosis in carrier attle. he influence of physical form of roughages and antibiotic dministration on performance, carcass characteristics, ealth, of the rumen epithelium, rumen volatile fatty acids ealth, of the rumen epitherium, rumen solution they does nd liver abscesses of steers fed all-concentrate rations. 7347 nfluence of porcine transmissible gastroenteritis on hlortetracycline blood values. 7540 he effect of 2 hepta-5-methylbenzimidazole and hydrochloric cid on the growth of microflora found on poultry carcasses 7652 LESTEROL istopathology of guinea pigs with cholesterol-induced 7560 nemia. RIONIC GONADOTROPINS RIGNIC GONADOTROPINS regnancy hormones and brucellacidal activity in bovine 7213 RISTONEURA

Polyhedrosis and granulosis viruses causing single and double infections in the spruce budworm, Choristoneura fumiferana Clemens. 6492

PAGE 87

#### CHORISTONEURA

CHORTSTONEDRA FUMTPERANA Aerial forest spraying against spruce budworm- A problem of mutual interest in Canada and the United States. 711 7117 CHORISTCNEURA FUMIFERANA Polyhedrosis and granulosis viruses causing single and double infections in the spruce budworm, Choristoneura fumiferana Clemens. 6492 CHROMATOGRAPHY Insecticides in human fat in New Zealand. 7663 Analysis of egg yolk and poultry tissues for chlorinated in-secticide residues. 7681 7681 CHROMOSOMES Correlation between sperm redundancy and chiasma frequency 6669 tological and autoradiographic studies on Sciara copro phila salivary gland chromosomes. 6671 Exchange and secondary nondisjunction in females of Droso-phila melanogaster homozygous for X chromosome inversions. 6674 Karyological studies on the Indian spiders. vI. chromo-some number and sex-determining mechanism in the family Araneidae). 6675 CHRONIC RESPIRATORY DISEASE NUMIL RESPIRATOR DISEASE Standardized infections for laboratory evaluation of com-pounds against a chronic respiratory disease complex in 7315 chickens. Identification of Mycoplasma gallisepticum in lesion tissue by immunofluorescence. 7445 CIRCULATORY SYSTEM Periodicity of Dirofilaria in the peripheral circulation CLOVER 7171 of dogs. Some examples of secondary circulatory dysfunction in cattle. 7361 Cardiovascular disease in horses. 7431 Vascular occlusion in a bitch. 7470 CITRUS Rapid-index methods for exocortis of citrus. 6718 -dibromotetrachloroethane - a new fungistat for control 6742 of citrus fruit decay. Cancroid spot of citrus. 6786 Effect of rootstock on the incidence of impietratura-dis-6846 eased grapefruit fruits. Biphenyl-resistant citrus green mold reported in Florida. 6914  $\tt Transmission$  of the stubborn and psorosis A viruses of citrus to an herbaceous host. 6928 The beet armyworm, Spodoptera exigua, an economic pest of citrus in California. 6 6982 Susceptibility of life stages of the Mexican fruit fly to fumigation with ethylene chlorobromide. 6985 Evaluation of insecticides for control of the Fuller rose beetle on citrus in California. 7004 The effect of copper compounds on control of citrus rust 7022 Criconema laterale Khan and Siddigi, 1963 (Nematoda Criconematidae), a parasite of citrus plant in the Pun-7093 jab. On a nematode species of the genus Hoplolaimus Daday, 1905, from a citrus plant in the Punjab. 7094 Studies on two plant nematode species of the genus Xiphi-nema Cobb, 1913. 7095 On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Boplolaimidae), a phytoparasitic nematode in the Punjab. 7096 PAGE 88

On Longidorus brevicaudatus (Schuurmans Stekhoven, 1951) 1961, a nematode parasite of citrus plants in the Thorne, Punjab. 7097 An attempt to extend the longevity of the burrowing nema-tode, Radopholus similis, with citrus root exudate. 7098 Decline of grapefruit trees in relation to citrus nematode populations and tree recovery after chemical treatment. 7106 The histological relationship of resistance to the citrus nematode in certain citrus rootstocks. 7 7114 Effect of soil exchangeable hydrogen and calcium ratio and the resulting pH on infection of citrus fibrous roots by Phytophthora parasitica. 7747 CLERIDAE The biological impact of the checkered beetles (Coleoptera0 Cleridae) on populations of Ips bark beetles (Coleoptera0 Scolytidae). 656 6565 CLONES Tobacco mosaic virus activity and growth of inoculated tobacco secondary single-cell clones. 6907 CLONORCHIS Lesions associated with liver fluke infection in a cat. 7587 CLOSTRIDIUM Clostridium chavoei common in normal adult dogs. 7222 Bacillary hemoglobinuria (redwater disease) in florida. 7617 Varietal resistance to clover rot in white clover. 6694 Seed transmission of white clover mosaic and clover yellow mosaic viruses in red clover. 67 6760 Sampling alfalfa seed for clover seed chalcid damage. 7067 Paraguat for selective control of range weeds. 7125 COAL TAR Effect of ingested disinfectants on chicks. 7247 COCCIDAE North American species of Aschersonia parasitic on Aley 6464 rodidae. COCCIDIOIDES The seasonal incidence of canine coccidiomycosis. 7475 COCCIDIOSIS Eimeria maxima in Georgia broilers. 7175 A mixture of diaveridine and sulfaquinoxaline as a coccidio-stat for poultry. I. Preliminary studies on efficiency against Eimeria tenella and E. necatrix infections, and on toxicity in poultry. 7270 Studies on coccidiosis and vitaminA nutrition of broilers. 7451 Concurrent Salmonella typhimurium and Eimeria necatrix infections in chicks. -75 18 A mixture of diaveridine and sulphaguinoxaline as a coccidiostat for poultry. 7604 Infection of goats with Eimeria spp. of sheep origin. 7610 COCCINELLIDAE CCINELLIDAE Nosema hippodamiae n. sp., a microsporidian parasite of Hippodamia convergens Guerin (Coleoptera, Coccinellidae). 6577 COCHLIOBOLUS A toxic metabolite from Ascochyta fabae having antibiotic 6841 activity.

Spore germinability in soil as an inherent character of Cochliobolus sativus. 7706

.

COCKEE SPANIEL DOGS Cockers and labradors more resistant to distemper. 7197 COCKS	CONGENITAL TREMORS Cerebellar hypoplasia, hypomyelinogenesis, and congenital tremors of pigs, associated with prenatal hog cholera vacci- nation of sows. 7298
Physiological and pharmacological factors which influence the incidence of acute pulmonary alterations following wago- tomy in the domestic cock. 7136	CONIDIA Fungistatic effects of a soil bacterium on conidia and
Control of the northern fowl mite, Ornithonissus sylviarum (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199. 7573	hyphae of Helminthosporium sativum. 6842 Enzymes from conidia and matrix of Colletotrichum orbicu- lare grown on a natural medium. 6857
COLD Cold-induced dormancy and its reversal in uredospores of Puccinia graminis tritici. 6713	CONNECTICUT Effects of an aerial DDT spray on aquatic insects in Connecticut. 7016
COLD STORAGE The preservation of Babesia bigemina, Anaplasma centrale and A. marginale by deep-freezing. 7239	CONOTRACHELUS Plum curculio control experiments in 1955-58. 7062
CCLEOPTERA Studies of eugregarina in insects. 6470	COOLING Effects of rapid cooling to subzero temperatures on Meloi- dogyne hapla and M. incognita. 6887
Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae. 6474	COOPERIA Thiabendazole as an anthelmintic in cattle and sheep.
A virus disease of the Indian rhinoceros beetle, Oryctes rhinoceros (Linnaeus), caused by a new type of insect virus, Rhabdionvirus oryctes gen. n., sp. n 6551	7588 The anthelmintic efficiency of Haloxon against the adult and immature stages of the gastro-intestinal strongyles of
Membracidae attracted to black light. 6590	Nigerian Zebu cattle. 7614
A technique useful in comparing ponder-post beetle populations in the substructures of buildings. 6662	Efficacy of thiabendazole against Cooperia spp. and Ostertagia ostertagi in cattle. 7631
Stored-grain insects and their control in New Jersey. 7647	COPIDOSOMA The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006
COLLAS A cytoplasmic polyhedrosis of the alfalfa caterpillar. 6638	COPPER The effect of copper compounds on control of citrus rust mite with zineb. 7022
The utilization of Bacillus thuringiensis Berliner as a	Toxicity of copper sulfate in beef cattle. 7199
biotic insecticide to suppress the alfalfa caterpillar. 6640	Chronic copper poisoning in lambs. 7487
COLIAS EURYTHEME The utilization of Bacillus thuringiensis Berliner as a biotic insecticide to suppress the alfalfa caterpillar. 6640	COPPER COMPOUNDS Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equip- ment. 6881
COLITIS X Colitis X of horses. 7485	COPPER SULFATE Toxicity of copper sulfate in beef cattle. 7199
COLLETOTRICEUM A new crown rot of strawberry plants caused by Colletotri-	Salmonellosis A serious outbreak in a dairy herd. 7438
chum fragariae. 6772	COBIXIDAE Membracidae attracted to black light. 6590
Mycelial protein comparisons of isolates of cucurbit anthracnose fungi. 6808	COBKY RINGSPOT (TOBACCO) Electron microscopy of tobacco rattle type viruses.
Enzymes from conidia and matrix of Colletotrichum orbicu- lare grcwn on a natural medium. 6857	allen jr, t 1. 6844
Effects of sodium fluoride on growth of some pathogenic fungi. 6943	CORN Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize. 6585
A qualitative comparison of the amino acid content of acid hydrolysates from the mycelium of cucurbit anthracnose fungi. 7732	The effects on house flies of adding wheat germ and corn oils to fly media. 6654
COLLETOTRICHUM GOSSIPII	The role of leaf microflora on epidemiology of the northern leaf blight of corn. 6697
Susceptibility of Gossypium arboreum and Gossypium hirsutum to seedling anthracnose. 6710	Suppression of corn head smut by in-furrow applications of
COLOR Orange stain, a storage disease of rice caused by Penicil- lium puberulum. 6895	pentachloronitrobenzene. 6747 Monogenic chlorotic lesion resistance to Helminthosporium turcicum in corn seedlings. 6767
COLOSTRUM	The resistance of Zea mays to Puccinia graminis. 6794
A simple test for deprivation of colostrum in piglets. 7292	Relationship of water content and living cells to spread of
COMPLEMENT FIXATION	Diplodia zeae in corn stalks. 6849
Complement-fixation test for detecting Japanese encephalitis virus. 7198	Antibiotic production by Streptomyces sp. in corn rhizosphere. 6864
	Reproduction of Pratylenchus penetrans on corn roots cul- tured on various nutrient media. 6896

CORN

PAGE 89

		Sebener	
20	DRN STOVER		
	A virus infecting maize in South Dakota.	6927	St
	Influence of light on growth of Aspergillus restrictus i agar culture.	in 6957	to
	Effect of crop rotation on yields, stalk rot, and root n of corn.	ot 6964	Ir pi
	European corn borer control in peppers.	6990	A wi
	European corn borer populations in relation to the estimation of crop loss.	6995	Ir
	Artificial medium for rearing some lepidopterous corn insects.	7007	Rb Re
	Experiments for the control of sap beetles in sweet corr grown for processing.	7014	a] PI
	Effectiveness of insecticides against the European corn borer and green peach aphid on peppers.	7017	to
	Increase of European corn borers following soil applicat	ion	hi ar
	of large amounts of dieldrin.	7028	Id
	The effect of grain moisture upon development of the ric weevil in green corn.	ce 7049	so Fa
	Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn.	7055	Re
	The influence of selected nematode species and number of		
	consecutive plantings of corn and sorghum on forage prod tion, soil, and water use efficiency.	iuc- 7087	SC
	Pactors affecting invasion of grains and seeds by Asperglus flavus and effects of the fungus on germination of the	jil- the	Tł
	seeds.	7644	ni We
	Preliminary evidence of resistance of high-amylose corn	to 7648	Fi
	the Angoumois grain moth.		Ca
	The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in		GI
	soil.	7657	fe
	Heptachlor residues on corn stover in relation to dairy cattle feeding.	7670	E1 le
C	DRN STOVER Heptachlor residues`on corn stover in relation to dairy		0-
	cattle feeding.	7670	sy Co
C	ORNYBACTERIUM The effect of 2 hepta-5-methylbenzimidazole and hydrochl	loric	II
	acid on the growth of microflora found on poultry carcas		to Te
C	DETICIUM		La
	Influence of temperature on rate of growth of five fungue pathogens of turfgrass and on rate of disease spread.		ag
C	ORTISOL	6745	CC hy
	Effects of cortisol and adrenalectomy on induction of in feron by endotoxin.	nter- 7468	st pi
C	DEVEBBACTERIUM		Sa
	Infecting seven-day-old alfalfa seedlings with wilt back through wounded Cotyledons.	6789	Tı
	Persistence of Corynebacterium insidiosum in soil.	6833	C <b>OU!</b>
	Comparative bactericidal properties of N-polyhaloethylth hydantoins.		A (I ti
C	OTTON		
	A seasonal study of diapause, reproductive activity and seasonal tolerance to insecticides in the boll weevil.	6496	са (0
	First records of hymenopterous parasites of yellow scale	e of	S
	cotton Cerococcus hibisci Green (Homoptera, Coccidae).	6629	01
	Potential use of Dylox and other insecticides in a contr	rol	Ca
	program for field crop pests in California.	6687	Thag
	Environmental and other factors influencing development southwestern cotton rust (Puccinia stakmanii).	of 6708	To
P	AGE on		

usceptibilty of Gossypium arboreum and Gossypium hirsutum to seedling anthracnose. 67 6710 internally infected seed as a source of inoculum for the primary cycle of bacterial blight of cotton. 6712 comparison of Fusarium wilt indices of cotton warieties ith root-knot and sting nematodes as predisposing agents 6727

nfection of seedling cotton hypocotyl by an isolate 6781 hizoctonia solani.

ecognition of Phymatotrichum root rot of cotton and lfalfa in an aerial survey. 6858

Prevention of symptom development of Fusarium wilt of cot-con by isolates of a Cephalosporium species. 68 6877

ommon antigens in Xanthomonas malvacearum and Gossypium irsutum and their possible relationship to host specificit and disease resistance. 689 6891

dentification of three physiologic races of Rhizoctonia olani isolated from seedling cotton. 6905

actors affecting the pathogenesis of Pythium species on otton (Gossypium hirsutum L) seedlings. 6920

elation of seed-borne fungi to boll rots of cotton. 6960

some effects of age, preimaginal habitat, and adult food on susceptibility of boll weevil to certain insecticides. 6983

the effectiveness of chlorinated hydrocarbon insecticide dixtures for control of resistant and susceptible boll eevils. 6986

ield control of cotton mites with Aramite aerial spray in 6998 alifornia.

reenbug control with systemic insecticides as influenced by ertilizer applications. 6999 ertilizer applications.

ffects of nectariless cottons on populations of three 7029 epidopterous insects.

-ethyl S-2 (ethylthio) -ethyl alkylphosphonothioates as ystemic insecticides 7035

7036

otton insects in Nicaragua.

ncreased tolerance of the boll weevil and cotton fleahopper o some chlorinated hydrocarbon insecticides in Central 7042 exas in 1958.

aboratory studies on the effectiveness of Chipman R-6199 7070 gainst some cotton pests.

ontrol of boll weevils resistant to chlorinated ydrocarbons. 7074

talk shredding and plowing as methods for controlling the 7083 oink bollworm, Pectinophora gossypiella.

alt-marsh caterpillar control on cotton in Arizona. 7118

ranslocation of C14-labeled compounds in cotton and oaks. 7708

# MAPHOS A study of the histological effects of Hypoderma lineatum (De Vill.) on gullet tissue taken from systemically created and untreated cattle. 75 7570 control of the northern fowl mite, Ornithonissus sylviarum (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199. 7573 7574 ystemic insecticides for cattle grub control. rganophosphate systemics as sprays and feed additives for attle grub control. 75 7577 The in vivo activity of several systemic insecticides gainst cattle grubs in South Dakota. 7582

oxicity to house fly larvae of droppings from chickens fed

CU	LI	CI	DAE	

91

insecticide-treated rations. 754 A colorimetric method for the determination of Co-Ral in animal tissues. 760	The influence of selected nematode species and number of consecutive plantings of corn and sorghum on forage produc-
Toxicity of organic phosphorus insecticides to horses. 769	
COVERED SMOT (SORGHUM) Screening sorghum varieties for resistance to the covered kernel smut fungus in Iraq. 69	killing. 7127 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of BPTC in soil. 7657
COWPEAS Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 690	CROTALARIA 6 Crotalaria spectabilis intoxication in Rhesus monkeys.
Dodder transmission of citrange stunt virus, a virus asso- ciated with tatter leaf of citrus. 69!	
Predisposition to powdery mildew. 69	seed on the performance of chicks, turkeys, and pullets. 7342
Mechanical transmission of a latent lemon virus. 69	76 Pathologic changes associated with feeding various levels of Crotalaria spectabilis seed to poultry. 7508
CRABAPPLES Studies on a virus causing stem grooving and graft-union abnormalities in Virginia Crab apple. 684	CROWN GALLS
Biology and control of the apple seed chalcid in North Carolina. 70'	Physiological factors involved in tumor production by the oleander knot pathogen, Pseudomonas savastanoi. 6802
CRACKING PROCESS Reaction of Drosophila to different varieties of tomatoes.	CROWN GALLS (PLANTS) An inexpensive, versatile oxygen electrode. 7756
70: CRAYFISH Effect of Latrodectus mactans tredecimguttatus venom on the crayfich started reserves permass of the startes of t	CROWN ROT (PARSLEY) Influence of soil temperature on a crown rot disease of parsley caused by Phytophthora parasitica. 6769
CRESYLIC ACID Effect of ingested disinfectants on chicks. 724	CROWN ROT (STRAWBERRIES) A new crown rot of strawberry plants caused by Colletotri-
CRICONEMA LATERALE Criconema laterale Khan and Siddiqi, 1963 (Nematoda, . Criconematidae), a parasite of citrus plant in the Pun- jab. 70	CROWN RUST (OATS) Measuring the pathogenic potential of Puccinia coronata var. avenae. 6879
	CRIPTOCOCCOSIS
CRICONEMATIDAE Criconema laterale Khan and Siddiqi, 1963 (Nematoda, Criconematidae), a parasite of citrus plant in the Pun- jab. 709	Feline cryptococcosis.       7448         CRYPTOCOCCUS       7448         Feline cryptococcosis.       7448
CRICCNEMOIDES CURVATUM The effect of Criconemoides curvatum and Pratylenchus penetrans on woody ornamentals. 709	CRYPTOTERMES Fumigation of buildings to control the dry-wood termite, Cryptotermes brevis. 7646
CRONAETIUM In vitro sporidial germination of Cronartium fusiforme. 77 <sup>.</sup>	CUCUMBERS Metabolism of resistant and susceptible cucumber varieties 16 infected with cucumber mosaic virus. 6813
CROP LOSSES European corn borer populations in relation to the estimation of crop loss. 699	Transmission of the stubborn and psorosis A viruses of citrus to an herbaceous host. 6928
CROP VARIETIES	Production of pectinolytic and cellulolytic enzymes by cucurbit anthracnose fungi. 6968
Sources of resistance to halo blight in Phaseolus vulgaris. 669	Predisposition to powdery mildew. 6975
Variation in susceptibity to Sclerotium rolfsii among pea- nut varieties. 675	Pickleworm control and residue studies with malathion and 55 phosdrin. 7107
Varietal response in groundnut to Sclerotium bataticola. 680	CUCURBITA 6 A qualitative comparison of the amino acid content of acid hydrolysates from the mycelium of cucurbit anthracnose
Relationship of the genes conditioning resistance to Ery- siphe graminis f. sp. hordei in some varieties of barley used to differentiate races of this pathogen. 689	fungi. 7732
Screening sorghum varieties for resistance to the covered kernel smut fungus in Iraq. 69	
Anatomical aspects of resistance in sweetpotato to Fusarium Wilt. 69	
CROP VIELDS	Suspected cases of western encephalitis on increase. 7174
The effect of dapple apple and stem pitting on apple tree growth and yields in New Hampshire over a fourteen-year period. 686	CULICIDAE Microbial isolations from the mid-gut of Culex tarsalis Coquillett. 6511
Effect cf crop rotation on yields, stalk rot, and root rot of corn. 690	
	A method for inoculation of mosquito larvae. 6514

CULICOIDES	
Pythium sp. (Phycomycetes Pythiales) pathogenic to mosg to larvae.	11- 6515
Historathological changes with age in the flight muscles the African mosquito, Fretmapodites chrysogaster.	s of 6554
Transovarian transmission of some Thelohania (Nosematida Microsporidia) in mosquitoes of California and Louisiana	
Experiments on prolongation of the life of mosquito larv by underfeeding.	vae 6581
Effects of heterogeneous distribution and codistillation the results of tests with DDT against mosquito larvae.	on 6657
Toxicological action of DDT on three species of mosquite larva $\epsilon_{\star}$	6658
Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.	6683
CULICOIDES The Culicoides of New Mexico (Diptera, Ceratopogoni- dae).	6446
African horse-sickness.	7200
CULM Effect of culm solidness on the survival of the wheat st sawfly.	ет 7041
CULTURAL CONTROL (INSECTS) Inter-relationship between whitefly (Bemisia tabaci Gien population and the incidence of leaf curl in bidi tobaco (nicotiana tabacum L) in relation to different planting dates.	1) 50 7044
Incidence of predators and feasibility of their control through hand picking in lac cultivation on bush types of hosts.	5 7050
CULTURAL CONTROL (PLANT DISEASES) Multiplication of Xanthomonas vesicatoria on tomato see lings.	1- 6796
Reterothallism in Pyrenophora teres.	6809
Inter-relationship between whitefly (Bemisia tabaci Gien population and the incidence of leaf curl in bidi tobacc (nicotiana tabacum L) in relation to different planting dates.	n) 20 7044
CULTURE MEDIA A modified azan staining technique for inclusion body viruses.	6540
Serological studies of the cytoplasmic- and nuclear- polyhedrosis viruses of the silkworm, Bombyx mori.	6552
A simplified purification technique for parasporal inclusions from certain varieties of Bacillus thurengiensis.	1- 6600
Growth and sporulation of submersed cultures of the fung Beauveria bassiana in various media.	jus 6621
A selective medium for the isolation of Beauveria tenel: and of Metarrhizium anisopliae.	La 6652
Heterothallism in Pyrenophora teres.	6809
Enzymes from conidia and matrix of Colletotrichum orbic lare grown on a natural medium.	1- 6857
Culture of the dwarf bunt fungus.	6944
Inhibition of fungi by culture media previously exposed light.	to 6954
Artificial medium for rearing some lepidopterous corn insects.	7007
The recovery of Pasteurella multocida from lyophilised of tures.	cul- 7265
Brush technique for detection of fungus diseases.	7327

observations on an avian strain of Pasteurella haemolyt:	7332
The characterization of a causitive agent of virus pig p monia.	neu- 7413
Observations on pathogenicity and immunogenicity of a cell-culture-modified foot-and-mouth disease virus.	7498
Incidence of infection with Trichinella spiralis in dog	5. 7611
A simple method for the culture and recovery of larvae of intestinal nematodes of sheep.	of 7636
CUMINUM CYMINUM Effect of SMDC on germination, plant growth, and fusarin wilt incidence of cumin (Cuminum cyminum).	נת 6805
CUPRESSUS Pomes annosus.	6705
Cypress poisoning.	7328
CUSCUTA SUBINCLUSA Dodder transmission of citrange stunt virus, a virus as ciated with tatter leaf of citrus.	50- 6952
CUTICLE The free fatty acids and neutral lipids of the cuticula: of the Mormon cricket, Anabrus simplex, Hald.	c wax 6605
CYANAMIDE Insecticidal control of the Hessian fly.	6987
CYCLOHEXENE-1,2-DICARBOXIMIDE, CIS-4- Isolation and characterization of a germination inhibit from sugar beet fruit.	рг 7721
CYCLOHEXIMIDE Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica.	6765
CYCLOHEXIMIDE THIOSEMICAREMZONE First and second year effects on Cytospora canker disea: of Italian prune trees sprayed with four concentrations cycloheximide thiosemicarbazone.	se of 6764
CYLINDBOCLADIUM Infection of spruce seedlings by Cylindrocladium scopar:	ium. 6715
CYLINDROSPORIUM Control of Cylindrosporium leaf spot disease of Rhus tr lobath and Shepherdia argentea seedlings.	i- 6855
CYSTEAMINE Cysteamine therapy of primary bovine ketosis.	7233
The therapeutic use of cysteamine in bovine ketosis.	7507
CYSTINE Amino-acid excretion in canine cystine-stone disease.	7530
CYTOLOGY The spiral thread.	6563
Histological studies on the deutocerebrum of Poeciloceru picus P (Orthoptera) and Mantis religiosa L (Dictyop- tera).	15 6625
Correlation between sperm redundancy and chiasma frequen	ncy. 6669
Cytological and autoradiographic studies on Sciara copro phila salivary gland chromosomes.	- 6671
Genetics and cytology of Phytophthora.	6752
CYTOPLASM Synthesis of tobacco mosaic virus forms in nucleus and cytoplasm.	6700
Studies on the aggregation of tobacco mosaic virus in t ground cytoplasm and chloroplasts of tomato.	ne 6902

DDT

CYTOSPORA CINCTA First and second year effects on Cytospora canker disease of Italian prune trees sprayed with four concentrations of cycloheximide thiosemicarbazone. 6764	DBTCE Sym-dibromotetrachloroethane - a new fungistat for control of citrus fruit decay. 6742
D, 2,4-	DDE Insecticides in human fat in New Zealand. 7663
The fight against weeds. 7121 Decomposition of 2,4-D and related phenoxyacetic acids by	Organochlorine pesticides in Antarctica. 7684
an Arthrobacter species. 7658 The mechanism of the interaction between soil organic matter	DDT Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to
and herbicide toxicity and the influence of pH on herbicide phytotoxicity. 7698	adult house flies. 6485 Cumulative effect of sublethal doses of myristyl chloro-
Physiological and metabolic changes induced by lethal con- centrations of 2,4-D in the cocklebur (Xanthium spp.). 7705	acetate on a highly DDT -resistant strain of Musca domestica L. 6491
DACTYLELLA A slender-spored Dactylella parasitic on Pythium oospores.	Behavioural responses to contact with DDT in Anopheles atroparvus. 6531
drechsler, c. 7728 DACUS CUCURBITAE	The effects of chemical insecticides and insecticidal adju- vants of a Heliothis nuclear polyhedrosis virus. 6557
Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iV. responses of D cucurbitae larvae to vitamin deficient	Effect of dDT resistance on the development of malathion resistance in house flies. 6574
diets. 6512 Studies on the nutritional requirements of the fruit fly	DDT-DEHYDROCHLORINASE iii. Solubilization of insecticides by lipoprotein. 6579
Dacus cucurbitae Coquillett (Diptera, Trypetidae). iII. Development of a synthetic medium for D cucurbitae lar-	The effect of insecticides on transamination in th american cockroach. 6587
	Action of DDT at an insect synapse. 6633
DAHLIA A ringspot virus from dahlia. 6793 DAIRY CATTLE	Effects of heterogeneous distribution and codistillation on the results of tests with DDT against mosquito larvae. 6657
A report of the AVMA mastitis committee. The veterinary profession and programs of milk quality control. 7160	Toxicological action of DDT on three species of mosquito larvae. 6658
Fluorcsis of non-industrial origin in a dairy herd. 7259	A preliminary report on mutations in the house fly. 6676
Identification and persistence of phage types of Staphylo- coccus aureus in dairy herds in florida. 7291	Methylenedioxyphenyl derivatives as synergists for carbamate insecticides on susceptible, DDT-, and parathion-resistant
A practitioner s mastitis control program. 7338	house-flies. 6679
Isolaticn of Mycoplasma sp. from the oviducts of dairy cows. 7358	The beet armyworm, Spodoptera exigua, an economic pest of citrus in California. 6982
Abomasal impaction. 7383	The effectiveness of chlorinated hydrocarbon insecticide mixtures for control of resistant and susceptible boll
Incidence of mastitis in cows and buffaloes in north west Indïa. 7389	weevils. 6986
Ulceration of cow s teats caused by a virus. 7415	European corn borer control in peppers. 6990
Salmonellosis A serious outbreak in a dairy herd. 7438	Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 6991
The economic loss associated with infectious bovine Rhino- tracheitic in a dairy herd. 7463	Field testing of insecticides for control of the Nantucket pine moth, Rhyacionia frustrana, and the European pine
Studies of a new penicillin, BRI 1921, for the treatment and control of staphylococcal mastitis in cows. 7556	shoot moth, R. buoliana. 7001
Heptachlor residues on corn stover in relation to dairy	Problems in the control of mint insects. 7009
cattle feeding. 7670 DALAPON	Hyperodes humilis, a new pest of sweet corn in the everglades, and its control. 7013
Response of selected and random plantings of Johnsongrass (Sorghum halepense) to dalapon. 7124	Experiments for the control of sap beetles in sweet corn grown for processing. 7014
The mechanism of the interaction between soil organic matter and herbicide toxicity and the influence of pH on herbicide phytotoxicity. 7698	The effects of DDT and malathion upon forest soil microarthropods. 7015
DAMPING-OFF (MELONS) Control of Pythium damping-off of melons by simultaneous	Effects of an aerial DDT spray on aquatic insects in Connecticut. 7016
seeding and soil fumigation with chloropicrin. 6961	Effectiveness of insecticides against the European corn borer and green peach aphid on peppers. 7017
DAPPLE (APPLES) The effect of dapple apple and stem pitting on apple tree growth and yields in New Hampshire over a fourteen-year	Laboratory studies of three-lined potato beetle and control with various insecticides. 7025
period. 6868 DBSS	The effect of Lygus bug control on the yield of lima beans. 7033
Evidence for two different pathogens of peanut pod rot. 6754	Increased tolerance of the boll weevil and cotton fleahopper to some chlorinated hydrocarbon insecticides in Central

# DDT-DEHYDROCHLORINASE

DDT-DEHIDROCHLORINASE	
Texas in 1958. 7042	
Observations on soyhean insects in maryland. 7051	
Effects of soil insecticides and absorbents on plant sugars and resulting effect on mite nutrition. 7054	
The influence of seasonal DDT applications upon arthropod populations in jack pine stands. 7056	
Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California. 7065	
Field tests with various insecticides for the control of Lygus hugs and the corn earworm on lima heans. 7066	
Laboratory studies on the effectiveness of Chipman R-6199 against some cotton pests. 7070	
Biology and control of the apple seed chalcid in North Carolina. 7072	
Control of holl weevils resistant to chlorinated hydrocarbons. 7074	
Brief history of aphid control on potatoes in south Florida, 1946-59. 7079	
A comparison of the toxicity of insecticides for the control of corn earworm on sweet corn. 7084	
Control of army cutworms in alfalfa during 1959. 7104	
Experiments on control of the sugar-heet wireworm in southern California hean fields. 7111	
Aerial forest spraying against spruce hudworm- A problem of mutual interest in Canada and the United States. 7117	
Salt-marsh caterpillar control on cotton in Arizona. 7118	
Field studies of house fly resistance to organophosphorus insecticides. 7569	
House fly pupation under haseboards. 7575	
Chlorinated hydrocarhon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in the lahoratory. 7576	
Pesticides and the soil fauna. I. effects of aldrin and DDT in an arahle field. 7656	
Insecticides in human fat in New Zealand. 7663	
The excretion of dieldrin, DDT, and heptachlor epoxide in milk of dairy cows fed on pastures treated with dieldrin, DDT, and heptachlor. 7668	
Persistence of DDT, aldrin, and lindane in some midwestern soils. 7672	
DDT residue studies on peppers. 7675	
DDT deposits on grapes as affected hy growth and weathering. 7682	
Organochlorine pesticides in Antarctica. 7684	
Toxic chemicals. 7685	
DDT-DEHYDROCHLORINASE DDT-DEHYDROCHLORINASE iii. Soluhilization of insecticides by lipoprotein. 6579	
DECOMPOSITION Relation of decomposing plant residues to root growth of alfalfa. 6840	
Studies on the decomposition of sinalhin. iI. the composi- tion products of sinalhin and their degradation pathways. 7741	
Carbonyl sulphide from the decomposition of captan. 7746	
Decomposition of sodium N-methyldithiocarhamate in soil. 7748	

DEER Role of deer in epizootiology of leptospirosis.	7212
Tuberculosis in deer.	7421
An outhreak of malignant catarrh among the Pere David deer.	7499
DEFICIENCY DISEASES Thyroid dysplasia in the hudgeriar.	7242
DEFOLIANTS Control of Botrytis neck rot of onions by fungicidal du and desiccant chemicals.	sts 6779
DEHYDROGENASES Histochemical studies on the dehydrogenases of potato affected hy late blight.	6949
DELPHENE Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
DEMETON Soil injection as a means of applying systemic acaricid fruit trees.	es to 6997
Greenbug control with systemic insecticides as influenc fertilizer applications.	ed by 6999
Citrus red mites resistant to demeton and ovex and thei response to Tedion and Kelthane.	r 7040
Biology and control of the apple seed chalcid in North Carolina.	7072
DENSITY	
Rapid plant virus assay combines density-gradient centrifugation and Ouchterlony agar diffusion serologic tests.	al 7712
DEOXYRIBONUCLEIC ACID Base composition and thermal denaturation of DNA isolat from Anaplasma marginale.	ed 7295
Mode of action of 2,6 dichloro-4-nitroaniline (DCNA) in Rhizopus arrhizus.	7750
DERBIDAE A taxonomic study of the genus Cedusa in the New World (Homoptera0 Derhidae).	6454
DERMACENTOR Ticks in the united states serve as vectors of disease.	7187
Transmission of equine piroplasmosis by Dermacentor nit Neumann.	ens 7483
DERMANYSSUS Malathion dust for chicken mite control.	7580
DERMAPTERA Histology of the brain of Labidura riparia (Pallas) Der maptera).	- 6630
DERMATOBIASIS Dermatobiasis in cattle in South America.	7615
DERMATOLOGY Feline dermatology.	7439
DERMATOPHYTOSIS Dermatophytosis (ringworm) pathogenesis, diagnosis, an treatment.	d 7250
DERMOID CYSTS Dermoid sinus in the Rhodesian Ridgeback.	7521
DEROCERUS Vectors of alfalfa and bean yellow mosaic viruses in La	dino
white clover.	6803
DESMIA Control of the grape leaf folder in California.	7064
DEUTERIUM Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to adult house flies.	6485

	DI	EL	DR	Ι	Ņ
--	----	----	----	---	---

DEUTOCEREBRUM Histological studies on the deutocerebrum of Poecilocerus picus F (Orthoptera) and Mantis religiosa L (Dictyop-	House fly control in pig pa
tera). 6625	Field studies of house fly insecticides.
DEW Dew, its significance and measurement in phytopathology. 7757	Toxicity to house fly larva insecticide-treated rations
DI-N-BUTYL SUCCINATE Face fly control. 7564	DIBROMO-3-CHLOROPROPANE, 1,2- Transmission of Pseudomonas propagation.
DIABROTICA A mosaic virus transmitted by beetles and a grasshopper. 6926	DIBROMOTETRACHLOROETHANE, SYM Sym-dibromotetrachloroethan of citrus fruit decay.
DIAGNOSIS An improved technique for inducing diagnostic symptoms in tomato infected by potato spindle tuber virus. 6959	DICHLORO-4-NITROANILINE, 2,6- Control of Botrytis neck ro and desiccant chemicals.
An evaluation of the California mastitis test and the Ne- gretti field test as indicators of subclinical bovine masti- tis. 7299	Bffects of 2,6-dichloro-4-n and its comparison with oth
PIALYSIS Peritoneal dialysis as an adjunct to Leptospirosis therapy in a dog. 7473	Rhizopus rot of peaches. Variations in tolerance of
DIANTHUS CARYOPHYLLUS	-4-nitroaniline. The mode of action of 2,6 d
Pseudomonas caryophylli in carnation. I. Relation of soil temperature to symptom expression. 6734	Rhizopus arrhizus spores. Mode of action of 2,6 dichl
Pathogenicity, vitamin nutrition, and cultural characteris- tics of isolates of Phytophthora parasitica from carnation and other hosts in havaii. 6768	Rhizopus arrhizus. DICHLOROPHENE
A seasonal study of diapause, reproductive activity and	The assessment of the value treatment of contagious foo reference to Dichlorophen.
seasonal tolerance to insecticides in the boll weevil. 6496	DICHLOROPROPANE DICHLOROPROPE Hairy root (Agrobacterium r
Diapause and secondary parasites nullify the effectiveness of rose-aphid parasites in riverside, california, 1957-1958. 7058	DICHLOROPROPENE, 1,3- Population dynamics and fum
DIARRHEA OCCUTTENCE and etiology of infectious calf diarrhea. 7228	todes associated with roots
Diphenoxylate a useful drug in the symptomatic treatment of acute and chronic diarrhoea in domestic and wild animals. 7414	DICHLOBOPROPIONIC ACID, 2,2- Response of selected and ra (Sorghum halepense) to dala
The pathogenisis of diarrhea in the newborn calf, with special reference to physiologic functions and environmental	DICHLORVOS Face fly control.
conditions. 7436 Colitis X of horses. 7485	Toxicity of organic phospho
Mastitis, metritis and diarrhea in swine. 7514	Toxicological aspects of 2, phosphate (DDVP) in cows, h
IAZINON Laboratory selection of normal and chlordane-resistant German cockroaches for resistance to Malathion and	DICOPOL Evaluation of chemicals for on cherry and peach.
Diazinon. 6535 Belationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and	Citrus red mites resistant response to Tedion and Kelt
acethion. 6570	Control of the grape leaf f
The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana (Linn.). 6639	DICTYOCAULUS Limitations of lungworm vac
Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003	Effect of diethylcarbamazin calves.
Experiments for the control of sap beetles in sweet corn grown for processing. 7014	Immunization experiments wi DIEBACK (MUSHROOMS)
Control of the grape mealybug on apricots. 7030	Transmission of a virus dis spores.
A comparison of the toxicity of insecticides for the control of corn earworm on sweet corn. 7084	DIELDRIN Effects of heterogeneous di the results of tests with D
Salt-marsh caterpillar control on cotton in Arizona. 7118	
Resistance of Boophilus microplus to organo-phosphorus in- secticides. 7503	Colonization and production of Anopheles quadrimaculatu

House fly control in pig parlors. 7566

Field studies of house fly resistance to organophosphorus insecticides. 7569

Toxicity to house fly larvae of droppings from chickens fed insecticide-treated rations. 7584 VIBRONO-3-CHLOROPROPANE, 1,2-

Transmission of Pseudomonas syringae in peach trees by bud propagation. 6736

DIBROMOTETRACHLOROETHANE, SYMMETRICAL Sym-dibromotetrachloroethane - a new fungistat for control of citrus fruit decay. 6742

DICHLOBO-4-NITROANILINE, 2,6-Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 6779

Effects of 2,6-dichloro-4-nitroaniline on Rhizopus species and its comparison with other fungicides on control of Rhizopus rot of peaches. 6838

Variations in tolerance of Rhizopus species to 2,6-dichloro -4-nitroaniline. 6839

The mode of action of 2,6 dichloro-4-nitroaniline in Rhizopus arrhizus spores. 7729

Mode of action of 2,6 dichloro-4-nitroaniline (DCNA) in Rhizopus arrhizus. 7750

- DICHLOBOPHENE The assessment of the value of topical applications for the treatment of contagious foot-rot in sheep, with particular reference to Dichlorophen. 7346
- DICHLOROPROPANE DICHLOROPROPENE MIXTURE Hairy root (Agrobacterium rhizogenes) of field roses.

6829

DICHLOBOPENE, 1, 3-Population dynamics and fumigation studies of certain nematodes associated with roots of wheat in Nebraska. 7101

DICHLOROPROPIONIC ACID, 2,2-Response of selected and random plantings of Johnsongrass (Sorghum halepense) to dalapon. 7124

- DICHLORVOS Face fly control. 7564 Toxicity of organic phosphorus insecticides to horses. 7694
- Toxicological aspects of 2,2-dichlorovinyl dimethyl phosphate (DDVP) in cows, horses, and white rats. 7699
- ICOFOL Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003

trus red mites resistant to demeton and ovex and their sponse to Tedion and Kelthane. 7040

- Control of the grape leaf folder in California. 7064
- ICTYOCAULUS Limitations of lungworm vaccine. 7153 Effect of diethylcarbamazine on parasitic bronchitis in calves. 7591
- Immunization experiments with lungworm larvae. 7592
- DIEBACK (HUSHROOMS) Transmission of a virus disease of mushrooms by infected spores. 6890

ELDEAD Effects of heterogeneous distribution and codistillation on the results of tests with DDT against mosquito larvae. 6657

Colonization and production of a dieldrin-resistant strain of Anopheles guadrimaculatus say. 6677

Evaluation of insecticides for control of the Fuller rose

		SUBJECT
DI	ETHYLCARBAMAZINE	
	beetle on citrus in California.	7004
	The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
	Problems in the control of mint insects.	7009
	Laboratory studies of three-lined potato beetle and cont with various insecticides.	rol 7025
	Increase of European corn borers following soil applicat of large amounts of dieldrin.	ion 7028
	Increased tolerance of the boll weevil and cotton fleaho to some chlorinated hydrocarbon insecticides in Central Texas in 1958.	pper 7042
		7062
	Field tests with various insecticides for the control of	
	Currant fruit weevil, Pseudanthonomus validus, a pest of cultivated highbush blueberry.	7069
		7104
	Experiments on control of the sugar-beet wireworm in	
	southern California bean fields.	7111
	Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in t laboratory.	he 7576
	The excretion of dieldrin, DDT, and heptachlor epoxide i milk of dairy cows fed on pastures treated with dieldrin DDT, and heptachlor.	n 7668
	Epoxidation of aldrin and heptachlor in soils as influen by autoclaving, moisture, and soil types.	ced 7673
	Acute toxic effects upon livestock and meat and milk residues of dieldrin.	7677
	ETHYLCARBAMAZINE Prophylactic therapy against dirofilaria immitis.	7204
	Effect of diethylcarbamazine on parasitic bronchitis in calves.	7591
	Parafilaria multipapillosa in the horse.	7626
		7627
DI	ETHYLSTILBESTROL Potentiation of diethylstilbestrol induced aortic ruptur of turkeys with thiouracil.	es 7509
DI	ETHYLTOLUAMIDE Laboratory and field tests against mites and lice attack poultry.	ing 7562
DI	GESTION Mechanism of food transport in cattle-tick, Hyalomma aeg tium.	9 p- 6 5 <b>6 2</b>
DI	BYDROSTREPTOMYCIN Dihydrostreptomycin therapy of bovine vibriosis.	7 16 1
DI	HYDROTACHYSTEROL Metastatic calcification induced by hytakerol in chicken infected with Plasmodium gallinaceum.	ls 7427
DI	LLAN Control of army cutworms in alfalfa during 1959.	7104
	Salt-marsh caterpillar control on cotton in Arizona.	7118
DI	METHYL-TETRAHYDRO-1,3,5,2H THIADIAZINE-2-THIONE, 3,5- Release of methylisothiocyanate from soils treated with Mylone (3,5-dimethyl-tetrahydro-1,3,5,2H thiadiazine-2- thione).	7744
DI	LMETHOATE Control of the oriental rat flea with systemic insectici	
	fed to rats. Relationship between metabolism and differential toxicit	6542 y in

Relationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and 6570 acethion.

PAGE 96

Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 699 6991 Systemic insecticides for control of scales, leaf miners, 7059 Selective toxicity and animal systemic effectiveness of several organophosphates. 7563 Face fly control. 7564 Systemic insecticides for cattle grub control. 7574 The in vivo activity of several systemic insecticides against cattle grubs in South Dakota. 7582 DIMETYHL-4,4 -DIPYRIDYLIUM, 1,1; Paraquat for selective control of range weeds. 7125 DINITROBUTYLPHENOL The mechanism of the interaction between soil organic matter and herbicide toxicity and the influence of pH on herbicide 7698 7698 phytotoxicity. DINITROPHENOLS Structure and pesticidal activities of derivatives of dinitrophenols. iII. structure and acaricidal activity of cer-tain carbonates of 2-alkyl-5-methyl-4,6-dinitrophenols and related compounds. 7696 DIOXATHION Field testing of insecticides for control of the Nantucket pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana. 7001 Biology and control of the apple seed chalcid in North 7072 Carolina. DIPHENAMID The mode of action of diphenamid (N, N-dimethyl 2, 2-di-7126 phenylacetamide) in plants. DIPHENYLACETAMIDE, 2,2-The mode of action of diphenamid (N, N-dimethyl 2, 2-di-7126 phenylacetamide) in plants. DIPLOCARPON ROSAE Hostiparasite interaction in blackspot disease of roses caused by Diplocarpon rosae Wolf. 6886 DIPLODIA Relationship of water content and living cells to spread of Diplodia zeae in corn stalks. 684 6849 Relation of seed-borne fungi to boll rots of cotton. 6960 DIPLOPODA Bistochemical studies of larval Macracanthorhynchus ingens and certain spirobolid millipeds. 64 6495 DIPLOTEMNUS INSOLITUS The spiral thread. 6563 DIPTERA The Culicoides of New Mexico (Diptera, Ceratopogonidae). 6446 The black flies (Diptera0 Simuliidae) of western Massa-6457 chusetts. A preliminary study of the Syrphidae of Oklahoma (Dip-6469 tera0 Syrphidae. Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iII. Development of a synthetic medium for D cucurbitae lar-6513 vae. 6610 Invertebrate pathology, cytology, and development. 6617 A conopid fly parasite found in the honey bee.

DIPTRIDULIUM 7662 Dipyridylium residues in an aquatic environment.

DIQUAT Darkuess and the activity of diquat and paraguat on toma broad bean and sugar beet.	nto, 7119
Dipyridylium residues iu au aquatic euviroument.	7662
DIQUAT. A study of factors influencing the effectiveness of dign (101 -ethylene-202 -dipyridyling dibromide) for potato w killing.	
DIROFILARIA Periodicity of Dirofilaria iu the peripheral circulation of dogs.	7 7171
Prophylactic therapy against dirofilaria immitis.	7204
Two-day treatment with Thiacetarsamide for cauiue hearty disease.	юг <u>я</u> 7378
DISEASE TRANSMISSION Infectivity of Trypauosoma rhodesiense to tsetse flies f through animal membraues.	ed 6681
DISEASES Leucodermia-like disease iu the culture of giaut African suail Achatiua fulica Bowdich.	1 7134
DISTILLATION Effects of heterogeneous distribution and codistillation the results of tests with DDT against mosquito larvae.	1 OU 6657
DISULFOTON	(007
Iusecticidal control of the Hessian fly.	6987
Greenbug coutrol with systemic insecticides as influence fertilizer applications.	6999
The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat.	7027
Systemic iusecticides for coutrol of scales, leaf miuers and lace bugs.	7059
Control of the two-spotted spider mite on beans with systemic insecticides applied in the soil.	7076
DITETAZANINE Prophylactic therapy agaiust dirofilaria immitis.	7 20 4
DITTLENCHUS Materials discharged by plaut-parasitic nematodes.	7103
DITYLENCEUS DIPSACI Evaluation of several techniques for screeuiug alfalfa a resistance to Dityleuchus dipsaci.	Eor 7090
DIURNAL RHYTHM Effects of various diurual temperature profiles ou host- parasite reaction of wheat varieties aud Pucciuia striiformis.	6903
Diurnal emergence of Xyleborus ferrugineus (Coleoptera, Scolytidae) from cacao truuks iu Ecuador aud Costa Rica.	7057
DIURON Au evaluatiou of atraziue, simazine, mouurou aud diuron teu Hawaiiau sugar caue plantatious.	ou 7132
DMC Control of Myocoptes musculiuus on guinea pigs.	7583
DOGS Rabies iu dogs aud mau sharply reduced.	7164
Periodicity of Dirofilaria in the peripheral circulation of dogs.	n 7 17 1
Cockers and labradors more resistant to distemper.	7197
Prophylactic therapy agaiust dirofilaria immitis.	7204
Aujesky s disease iu dogs.	7205
Salmonellosis iu the dog.	7221
Clostridium chavoei common in normal adult dogs.	7222

Suspected authrax in a bitch.	7223
Cauiue leukosis iu Swedeu.	7234
Metaldehyde poisouiug.	7254
osteogeuic sarcoma of the oesophagus in a dog.	7262
Blbow dysplasia iu the Germau Shepherd dog.	7277
Vaccinatiou of puppies.	7303
Suspected myastheuia gravis iu a dog.	7336
Congenital detachment of the processus anconeus in the o	log. 7341
Aminophylliue poisouiug iu dogs.	7350
Suspected skeletal scurvy iu the dog.	7360
Surgical interference in torsion of the canine stomach.	7366
Calcificatiou of the adreual glauds iu a dog.	7370
Suspected skeletal scurvy iu the dog.	7372
A possible case of purpura haemorrhagica iu a dog.	7376
Rosinophils of dogs.	7377
A cliuiciau s view of cauiue virus diseases.	7386
The preuatal migratiou of Toxocara canis larvae aud thei relatiouship to iufectiou iu pups.	r 7397
Pyloric steuosis iu the dog.	7418
A case of retention pyonephrosis in a Corgi bitch.	7419
Pyloric steuosis iu the dog.	7429
roxicity of some hydraziue trauquillisers to dogs.	7446
Metaldehyde poisouiug.	7449
The differential diagnosis of bone tumours in the dog.	7450
apparent cauiue distemper caused by Klebsiella orgauisms	5. 7452
Suspected skeletal scurvy iu the dog.	7464
Purpura haemorrhagica iu a dog.	7465
Vascular occlusiou iu a bitch.	7470
Cousillar carciuoma iu rural dogs.	7471
Peritoneal dialysis as au adjuuct to Leptospirosis thera in a dog.	ру 7473
The seasoual iucideuce of cauine coccidiomycosis.	7475
Suspected skeletal scurvy iu a dog.	7490
Syuthetic oestrogeu poisouiug.	7500
The cliuical approach to abdomiual disorders of the dog.	7502
A possible case of purpura haemorrhagica in a dog.	7517
amino-acid excretion in canine cystine-stone disease.	7530
setaldehyde poisoniug in the dog.	7532
the radiographic features of calcinosis circumscripta (Kalkgicht, calcium gout) iu the dog.	7538
detaldehyde poisouing.	7549
The zoonosis of animal parasites in Iraq. IV. Some unusu al lesions associated with Opisthorchis teuuicollis infe tiou.	
Theuium and piperaziue combined, iu the treatmeut of hoc	ok-

DOGS

#### DORMANT OIL

Johnani oli	
worm and roundworm infestation in the dog.	7599
Pre-partum infestation of puppies with Ancylostoma cani	num. 7603
The treatment of ankylostomiasis and of spirocercosis i dogs by the new compound, 2,6-diiodo-4-nitrophenol.	n 7607
Incidence of infection with Trichinella spiralis in dog	s. 7611
A taenacide for dogs and cats.	7639
DORMANT OIL	
Control of pear borer and American plum borer in apple trees.	7024
DORSET HORN SHEEP Congenital goitre in Dorset-Horn lambs.	7542
DORSILOPHA	
Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley.	6466
DOSAGE First and second year effects on Cytospora canker disea:	50
of Italian prume trees sprayed with four concentrations cycloheximide thiosemicarbazone.	
DOWCO 105	
Toxicity of organic phosphorus insecticides to horses.	7694
DOWCO 109	
Control of the oriental rat flea with systemic insection fed to rats.	ides 6542
Systemic insecticides for cattle grub control.	7574
The in vivo activity of several systemic insecticides against cattle grubs in South Dakota.	7582
DOWNY MILDEW (PAPAVER) Control of downy mildew of opium poppy by root applicat: of fungicides.	ion 6788
DOWNY MILDEW (LIMA BEANS) Green-seeded downy mildew-resistant Fordhook lima beans.	6958
	0,00
DOWNY MILDEW (SUGAR BEETS) Field experiments on sugar-beet downy mildew (Peronospo: farinosa).	са 6717
DRAFT CATTLE	
Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
DROSOPHILA Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley.	6466
The influence of selection pressure on the development	of
resistance in populations of Tetranychus telarius (L.).	6656
A preliminary report on mutations in the house fly.	6676
Drosophila breeding in refuse from tomato canneries.	7031
Reaction of Drosophila to different varieties of tomato	es. 7032
DROSOPHILA BIPECTINATA The offort of intrasposific and interspecific inseminat	ion
The effect of intraspecific and interspecific inseminat on fecundity in Drosophila malerkotliana and Drosophila bipectinata.	660 <b>1</b>
DROSOPHILA MALERKOTLIANA	
The effect of intraspecific and interspecific inseminat on fecundity in Drosophila malerkotliana and Drosophila bipectinata.	10n 6601
DROSOPHILA MELANOGASTER Evaluation of compounds of cadmium and related metals as production inhibitors in insects.	s re- 6476
Effects of X-rays, tryptophan metabolites, and eye colo mutants on the tumor-suppressor system in Drosophila me oqaster.	r lan- 6668
PAGE 98	

Exchange and secondary nondisjunction in females of Droso-phila melanogaster homozygous for X chromosome inversions. 6674 The role of Drosophila melanogaster in th epiphytology of Geotrichum, Rhizopus, and other fruit rots of tomato. 6716 Drosophila breeding in refuse from tomato canneries. 7031 Reaction of Drosophila to different varieties of tomatoes. 7032 DROSOPHILA PSEUDOOBSCURA Studies on ovarian structure, function and growth in adult Drosophila pseudo-obscura. 6661 DROSOPHILIDAE Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley. 6466 DRUG THERAPY UG THERAPY Chemotherapy of the apple scab disease with butyric acid 6801 The use of chemotherapeutic agents in animal tuberculosis. 7396 DUCKLINGS Factors other than groundnut relating to turkey X disease . 7477 DUBRA Sporangial germination of Sclerospora graminicola and inoculation of Pennisetum glaucum. 6882 DUSTING Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 67 6779 DWARF BUNT (WHEAT) Time of year of infection of winter wheat by the dwarf bunt fungus. 6862 Culture of the dwarf bunt fungus. 6944 DWARF DISEASE (PRUNUS) Rate and pattern of prune dwarf virus movement within inoculated cherry trees. 6761 Variability in rates of movement of different strains of the virus responsible for prune dwarf. 6818 Sedimentation properties of two stone fruit viruses. 6940 DWARF MISTLETOE Some characteristics of dwarf mistletoe populations on red 6850 fir. DYSPLASIA Elbow dysplasia in the German Shepherd dog. 7277 EARTHWORMS A crytalliferous bacterium associated with a blister di-sease in the earthworm Eisenia foetida (Savingy). 6 6546 The life history and the morphology of the earthworm mite, Uroactinia anchor (Trouessart, 1902) (Acarina0 Uropodi-dae) with preliminary ethnological study of behavior. 6594 ECHEVERIA Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum. 6916 ECOLOGY The horizontal and vertical distribution of flying insects near artificial windbreaks. 64 6462 ECONOMICS Economic parasitology. 7635

EDEMA The pathogenesis of gastro-enteritis associated with Escherichia coli. 7526

# ENTEROVIRUSES

And the second	
EDEMA DISEASE Groundnut toxicity as the cause of exudative hepatitis (oedema disease) of guinea-pigs.	7455
Transmission and characterization of edema disease of swine.	7535
EDUCATION Pesticide safety education.	7759
EGG CONTAINEES The microbiological contamination of egg shells and egg packing materials.	7651
EGG PRODUCTION Calcium requirements of turkey breeder hens.	7 135
Economic importance of the chicken body louse.	7585
EGGS Mortality factors for the vetch bruchid, Bruchus brachialis.	7000
The effect of grain moisture upon development of the river	ce 7049
Bffect of root extract of Asparagus racemosus and Taget erecta on hatching of eggs of Meloidogyne javanica and Meloidogyne arenaria.	es 7 11 3
Potentiation of chlortetracycline in laying chickens.	
	7140
Influence of vitamin D on avrious aspects of the reprod tive process in mature hens.	uc- 7142
Survival of encysted eggs and larvae of the soybean cys nematode, Heterodera glycines, ingested by swine.	t 7632
The microbiological contamination of egg shells and egg packing materials.	7651
EIMERIA Eimeria maxima in Georgia broilers.	7175
Concurrent Salmonella typhimurium and Eimeria necatrix fections in chicks.	in- 7518
ELECTRIC CIECUITS An inexpensive, versatile oxygen electrode.	7756
ELECTROCHEMISTRY An inexpensive, versatile oxygen electrode.	7756
ELECTRODES An inexpensive, versatile oxygen electrode.	7756
ELECTBON MICROSCOPES Microscopic study of bovine endometrium.	7751
ELECTRON MICROSCOPY Electron microscopy of tobacco rattle type viruses.	
allen jr, t 1.	6844
The nature of stain uptake in ultrathin sections of tob mosaic virus.	acco 6901
An electron microscope study of TMV lesions in Nicotian glutinosa.,	a 6955
Histologic and electron microscopic studies of agranulo and hemal and hemolymph nodes in cattle.	cytes 7545
Electron microscopy of the sheath surrounding the haust of Brysiphe graminis.	orium 7711
ELECTRONIC STRUCTURE Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to adult house flies.	6485
ELEPHANTS	
Anthrax in Chester Zoo.	7506
Paraquat for selective control of range weeds.	7125

EMPHYSEMA Emphysema with cardiac embassment in calves.	7453
EMPOASCA Vectors of alfalfa and bean yellow mosaic viruses in La white clover.	adino 6803
ENATION MOSAIC (PEAS) Comparisons of pea enation mosaic virus isolates.	6878
ENCEPHALOMALACIA Nigropallidal encephalomalacia in the horse.	730 <b>7</b>
ENDOCARDITIS Vascular occlusion in a bitch.	7470
ENDOMETRIUM Changes in endometrium of vibrio fetus-infected and noninfected heifers.	7190
Microscopic study of bovine endometrium.	7751
ENDOSULFAN The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
Thiodan, a promising chemical for control of the lesser peach tree borer.	7038
Soil treatments in lieu of spraying for plum curculio control in peach orchards.	7063
Brief history of aphid control on potatoes in south Florida, 1946-59.	7079
A comparison of the toxicity of insecticides for the co of corn earworm on sweet corn.	ontrol 7084
The toxicology of thiodan in several fish and aquatic i tebrates.	inver- 7697
ENDOTOXEMIA Colitis X of horses.	7485
ENDRIN Boll weevil susceptibility to toxaphene, endrin, and g. in five Alabama localities.	thion 6505
The effects of chemical insecticides and insecticidal a vants of a Heliothis nuclear polyhedrosis virus.	adju- 6557
The effect of insecticides on transamination in th amen cockroach.	cican 6587
Soil treatments in lieu of spraying for plum curculio control in peach orchards.	7063
Control of the grape leaf folder in California.	7064
Field tests with various insecticides for the control of Lygus bugs and the corn earworm on lima beans.	of 7066
Laboratory studies on the effectiveness of Chipman R-61 against some cotton pests.	199 7070
Control of army cutworms in alfalfa during 1959.	7104
Experiments on control of the sugar-beet wireworm in southern California bean fields.	7111
Salt-marsh caterpillar control on cotton in Arizona.	7118
ENOCLEBUS NIGRIPES The biological impact of the checkered beetles (Coleopt Cleridae) on populations of Ips bark beetles (Coleopter Scolytidae).	era0 a0 6565
ENT A A biotype of the spotted alfalfa aphid on alfalfa.	7046
ENTERITIS A haemolytic cocco-bacillus recovered from poultry.	7340
Prophylactic use of Framycetin sulphate in calves.	7442
ENTEROVIRUSES Isolation of enteroviruses from intestinal tract of swi	ле. 7155
Purification of swine enteroviruses and swinepox viruse	

# EN

ENTOMAPHAGOUS INSECTS	Seperci	1.412
	7218	Г
Characterization and classification of newly isolated av enteric viruses.	ian 7284	F
ENTOMAPHAGOUS INSECTS Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California.	7065	r E B
ENTOMOGENOUS FUNGI Spicaria rileyi (Farlow) Charles and Aspergillus flavus Link, entomogenous fungi of the cabbage looper, Trichopl sia ni (Hubner), in Indiana and Wisconsin.	.u- 6487	EOS
Pythium sp. (Phycomycetes Pythiales) pathogenic to mosqu to larvae.		EPJ
Hemerocampa pseudotsugata McDunnough, a new host for Beauveria bassiana (Balsamo) Vuillemin.	6524	s t i
Fungus infection of insects via the alimentary tract.	6530	C
Pathogenicity of Spicaria rileyi to Pseudoplusia inclu- dens.	6536	3
The fungus Entomophthora erupta (Dustan) attacking the black grass bug, Irbisia solani (Heidemann) (Hemiptera, Miridae), in California.	6538	H A t
Beauveria densa, pathogenic for the larvae of Chilo zonellus.	6584	EPJ
Bacteria and fungi associated with dead boll weevils (An thonomus grandis) in a natural population.	- 6589	EP] F
Toxins from the entomogenous fungus Metarrhizium anisopl I. Production in submerged and surface cultures, and in inorganic and organic nitrogen media.	iae 6618	EP1 3
Toxins from the entomogenous fungi Metarrhizium anisopli II. Symptoms and detection in moribund hosts.	.ae. 6619	ł
Growth and sporulation of submersed cultures of the func Beauveria bassiana in various media.	jus 6621	EPI
Oral infection of second-instar nymphs of Schistocerca gregaria by Metarrhizium anisopliae.	6651	I
ENTOMOLOGY Evaluation of the needs of Oklahoma extension personnel relative to entomology problems.	6444	EP] F
ENTOMOPHIHOBA The fungus Entomophthora erupta (Dustan) attacking the black grass bug, Irbisia solani (Heidemann) (Hemiptera, Miridae), in California.	6538	F
ENVIRONMENT The influence of environmental and nutritional factors of growth and caste determination of female honey bees.	on 6519	H
Environmental and other factors influencing development southwestern cotton rust (Puccinia stakmanii).	of 6708	I
The pathogenisis of diarrhea in the newborn calf, with special reference to physiologic functions and environme conditions.	ental 7436	EPI
Some factors that influence the deactivation of atrazine soil.	e in 7654	t
ENZIMES Studies on levels of reducing sugars and hydrolytic enzy in relation to Botrytis head rot on safflower.	mes 6703	EPC H
Enzymes from conidia and matrix of Colletotrichum orbicu lare grown on a natural medium.	1- 6857	EQU I
Production of pectinolytic and cellulolytic enzymes by Rhizopus stolonifer.	6919	BQU
Changes in multiple molecular enzymes in rusted bean lea	6923	EQU
Production of pectinolytic and cellulolytic enzymes by cucurbit anthracnose fungi.	6968	EQU
Decomposition of 2,4-D and related phenoxyacetic acids h an Arthrobacter species.	у 7658	

	The macerating enzyme of Rhizoctonia solani.	7701
	Respiratory activity and enzymes for glucose catabolism fungus spores.	in 7704
	The effect of n-dodecylguanidine acetate on enzyme acti and the nucleotides of ribonucleic acid.	vity 7749
E	OSINOPHILIC GRANULOMA Maduromycosis of the bovine nasal mucosa.	7479
E	OSINOPHILS Eosinophils of dogs.	7377
EI	PIDEHIOLOGY	
	Symposium on requirements and interpretations of biometeorological observations.	
	invitational papers presented at the fifty-fourth annua meeting of the Maerican Phytopathological Society.	
	corvallis, oregon, august 26-29, 1962.	6691
	The role of leaf microflora on epidemiology of the nort leaf blight of corn.	hern 6697
	Epidemiology of glume blotch of wheat.	6888
	A preliminary report on the occurence of infectious lar tracheitis of poultry in India.	yngo- 7510
El	PIDERMOPHYTON Mycosis in a manatee.	7285
EI	PIDIDYMITIS	
	Ram epididymitis versus brucellosis.	7184
EI	PITHELIOM The influence of physical form of roughages and antibic	tic
	administration on performance, carcass characteristics,	
	health, of the rumen epithelium, rumen volatile fatty a and liver abscesses of steers fed all-concentrate ratio	ns.
		7347
El	PITRIX Reappraisal of transmission of tobacco mosaic virus by	in-
	sects.	6845
	Laboratory studies of three-lined potato beetle and con with various insecticides.	trol 7025
EI	PIZOOTIC DISEASES First poliomyelitis epizootic in large primates under s	tudy.
		7178
	Role of deer in epizootiology of leptospirosis.	7212
	Epizootiology of equine viral rhinopneumonitis.	7286
	Epizootiology of bovine myxovirus parainfluenza 3(sf-4) Nebraska cattle as determined by antibody titers.	in 7398
	A swine brucellosis epizootic.	7407
	Immunologic and epizootiologic studies of epizootic bow abortion.	ine 7425
El	PN	1.00
	Laboratory studies on the toxicity of various insecticito different stages of the oriental fruit moth.	6988
	Parathion and EPN residue studies on Concord grapes.	7683
El	POXY BESINS Epoxidation of aldrin and heptachlor in soils as influe by autoclaving, moisture, and soil types.	nced 7673
E	QUADOR Potato yellow vein virus in Equador.	6826
P.	QUINE INFECTIOUS ANEMIA	
	Current disease problems of horses.	7393
Ę	QUINE INFLUENZA Current disease problems of horses.	7393
E	QUINE REINOPNEUMONITIS Epizootiology of equine viral rhinopneumonitis.	7286

FALCULIFER ROSTRATUS

EQUIPHENT A sampling technique for estimating populations of smal arthropods in soil and vegetation.	1 6455
Membracidae attracted to black light.	6590
Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
Apparatus for insecticide assay.	7753
A funigant vaporizer unit for use in laboratory experim	ents. 7758
ERIOSOMA Control of the woolly apple aphid on roots of apple nur stock.	sery 7011
ERWINIA Prevalence of Erwinia amylovora in apple buds as detect by phage typing.	ed 6701
Relation of the iris borer to bacterial soft rot of iri	s. 6774
Comparative bactericidal properties of N-polyhaloethylt hydantoins.	hio 7737
ERYSIPELAS BACTERINS Clinical appraisal of an avirulent oral erysipelas vacc	ine. 7492
ERTSIPHE Relationship of genes conditioning pathogenicity of Erysiphe graminis f. sp. hordei on barley.	6828
Studies on the host range and pathogenicity of Erysiphe polygoni.	6924
Electron microscopy of the sheath surrounding the haust of Erysiphe graminis.	orium 7711
ERYSIPHE GRAMINIS HORDEI Relationship of the genes conditioning resistance to Er siphe graminis f. sp. hordei in some varieties of barle used to differentiate races of this pathogen.	у- У 6856
ERYTHROCYTES ATPase activity of the erythrocytic membrane in anaplas sis and of Anaplasma marginale.	mo- 7317
ERTTHROGENESIS Response of cows and calves to a Psittacosis-Lympho- granuloma group agents.	7 18 6
ESCHERICHIA Occurrence and etiology of infectious calf diarrhea.	7228
Standardized infections for laboratory evaluation of co pounds against a chronic respiratory disease complex in	
chickens.	7315
Toxicity of nitrate nitrogen to cattle.	7423
The pathogenisis of diarrhea in the newborn calf, with special reference to physiologic functions and environm conditions.	eñtal 7436
Colitis X of horses.	7485
ESCHERICHIA COLI The enteropathogenic effect of Escherichia coli in rabb and pigs.	its 7324
ESCHERICHIA COLI BACTERIN Inhibition of enzymes by the anthocyanin malvidin-3-mon coside.	oglu- 7730
ESCHERICHIA COLI BACTERINS Intensive veal production and a hitherto untried nitrof A preliminary trial.	uran- 7329
ESERINE Materials discharged by plant-parasitic nematodes.	7103
ESOPHAGUS Osteogenic sarcoma of the oesophagus in a dog.	7262

	FALCULIFER	ROSTRAT
ESTIGNENE ACREA Salt-marsh caterpillar control on cotton i	n Arizona.	7118
ESTROGENS Suspected synthetic oestrogen poisoning in	mink.	7369
Synthetic oestrogen poisoning.		7500
ETCH (REDPEPPERS) Identification of the viruses affecting co of pepper (Capsicum annum) in New Jersey.	nmercial var	ities 6925
ETHIDNINE Chlorophyll formation in Euglena as a test	for herbici	ides. 7129
ETHYL N.N-DIPROPYLTHIOCARBAMATE The effect of oils on herbicidal activity linuron and of waxes and oils on the movem soil.	cf atrazine ent of EPTC	and in 7657
ETHYLAMINE Control of Penicillium decay of oranges wi volatile aliphatic amines.	th certain.	6741
ETHYLENE DIBROMIDE Distribution and sorption of liquid fumiga wheat by recirculation.	nts applied	to 6688
Black root rot of pine.		677 <b>1</b>
ETHYLENE DICHLORIDE Distribution and sorption of liquid fumiga wheat by recirculation.	nts applied	to 6688
ETHYLENEDIAMINETETRAACETIC ACID The effectiveness of EDTA as a fish preser	vative.	7695
EUBLEMMA AMABILIS Incidence of predators and feasibility of through hand picking in lac cultivation on hosts.		
EUBLEMMA SILICULA Occurrence of Eublemma silicula Swinhoe as in Delhi.	pest of baj	jra 7023
EUGLENA Chlorophyll formation in Euglena as a test	for herbici	.des. 7129
EUGREGARINA Studies of eugregarina in insects.		6470
EUTHANASIA A note on rabies and euthanasia in man.		7469
EVERGLADES The bean leaf skeletonizer, Autoplusia ege control on bush snap beans in the everglad	na, and its es.	7006
Hyperodes humilis, a new pest of sweet cor everglades, and its control.	n in the	7013
EXOCORTIS (CITRUS) Rapid-index methods for exocortis of citru	s.	6718
EXTENSION WORKERS Evaluation of the needs of Oklahoma extens relative to entomology problems.	ion personne	1 6444
EXTREMITIES Elbow dysplasia in the German Shepherd dog		7277
EXUDATES Influence of root exudates of cacao and ot spore development of Phytophthora palmivor		on 6947
EYES Effects of X-rays, tryptophan metabolites, mutants on the tumor-suppressor system in ogaster.		
FALCULIFER ROSTRATUS A study of the life history of the pigeon		,
Falculifer rostratus (Buchholz), 1869, in vitro.	vivo and in	6493

FASCIOLA	
FASCIOLA Immunity to Fasciola hepatica infection in albino rats va cinated with irradiated metacercariae. 7	FE 638
FASCIOLIASIS	
Injectable Carbontetrachloride in the treatment of Fasciola hepatica infestation in lambs. 7	608 FE
FAT BODY Structure and metamorphic changes in the fat body of Call sobruchus maculatus (F.) (Bruchidae, Coleoptera). 6	0- 606 FE
FATS Insecticides in human fat in New Zealand. 7	663
FATTY ACIDS	FE
The free fatty acids and neutral lipids of the cuticular of the Mormon cricket, Anabrus simplex, Hald. 6	wax 605 FE
The influence of physical form of roughages and antibioti administration on performance, carcass characteristics,	с
health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations	ds 347
FEATHERS	
A study of the life history of the pigeon feather mite, Falculifer rostratus (Buchholz), 1869, in vivo and in vitro. 6	493
FECES Toxicity to house fly larvae of droppings from chickens f insecticide-treated rations. 7	ed 584
FEED Mycotoxicosis and animal disease. 7	152
Toxicity in groundnuts. 7	156
Groundnut toxicity. 7	264 FE
Groundnut toxicity. 7	323
Xanthomatosis in laying hens - a case report. 7	391 FE
	551 15
Evidence for a difference in toxicity between common and hairy vetch seeds for chicks. 7	687
hairy vetch seeds for chicks. 7 FEED ADDITIVES	687 Fe
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis.	687 FE
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6	687 Fe
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi	687 - 479
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi	687 - FE 479 597
<ul> <li>hairy vetch seeds for chicks.</li> <li>7</li> <li>FEED ADDITIVES The potential role of a feeding stimulant used in combination with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone compositi</li></ul>	687 - FE 479 597
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combination with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone compositi 7 FEED CONCENTRATES	687 - FE 479 5. 597 on. 137
hairy vetch seeds for chicks. 7  FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on hone compositi 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics,	687 - FE 479 5. 597 on. 137 c
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations	687 - FE 479 5. 597 on. 137 c ds FE
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combination with the nuclear polyhedrosis virus of Heliothis. A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone compositi 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations	687 - FE 479 5. 597 on. 137 c ds FE 347
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations 7 FEED TOXICITY	687 - FE 479 5. 597 on. 137 c ds FE
hairy vetch seeds for chicks. 7  FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on hone compositi 7  FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations 7  FEED TOXICITY Diagnosis and causes of nitrate poisoning. 7  FEEDING Experiments on prolongation of the life of mosquito larva	687 - FE 479 5. 597 on. 137 c ds FE 347 FE 513
hairy vetch seeds for chicks. 7  FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on hone compositi 7  FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations 7  FEED TOXICITY Diagnosis and causes of nitrate poisoning. 7  FEEDING Experiments on prolongation of the life of mosquito larva by underfeeding. Biology of the convergent lady beetle when fed a spotted	687 - FE 479 5. 597 0n. 137 c ds FE 347 FE 513 e
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on hone compositi 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci 7 FEED TOXICITY Diagnosis and causes of nitrate poisoning. 7 FEEDING Experiments on prolongation of the life of mosquito larva by underfeeding. 6 Biology of the convergent lady beetle when fed a spotted alfalfa aphid diet. 7	687 - FE 479 5. 597 0n. 137 c ds FE 347 FE 513 e 581 FI
hairy vetch seeds for chicks. 7  FEED ADDITIVES The potential role of a feeding stimulant used in combination with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on hone compositi administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations 7  FEED TOXICITY Diagnosis and causes of nitrate poisoning. 7  FEEDING Experiments on prolongation of the life of mosquito larva by underfeeding. 6 Biology of the convergent lady beetle when fed a spotted alfalfa aphid diet. 6 A cage for feeding insects through membranes. 6 Effect of melatonin on thyroid hormone secretion rate and	687 - FE 479 597 on. 137 c ds FE 513 e 513 e 581 FI 603 FI 929
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combination with the nuclear polyhedrosis virus of Heliothis. A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothis Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on home compositiad ministration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations FEED TONICITY Diagnosis and causes of nitrate poisoning. 7 FEEDING Experiments on prolongation of the life of mosquito larva by underfeeding. 6 Biology of the convergent lady beetle when fed a spotted alfalfa aphid diet. 6 I cage for feeding insects through membranes. 6 Iffect of melatonin on thyroid hormone secretion rate and feed consumption of female rats. 7	687 - FE 479 5.597 on. 137 c ds FE 513 e 513 FI 603 FI 929 444
hairy vetch seeds for chicks. 7 FEED ADDITIVES The potential role of a feeding stimulant used in combina tion with the nuclear polyhedrosis virus of Heliothis. 6 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothi 6 Influence of dietary zinc, calcium and vitamin D for hens 7 FEED CONCENTRATES The influence of physical form of roughages and antibioti administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty aci and liver abscesses of steers fed all-concentrate rations 7 FEED TOXICITY Diagnosis and causes of nitrate poisoning. 7 FEEDNNC Experiments on prolongation of the life of mosquito larva by underfeeding. 6 Biology of the convergent lady beetle when fed a spotted alfalfa aphid diet. 6 A cage for feeding insects through membranes. 6 Effect of melatonin on thyroid hormone secretion rate and feed consumption of female rats. 7 FELINE INFECTIOUS ENTERITIS Isolation of a virus from a condition simulating feline p	687 - FE 479 5. 597 0n. 137 c ds FE 347 FE 513 603 FI 929 444

PENTHION Selective toxicity and animal systemic effectiveness of several organophosphates.	of 7563
House fly control in pig parlors.	7566
PENUSA Systemic insecticides for control of scales, leaf mine and lace bugs.	ers, 7059
PERBAM Infection of spruce seedlings by Cylindrocladium score	arium. 6715
PERRETS A report on the dosage of pentobarbitone sodium requi- induce anaesthesia in ferrets.	red to 7440
PERTILITY Evaluation of compounds of cadmium and related metals production inhibitors in insects.	as re- 6476
Mortality and fertility response of Musca domestica L naeus to certain known mutagenic or anti-tumor agents	
The effect of intraspecific and interspecific insemin on fecundity in Droscphila malerkotliana and Drosophi bipectinata.	
Effects of geographic isolation and host association evolution of sexuality in Helminthosporium.	on the 6835
Effect of temperature and humidity on the fecundity a velopment of Cadra cautella Wlk. in wheat.	nd de- 7071
Isolation of Mycoplasma sp. from the oviducts of dair cows.	y 7358
PERTILIZERS Fertilizer and soil-fumigation effects on Pythium splo in south Florida.	endens 6934
PESTUCA Paraquat for selective control of range weeds.	7125
Gastrointestinal nematodes in beef yearlings.	7215
RETAL DEATH	
Chronologic evaluation of tetratogenicity in sheep fea Veratrum californicum.	7249
Cerebellar hypoplasia, hypomyelinogenesis, and congen tremors of pigs, associated with prenatal hog cholera nation of sows.	
Equine viral abortion in western Montana.	7334
The prenatal migration of Toxocara canis larvae and the relationship to infection in pups.	heir 7397
Iron deficiency anemia as a cause of stillbirths in s	wine. 7437
PETAL SKIN Fetal skin harbors most microorganisms.	7214
<pre>PETUS Changes in endometrium of vibrio fetus-infected and noninfected heifers.</pre>	7190
Ovine abortion virus in ewes and fetuses.	7195
PIBROUS DYPLASIA Fibrous dysplasia in a monkey and a kudu.	7555
PIELD CROPS Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus.	s of 6992
Effects of Dylox and other insecticides on entomophage insects attacking field crop pests in California.	ous 7065
PILENCHUS On two plant parasitic nematodes from a cauliflower f: the Punjab.	ield in 7092

FO	WT.P	n r	VIE	ns.

FISH Dipyridylium residues in an aquatic environment. 7	FOOD 662 Some e	f
	suscep	
	695 FOOD ADD	I
The toxicology of thiodan in several fish and aquatic inv	Possib	1
	1697 Organo	
FLAT APPLE (APPLES) The flat apple disease.	cattle	•
FLAXSEED	FOOD PRE The ef	
Effect of methyl bromide and hydrocyanic acid fumigation the germination of flax seeds. 7	on 7650 FOOD STO The re	
FLOCCULATION Bentonite flocculation a rapid, sensitive serological te	ture r	:i
	5897 Develo of whe	
The fungous flora of nonsuberized roots of poorly growing	g Influe 5749 effect	
FLORIDA	FOOT ROT	2
Fertilizer and soil-fumigation effects on Pythium splende		ss
Identification and persistence of phage types of Staphylo coccus aureus in dairy herds in florida.		
Bacillary hemoglobinuria (redwater disease) in florida. 7	FOOT-AND 7617 Infect	
FLORISIL		
Analysis of egg yolk and poultry tissues for chlorinated	in- Foot-a 7681 cultur	
PLOWERING The effect of foraging behavior of moving honey bee color		Lo
to crops before or after flowering has begun. 6	5529 FOOT-AND	)-
FLUORESCENT ANTIBODY TECHNIC Progressive distribution of southern bean mosaic virus	Observ cell-c	
antigen in bean leaves determined with a fluorescent anti	i –	
	5969 FORAGE F The ef	
A fluorescent antibody study of infectious bronchitis vir 7	7434	_
Identification of Mycoplasma gallisepticum in lesion tiss		££
	7445 microa	
Immuncfluorescent studies of virus-induced rabbit papillo (Shope) in vitro.	oma FOREST S 7504 Forest	
FLUORIDES		
Effect of fluorides in cattle. 7	7365 FORESTRY Forest	
FLUORINE Toxic chemicals. 7	7740	
FLUORINE COMPOUNDS	FORESTS Bushbu	
	7739 agents	
FLUOROSIS Toxic chemicals.	FORMALDE	
	activa	
	7259 Factor 7260 deep l	
FOLIAR APPLICATION Response of selected and random plantings of Johnsongrass (Sorghum halepense) to dalapon.	Foot-r s 7124 Resist	
FOLIC ACID		
Inhibition of enzymes by the anthocyanin malvidin-3-monog	7730 A stud	ły
FOLPET	(Ckl.)	
	um. POWL CHO 6715 Observ	
FOMES Fomes annosus.	5705 FOWLPOX	V
Autumn and winter sporulation by basidiocarps of Fomes	Fowlpo	
	6871	

20	OD.	
	00 Some effects of age, preimaginal habitat, and adult food susceptibility of boll weevil to certain insecticides.	on 6983
	OD ADDITIVES Possible hazards in the veterinary use of antibiotics wi particular reference to their use as food additives.	th 7146
	Organophosphate systemics as sprays and feed additives f cattle grub control.	or 7577
	OD PRESERVATION The effectiveness of EDTA as a fish preservative.	7695
	OD STORAGE The relation between storage molds and damage in high-mo ture rice in aerated storage.	ois- 6894
	Development of granary weevils and storage fungi in colu of wheat- II	mns 7643
	Influence of grain moisture and storage temperature on t effectiveness of malathion as a grain protectant.	he 7649
20	OT ROT (ANIMALS)	
	The assessment of the value of topical applications for treatment of contagious foot-rot in sheep, with particul reference to Dichlorophen.	
	Poot-rot in feeding sheep.	7404
	OT-AND-MOUTH DISEASE Infectivity stability of foot-and-mouth disease virus.	7173
	Foot-and-mouth disease vaccine-production of antigen in culture.	7177
	Patal strike caused by Chrysomia bezziana in cattle ar buffaloes.	id 7633
	OT-AND-MOUTH DISEASE VIRUS Observations on pathogenicity and immunogenicity of a	
	cell-culture-modified foot-and-mouth disease virus.	7498
	BAGE PLANTS The effect of foraging behavior of moving honey bee cold to crops before or after flowering has begun.	nies 6529
	REST SOILS The effects of DDT and malathion upon forest soil microarthropods.	7015
	REST SURVEYS Forest-insect surveys in the central Rocky Mountains.	
20	RESTBY	7077
	Porest-insect surveys in the central Rocky Mountains.	7077
	BESTS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.	6683
	RMALDEBYDE The relative value of formalin and betapropiolactone as activating agents for Newcastle disease vaccine.	in- 7231
	Pactors influencing the survival of coliforms in the dus deep litter houses.	st of 7344
	Foot-rot in feeding sheep.	7404
	Resistance of egg-adapted canine distemper virus to form	alin* 7462
	RMICIDAE A study of mealybug populations (Dysmicoccus brevipes (Ckl.)) in an ant-free field.	6994
	WL CHOLERA Observations on an avian strain of Pasteurella haemolyti	.ca. 7332
PO	WLPOX VIRUS	
	Fowlpox virus from chickens with hemorrhagic tracheitis.	7381

FOXES FOXES Some observations of peanut leaf rust and Cercospora leaf Pluorescent antibody studies for rabies in wildlife. 7163 spots in Texas. 6762 Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 67 Wildlife rabies increases. 7180 6779 Effect of rabies virus inoculated into foxes and skunks. 7207 6787 Mechanism of soil fungistasis. Control of downy mildew of opium poppy by root application FRUIT -dibromotetrachloroethane - a new fungistat for control of fungicides. 6788 6742 of citrus fruit decay. On the fungistatic and fungicidal properties of an antibiotic produced by Penicillium rubrum. 6791 Variations in tolerance of Rhizopus species to 2,6-dichloro -4-nitroaniline. 6839 Disinfection of tomato seed infested with Xanthomonas vesi-6940 6797 Sedimentation properties of two stone fruit viruses. catoria. The infectious nature of pollen from certain virus-infected Fungistatic effects of a soil bacterium on conidia and stone fruit trees. 6963 hyphae of Helminthosporium sativum. 6842 Control of Cylindrosporium leaf spot disease of Rhus tri-lobath and Shepherdia argentea seedlings. PROIT TREES Soil injection as a means of applying systemic acaricides to 6855 fruit trees. 6997 A method for evaluating soil fungicides. 6939 FUNTGANTS Distribution and sorption of liquid fumigants applied to Effect of fungicides on the respiration of three species of wheat by recirculation. 6688 soil fungi. 6941 Susceptibility of certain stages of the rice weevil to a methallyl chloride fumigant formulation in wheat of various Influence of oat and alfalfa residues on soil respiration, fungistasis, and survival of Verticillium albo-atrum. moistures. 7045 7723 Stored-grain insects and their control in New Jersey. Carbonyl sulphide from the decomposition of captan. 7746 7647 FUNGUS DISEASES (ANIMALS) Brush technique for detection of fungus diseases. A fumigant vaporizer unit for use in laboratory experiments. 7327 7758 FUNGUS DISEASES (PLANTS) FUMIGATION Varietal resistance to clover rot in white clover. 6694 Susceptibility of life stages of the Mexican fruit fly to fumigation with ethylene chlorobromide. 6 6985 he role of leaf microflora on epidemiology of the northern leaf blight of corn. 6697 Germination of cereal, sorghum, and small legume seeds after fumigation with hydrogen phosphide. 7645 7645 Susceptibilty of Gossypium arboreum and Gossypium hirsutum to seedling anthracnose. 6710 Fumigation of buildings to control the dry-wood termite, 7646 Cryptotermes brevis. A probabilistic analysis of fungus control by foliar appli-6726 cation of chemicals. Effect of methyl bromide and hydrocyanic acid fumigation on the germination of flax seeds. 7650 Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745 FUNGI Pathogenicity of externally occurring fungi to Reticuliter 6634 mes flavipes. Antifungal phenolic acids in apple fruits after infection with Sclerotinia fructigena. 6 6746 The fungous flora cf nonsuberized roots of poorly growing charge trees. 6749 cherry trees. Phytophthora root rot of alfalfa in Minnesota. 6751 Mycelial protein comparisons of isolates of cucurbit Genetics and cytology of Phytophthora. 6752 anthracnose fungi. 6808 Evidence for two different pathogens of peanut pod rot. 6754 The utilization of ligno-cellulose by common mold fungi. 6816 Fungi attacking seeds in dry seed-beds. 6759 Effects of sodium fluoride on growth of some pathogenic 6943 Some observations of peanut leaf rust and Cercospora leaf fungi. spots in Texas. 6762 Insects associated with wounds on trees that develop oak Pirst and second year effects on Cytospora canker disease of Italian prune trees sprayed with four concentrations of wilt. 6989 Development of granary weevils and storage fungi in columns 6764 cycloheximide thiosemicarbazone. of wheat- II. . 7643 Fusarium wilt (race2) of tomato0 effect of lime and micro-6775 FUNGICIDE RESISTANT FUNGI nutrient soil amendments on disease development. Biphenyl-resistant citrus green mold reported in Florida. 6914 Control of Botrytis neck rot of onions by fungicidal dusts 6779 and desiccant chemicals. FUNGTOTIDES Trichlorobenzene as a soil toxicant against four wood-decay 6786 Cancroid spot of citrus. ing soil fungi. 6735 Control of downy mildew of opium poppy by root application Sym-dibromotetrachloroethane - a new fungistat for control of fungicides. 6788 of citrus fruit decay. 6742 On the fungistatic and fungicidal properties of an anti-biotic produced by Penicillium rubrum. Antifungal phenolic acids in apple fruits after infection with Sclerotinia fructigena. 6 6791 6746 Effect of SMDC on germination, plant growth, and fusarium Suppression of corn head smut by in-furrow applications of wilt incidence of cumin (Cuminum cyminum). 6805 6747 pentachloronitrobenzene.

Varietal response in groundnut to Sclerotium bataticola.

G	Е	N	E	т	1	С	s
---	---	---	---	---	---	---	---

			GENETIC
Calcium nutrition in relation to the black shank disease	6806 of 6825	GALLERIA The occurence of polyphenoloxidase in the hemocytes of actively immunized larvae of the greater wax moth, Galleria mellonella.	6510
Control of Cylindrosporium leaf spot disease of Rhus tri- lobath and Shepherdia argentea seedlings.	- 6855	Some effects of X-radiation on larvae of Galleria mello nella.	o- 6541
A new race of Plasmodiophora brassicae affecting badger	6898	Toxins from the entomogenous fungus Metarrhizium anisop I. Production in submerged and surface cultures, and in increasing and organic pictures.	ì
Pathogenicity of Fhacidium abietis.	6911	inorganic and organic nitrogen media.	6618
Control of the charccal root disease of white fir by fal soil fumigation.	.1 6913	Toxins from the entomogenous fungi Metarrhizium anisopl II. Symptoms and detection in moribund hosts.	6619
Biphenyl-resistant citrus green mold reported in Florida	• 6914	GALLSTONES Cholelithiasis causing obstructive jaundice in a Boxer	dog. 7248
Screening sorghum varieties for resistance to the covere kernel smut fungus in Irag.	d 6936	GAME ANIMALS Brucella agglutinins in East African game animals.	7484
	6728	GAME BIRDS Some congenital abnormalities in the beaks and skulls o wildfowl.	of 7343
URAZOLIDONE Amoeba disease of the honey bee, Apis mellifera Linnaeus and an attempt at its chemical control.	6533	A survey and review of parasitic diseases of wild and g birds in Great Britain.	jame 7618
The treatment of infectious sinusitis of turkeys with Fu zolidone.	ra- 7511	GAMMA RAYS Use of insects for their own destruction.	6672
VURNITURE Fumigation of buildings to control the dry-wood termite, Cryptotermes brevis.	7646	GAMTOX Control of pear borer and American plum borer in apple trees.	7024
USARIUM The influence of various nitrogen compounds on sexual reproduction in Hypomyces solani f. cucurbitae.	6699	GASTROENTERITIS The pathogenesis of gastro-enteritis associated with Es richia coli.	sche- 7333
Semeiography of Pusarium wilt of tomato.	6719	Lactogenic immunity to transmissible gastroenteritis of swine.	E 7335
A comparison of Fusarium wilt indices of cotton varietie with root-knot and sting nematodes as predisposing agent	s.	Bacterial gastro-enteritis outbreaks in cats.	7374
	6727	Salmonellosis in slaughterhouses in Israel.	7375
Effects of Meloidogyne spp. and Tylenchorhynchus clayton on pea wilt incited by Pusarium oxysporium f. pisi race		Bacterial gastro-enteritis in cats.	7400
Influence of temperature on rate of growth of five fungu pathogens of turfgrass and on rate of disease spread.		The pathogenesis of gastro-enteritis associated with Es richia coli.	7526
Wilt-incitant Fusarium oxysporum f. carthami present in	6745	GASTROINTESTINAL SYSTEM Recovery of aster yellows from excised organs of insect tors.	t vec- 6770
	6785	Gastrointestinal nematodes in beef yearlings.	7215
Addition of fungal cell-wall components to soil for biological disease control.	6822	Porcine gastric ulcers in the United States0 a review.	7263
Prevention of symptom development of Fusarium wilt of co ton by isolates of a Cephalosporium species.	ot- 6877	GENES Relationship of genes conditioning pathogenicity of	
Effect of fungicides on the respiration of three species soil fungi.	6941	Erysiphe graminis f. sp. hordei on barley. Relationship of the genes conditioning resistance to Er	6828
	6945	siphe graminis f. sp. horder in some varieties of barle used to differentiate races of this pathogen.	
	6954	Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu	ius).
	6956	GENETICS	6880
Relation of seed-borne fungi to boll rots of cotton.	6960	Genetics and cytology of Phytophthora.	6752
Spore germination and carbon metabolism in Fusarium sola i. requirements for spore germination.	ni. 7709	Genetic model for physiologic studies of mechanisms governing development of infection type in wheat stem r	cust. 6876
	7713	The population genetics of the potato cyst-nematode, He odera rostochiensis, mathematical models to stimulate t	he
	ni 7738	effects of growing eelworm-resistant potatoes bred from Solanum tuberosum ssp. andigena.	7100
FUSARIUM OXYSPORUM Effect of SMDC on germination, plant growth, and fusariu wilt incidence of cumin (Cuminum cyminum).	1m 6805	The enteropathogenic effect of Escherichia coli in rabb and pigs.	7324
		Pathogenicity of chlorinated-nitrobenzene-tolerant stra of Hypomyces solani f. cucurbitae race 2.	ins 7713

GEOGRAPHI	
GEOGRAPHY Effects of geographic isolation and host association on evolution of sexuality in Helminthosporium.	the 6835
GEOMETRIDAE The pathology of a nuclear polyhedrosis of Rachiplusia- ou-(Guenee) (Lepidcptera) Noctuidae).	6608
GEOTRICEUM The role of Drosophila melanogaster in th epiphytology Geotrichum, Rhizopus, and other fruit rots of tomato.	of 6716
GERANIUM Differentiation of viruses transmitted from Pelargonium hortorum.	6865
GERM-FREE LIFE Hog cholera is on the way out.	7 14 5
A report of the AVMA mastitis committee. The veterinary profession and programs of milk quality control.	7160
Salmonella problem receives primary attention at AVMA co cil meeting.	oun- 7170
Psoroptic cattle scabies eradication activities for 196	2 <b>.</b> 7193
Granulocytopoiesis in germfree mice.	7251
Prenatal hog cholera infection a potential source of he cholera.	og 7297
Conferences appraise hog cholera eradication efforts.	7319
Evaluation of problems related to introduction of second	darv
specific-pathogen-free (SPP) boars into SPP and Non-SPP herds.	7534
A successful anaplasmosis eradication program.	7552
GHIBBERELLA Pactors affecting resistance of wheat to scab caused by Ghibberella zeae.	6893
GIBBERELLINS Moisture sensitivity, mechanical injury and gibberellin treatment of Beta vulgaris seeds.	6721
GIEMSA External symptoms Giemsa-stainable cell inclusions associated with virus infection in cacti.	6720
GINGER Fusarium yellows and rhizome rot of common ginger.	6945
GLANDS (INSECTS) Morphology of the alimentary canal and associated glands	s of
the mature larva of Achaea janata L. (Lepidoptera, noc- tuidae).	6583
GLASSER S DISEASE Polyserositis-arthritis complex in swine.	7182
GLOBULINS Blood serum protein from mink with aleutian disease.	7185
GLOMERELLA	
Fungitoxicity of sterilized soil inoculated with soil microflcra.	6799
	6799 6808
microflcra. Mycelial protein comparisons of isolates of cucurbit	
microflcra. Mycelial protein comparisons of isolates of cucurbit anthracnose fungi. Production of pectinolytic and cellulolytic enzymes by	6808 6968

GLOSSINIA PALPALIS Infectivity of Trypanosoma rhodesiense to tsetse flies fed through animal membranes. 66 6681 GLECOSE Observations on the utilization of the hexose monophosphate pathway in nematode-infected roots of tomato. 708 7088 Respiratory activity and enzymes for glucose catabolism in fungus spores. 7704 GLUME BLOTCE (WHEAT) Epidemiology of glume blotch of wheat. 6888 GOATS Preliminary biological observations on Linognathus africanus Kellog and Paine with a description of the first in-star nymph (Haematopinidae, Anoplura). 6482 Rift valley fever in calves, goats and pigs. 7194 A condition in the goat resembling swayback in lambs. 7237 First report of Johne s disease in the Sudan. 7268 The effect of Tylosin against experimental and natural infection with Mycoplasma in goats. 7294 Infection of goats with Eimeria spp. of sheep origin. 7610 Acute toxic effects upon livestock and meat and milk residues of dieldrin. 7677 GOITER Congenital goitre in Dorset-Horn lambs. 7542 GOLF COURSES Formation of hydrogen cyanide by the mycelial stage of a fairy ring fungus. 6795 GOMPHRENA Approach graft transmission of Tulare apple mosaic virus between apple and Gomphrena globosa. 6753 GONADOTROPINS A study of the effects of various hormone treatments on the reproductive activity of prepuberal and post-puberal beef heifers and lactating beef cows. 7528 7528 GOTHION Control of boll weevils resistant to chlorinated hydrocarbons. 7074 GRAIN Infection inhibition and germ-tube lysis of three cereal rusts by Bacillus pumilus. 6827 Effect of ronnel upon the adult rice weevil, Sitophilus 7012 oryza. Factors affecting invasion of grains and seeds by Aspergil-lus flavus and effects of the fungus on germination of the 7644 seeds. Germination of cereal, sorghum, and small legume seeds after fumigation with hydrogen phosphide. 7645 Stored-grain insects and their control in New Jersey. 7647 A fumigant vaporizer unit for use in laboratory experiments. 7758 GRANADILLA Two unrelated viruses which cause woodiness disease of passion fruit (Passiflora edulis). 6937 GRANULOCYTOPOIESIS Granulocytopoiesis in germfree mice. 7251 GRANULOMA ANULOMA A non-tuberculous granuloma of the cat associated with an 7550 acid-fast bacillus. A non-tuberculous granuloma of the cat associated with an acid-fast bacillus. 7551

GEOGRAPHY

G	UI	E.	A	P	L	G	S

GRANULOSES Polyhedrosis and granulosis viruses causing single and double infections in the spruce budworm, Choristoneura fumiferana Clemens. 6492
Mortality of the honey bee, Apis mellifera, in colonies treated with certain biological insecticides. 6508
Persistence of a granulosis virus of Pieris brassicae on cabbage leaves. 6517
Hypoproteinemia in a noctuid larva during the course of a granulosis. 6582
Descriptions and characteristics of a nuclear polyhedrosis virus and a granulosis virus of the armyworm, Pseudaletia unipuncta (Baworth) (Lepidoptera, Noctuidae). 6646
Synergism between two viruses of the armyworm, Pseudaletia unipuncta (Haworth) (Lepidoptera, Noctuidae). 6647
Breeding Pieris brassicae apparently free from granulosis virus. 6670
GRAPEFRUIT Effect of rootstock on the incidence of impietratura-dis- eased grapefruit fruits. 6846
Decline of grapefruit trees in relation to citrus nematode populations and tree recovery after chemical treatment. 7106
401070
GRAPES Resistance to powdery mildew in grapevines related to osmotic value and associated factors. 6756
Control of the grape leaf folder in California. 7064
DDT deposits on grapes as affected by growth and weathering. 7682
Parathion and EPN residue studies on Concord grapes. 7683
Inhibition of enzymes by the anthocyanin malvidin-3-monoglu- coside. 7730
GRAPHOLITHA Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 6988
GRASS SICKNESS Recovery from grass sickness. 7306
Recovery from subacute grass sickness. 7520
GRASS TETANY Three methods for controlling grass tetany in cattle and sheep. 7202
GEASSES Evidence of the oversummering of the greenbug in the Texas panhandle. 6516
Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745
The resistance of Zea mays to Puccinia graminis. 6794
Heterothallism in Pyrenophora teres. 6809
On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Hoplolaimidae), a phytoparasitic nematode in the Punjab. 7096
Paraquat for selective control of range weeds. 7125
The mode of action of diphenamid (N, N-dimethyl 2, 2-di- phenylacetamide) in plants. 7126
GRASSHOPPERS Bacteria of grasshoppers of western Canada III. Frequen- cy of occurrence, pathogenicity. 6499
Schizogregarine infection in grasshoppers. 6500
Bacteria of grasshoppers of western Canada I. The entero- bacteriaceae. 6501
Bacteria of grasshoppers of western Canada Ii. The

Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families. 6503 The bacterium Coccobacillus acridiorum d Herelle Its taxonomic position and status as a pathogen of locusts and grasshoppers. 6504 The isolation of a polyhedrosis virus from a grasshopper. 6547 GREEN MOLD (CITRUS) Biphenyl-resistant citrus green mold reported in Florida. 6914 GREENHOUSE CULTURE REENHOUSE CULTURE Inoculation and rust development on peanuts grown in the 6811 Potentilla species as hosts for Phytophthora fragariae. 6824 GRISEOFULVIN Parafilaria multipapillosa in the horse. 7320 Griseofulvin in the treatment of bovine ringvorm. 7628 GROWTH FACTORS Influence of Pratylenchus penetrans alone and in combination with Verticillium albo-atrum on growth of 6707 peppermint. Influence of heat-labile components of the raspberry mosaic virus complex on growth and yield of red raspberries. 6724 Effect of biotin on growth and sporulation of Verticillium albo-atrum. Factors affecting growth, sporulation, pathogenicity, and dissemination of Leptosphaerulina briosiana. 64 6804 Effects of Ustilago avenae on growth of two oat varieties 6832 Relation of decomposing plant residues to root growth of alfalfa. 6840 alfalfa. The effect of dapple apple and stem pitting on apple tree growth and yields in New Hampshire over a fourteen-year period. 6868 Effects of sodium fluoride on growth of some pathcgenic 6943 fungi. Growth inhibition of Phytophthora cinnamomi by soil 6946 diffusates on agar medium. Influence of light on growth of Aspergillus restrictus in 6957 agar culture. 7274 Zinc bacitracin and chick growth. GRUBS Small amounts of insecticides effective in controlling grubs of the Japanese beetle. 7105 GUAR 6918 Three diseases of quar. GUINEA PIGS Exposure of white mice and guinea pigs to the nuclear-polyhedrosis virus of the cabbage looper, Trichoplusia ni 6545 Response of rabbits and guinea pigs to vesicular stomatitis virus. 7217 Groundnut toxicity as the cause of exudative hepatitis (oedema disease) of guinea-pigs. 7455

Eistopathology of guinea pigs with cholesterol-induced anemia. 7560 House fly pupation under baseboards. 7575 7583

Control of Myocoptes musculinus on guinea pigs.

HABEL TESI		
HABEL TEST Potency tests of sempyle-type rabies vaccines of nervous tissue origin for use in animals.	; 7283	virus complex on growth and yield of red raspbe
HABITATS The black flies (Diptera0 Simuliidae) of western Massa-		An investigation of thermal inactivation of alf virus.
chusetts.	6457	Hydrothermal and hygrothermal inactivation of M fructicola and Rhizopus stolonifer spores.
Some effects of age, preimaginal habitat, and adult food susceptibility of boll weevil to certain insecticides.	6983	Heat activation of different strains of tobacco infection on varieties of beans (Phaseolus vulg
HAEMATOBIA		
Preliminary report on the larval development of the horr fly, Haematobia irritans, in feces from cattle given fra tions of a commercial preparation of Bacillus thuringier sis.	ic- i-	Heat therapy of bean rust. Effect of heat treatment of sugarcane for contr ctunting diseases (RSD) on spread of messio
515.	6532	stunting disease (RSD) on spread of mosaic.
HAEMATOPINUS Cattle lice eradication studies- A-3-year evaluation.	H] 7230	ELICOPTERS Chemical control of bacterial blights of dry fi Michigan by foliage sprays applied by ground an ment.
HAEHONCHOSIS The anthelmintic efficiency of Haloxon against the adult and immature stages of the gastro-intestinal strongyles Nigerian Zebu cattle.		ELICOTYLENCHUS INDICUS On Helicotylenchus indicus Siddiqi, 1963 (Nemat Hoplolaimidae), a phytoparasitic nematode in th
HAEMONCHOS	70(14	nopiolaimilae,, a phytopalasicie nemacode in ch
Blood loss caused by Haemonchus contortus in sheep.	7216 H	ELICOTYLENCHUS THORNEI Helicotylenchus thornei n sp (Nematoda, Hoplola
HAEMOPHILUS Haemophilus gallinarum - Intraflock spread.	7559	from a tomato plant field in Ludhiana, Punjab.
	HI	BLIOTHIS
HAIRY ROOT (ROSA) Hairy root (Agrobacterium rhizogenes) of field roses.	6829	On Nosema heliothidis Lutz and Splendor, a micr parasite of Heliothis zea (Boddie) and Heliothi viruscens (Fabricus) (Lepidoptera, Phalaenidae)
HAIRY VETCH Mortality factors for the vetch bruchid, Bruchus brachialis.	7000	ELIOTHIS ZEA The potential role of a feeding stimulant used tion with the nuclear polyhedrosis virus of Hel
Evidence for a difference in toxicity between common and hairy vetch seeds for chicks.	7687	Silicon content of intact nuclear polyhydra fro earworm, Heliothis zea.
HALICTINAE Nests and social behavior of halictine bees of India (Hy menoptera, Halictidae).	- 6486	Effects of age on mortality of Heliothis zea an virescens larvae exposed to a nuclear polyhedro
HALO BLIGHT (BEANS)		
Sources of resistance to halo blight in Phaseolus vulgaris.	6698	A cytoplasmic polyhedrosis virus, Smithiavirus rae sp. n. of the pink bollworm, pectinophora g (Saunders).
Chemical control of bacterial blights of dry field beans		
Michigan by foliage sprays applied by ground and air equ ment.	6881	The effects of chemical insecticides and insect vants of a Heliothis nuclear polyhedrosis virus
HALO BLIGHT (OATS) Free amino acid and amide content of tobacco and oats in ted by wildfire and halo blight bacteria.	fec- 6851	Effects of temperature on mortality of Heliothi exposed to sublethal doses of a nuclear polyhed
HANTHOMONAS HEDERAE Bacterial spot of ivy caused by Xanthomonas hederae		The relation of pH to the activity of inclusion a Heliothis nuclear polyhedrosis.
(Arnaud, 1920, Dowson 1939, in New Zealand.	6740	On Nosema heliothidis Lutz and Splendor, a micr
HAUSTOBIUM Electron microscopy of the sheath surrounding the hausto of Erysiphe graminis.	orium 7711	parasite of Heliothis zea (Boddie) and Heliothi viruscens (Pabricus) (Lepidoptera, Phalaenidae)
HAWAII		Laboratory technique and apparatus for testing applied as dusts.
Pathogenicity, vitamin nutrition, and cultural character tics of isolates of Phytophthora parasitica from carnati		A feeding stimulant to increase effectiveness o
and other hosts in hawaii.	6768	field test with, a nuclear polyhedrosis virus o
An evaluation of atrazine, simazine, monuron and diuron ten Hawaiian sugar cane plantations.	on 7132	Thermal inhibition of certain polyhedrosis viru
HAY Residues in established alfalfa treated with granulated phorate (Thimet) and their effect on cattle fed the hay.	7667	Artificial medium for rearing some lepidopterou insects.
	, 307	Field evaluation of Sevin as an insecticide for
HEAD SMUT (CORN) Suppression of corn head smut by in-furrow applications pentachloronitrobenzene.	of 6747	vegetables in New Jersey. Observations on soybean insects in maryland.
	0147	
HEAT Thermal inhibition of certain polyhedrosis virus disease	es. 6649	Field tests with various insecticides for the c Lygus bugs and the corn earworm on lima beans.
Influence of heat-labile components of the raspberry mos	aic	

virus complex on growth and yield of red raspberries. 6724 investigation of thermal inactivation of alfalfa mosaic 6817 virus. Hydrothermal and hygrothermal inactivation of Monilinia fructicola and Rhizopus stolonifer spores. 6912 Heat activation of different strains of tobacco mosaic virus infection on varieties of beans (Phaseolus vulgaris). 6970 Heat therapy of bean rust. 6974 Effect of heat treatment of sugarcane for control of ratoon stunting disease (RSD) on spread of mosaic. 6981 LICOPTERS LICOPTERS Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equip-6881 ICOTYLENCHUS INDICUS On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Hoplolaimidae), a phytoparasitic nematode in the Punjab. 7096 LICOTYLENCHUS THORNEI Helicotylenchus thornei n sp (Nematoda, Hoplolaiminae) from a tomato plant field in Ludhiana, Punjab. 7091 LIOTHIS On Nosema heliothidis Lutz and Splendor, a microsporidian parasite of Heliothis zea (Boddie) and Heliothis viruscens (Fabricus) (Lepidoptera, Phalaenidae). 65 6568 LIOTHIS ZEA The potential role of a feeding stimulant used in combina-tion with the nuclear polyhedrosis virus of Heliothis. 6479 Silicon content of intact nuclear polyhydra from the corn earworm, Heliothis zea. 6525 Effects of age on mortality of Heliothis zea and heliothis virescens larvae exposed to a nuclear polyhedrosis virus. 6555 A cytoplasmic polyhedrosis virus, Smithiavirus pectinopho-rae sp. n. of the pink bollworm, pectinophora gossypiella (Saunders). 65 6556 The effects of chemical insecticides and insecticidal adju-vants of a Heliothis nuclear polyhedrosis virus. 6557 Effects of temperature on mortality of Heliothis zea larvae exposed to sublethal doses of a nuclear polyhedrosis virus. 6558 The relation of pH to the activity of inclusion bodies of a Heliothis nuclear polyhedrosis. 66559 On Nosema heliothidis Lutz and Splendor, a microsporidian parasite of Heliothis zea (Boddie) and Heliothis viruscens (Fabricus) (Lepidoptera, Phalaenidae). 6! 6568 Laboratory technique and apparatus for testing viruses applied as dusts. 6596 A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothis 6597 Thermal inhibition of certain polyhedrosis virus diseases. 6649 Artificial medium for rearing some lepidopterous corn 7007 insects. Pield evaluation of Sevin as an insecticide for pests of vegetables in New Jersey. 7010 Observations on soybean insects in maryland. 7051 Field tests with various insecticides for the control of 7066

PAGE 108

HABEL TEST

HERBICIDES

BELBINTHIASIS Use of irradiated vaccines increasing.	7162	HEPATITIS Hepatitis cysticerosa causing sudden death in a pig. 7405
The use of Thiofuradene as a growth stimulant and anthe mintic in the production of pork in the Bahamas.	el- 7302	HEPTA-5-METHYLBENZIMIDAZOLE, 2- The effect of 2 hepta-5-methylbenzimidazole and hydrochloric acid on the growth of microflora found on poultry carcasses.
The zoonosis of animal parasites in Iraq. IV. Some unuar al lesions associated with Opisthorchis tenuicollis in tion.		HEPTACHLOB
The anthelmintic activity of a phenothiazine-phenzidol	o mix-	Problems in the control of mint insects. 7009
ture compared with that of thiabendazole in lambs in Ke	enya. 7595	Control of root maggots in swede turnips in Newfoundland with heptachlor and aldrin and the effect on parasites and overwintering pupae. 7039
The role of selected management systems in the control sheep parasites.	of 7642	Soil treatments in lieu of spraying for plum curculio control in peach orchards. 7063
BELMINTHOSPORIUM Monogenic chlorotic lesion resistance to Helminthospor turcicum in corn seedlings.	ium 6767	- Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California. 7065
Effects of geographic isolation and host association of evolution of sexuality in Belminthosporium.	n the 6835	Further studies on control of the clover root borer in Virginia. 7080
Pungistatic effects of a soil bacterium on conidia and hyphae of Helminthosporium sativum.	6842	A comparison of the toxicity of insecticides for the control of corn earworm on sweet corn. 7084
Antibiotic production by Streptomyces sp. in corn rhizosphere.	6864	Small amounts of insecticides effective in controlling grubs of the Japanese beetle. 7105
Uptake of Helminthosporium victoriae toxin by oat tiss	ue. 6889	Experiments on control of the sugar-beet wireworm in southern California bean fields. 7111
Maduromycosis of the bovine nasal mucosa.	7479	Insecticidal baits for control of the imported fire ant, Solenopsis saevissima richteri. 7571
Spore germinability in soil as an inherent character of Cochliobolus sativus.	f 7706	Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in the
ELMINTHOSPCEIUM TERES Studies on the nature of barley resistance to Helmintho	o-	laboratory. 7576
sporium teres.	6780	The excretion of dieldrin, DDT, and heptachlor epoxide in milk of dairy cows fed on pastures treated with dieldrin, DDT, and heptachlor. 7668
The role of leaf microflora on epidemiology of the nor- leaf blight of corn.	thern 6697	Heptachlor residues on corn stover in relation to dairy cattle feeding. 7670
HEMAGGLUTINATION-INHIBITION TEST Hemagglutination test for diagnosis of hog cholera.	7196	The effect of soil treatments of chlordane or heptachlor on the flavor of turnips, parsnips, and carrots. 7671
HEMIPTERA The higher classification of the family Rhopalidae (Hen tera) together with a revision of the genus Arhyssus S (Rhopalidae0 Hemiptera).		Epoxidation of aldrin and heptachlor in soils as influenced by autoclaving, moisture, and soil types. 7673
Flow relationships for hemipterous stylets.	6593	HEPTACHLOB EPOXIDE The excretion of dieldrin, DDT, and heptachlor epoxide in
IEMITHEA TRITONARIA	0393	milk of dairy cows fed on pastures treated with dieldrin, DDT, and heptachlor. 7668
Bionomics of Hemithea tritonaria Walker (Lepidoptera, Geometridae), a pest of Moghania macrophylla (Willd) O Ktze.	6591	Heptachlor residues on corn stower in relation to dairy cattle feeding. 7670
HEMOLYMPH NODES Histologic and electron microscopic studies of agranule and hemal and hemolymph nodes in cattle.	ocytes 7545	HEBBICIDE RESIDUES Some factors that influence the deactivation of atrazine in soil. 7654
HEMOLYSINS		Dipyridylium residues in an aquatic environment. 7662
The effect of staphylococcal toxins on rnminant erythro treated with diffusable substances formed by corynebact		HEBBICIDES Darkness and the activity of diquat and paraquat on tomato, broad bean and sugar beet. 7119
HEBOLYTIC ANBRIA Histopathology of gninea pigs with cholesterol-induced anemia.	7560	A study of factors influencing the effectiveness of diquat (101 -ethylene-202 -dipyridylium dibromide) for potato vine
HEMOPHILUS Polyserositis-arthritis complex in swine.	7182	killing. 7127 Weed science - revolution in agricultural technology.
HEMORRHAGE		7131
Subendocardial haemorrhage in rinderpest-infected catt	le. 7495	The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7657
HEMOBEHAGIC TEACHEITIS Fowlpox virus from chickens with hemorrhagic tracheiti:	5. 7381	Decomposition of 2,4-D and related phenoxyacetic acids by an Arthrobacter species. 7658
EENDERSONULA Pathological anatomy of walnut branches infected by Hendersonula toruloidea.	6853	The mechanism of the interaction between soil organic matter and herbicide toxicity and the influence of pH on herbicide phytotoxicity. 7698

Physiological and metabolic changes induced by lethal con-

# HEREDITARY DISEASES

HEREDITARY DISEASES	
centrations of 2,4-D in the cocklebur (Xanthium spp.).	7705
HEREDITARY DISEASES Hereditary retinal atrophy in the poodle.	7238
BEREDITY Inheritance of stem rust resistance in two wheat variet Marquis and Kota.	ies, 6706
Inheritance of resistance in pepper to bacterial spot.	6725
Nature and inheritance of resistance to Albugo candida	in
radish. Heritable resistance to warfarin in rats.	6965 7693
Tolerance to chlorinated nitrobenzenes in Hypomyces sola f. cucurbitae and its mode of inheritance.	ani 7738
HEREFORD CATTLE	1130
Studies on the metabolism and residues of P32-labeled Delnav in a Hereford steer.	7676
BERNIA Rupture of the bladder in a calf.	7287
Unusual cerebellar conditions in pigs. Part 1. Cerebella herniation associated with vitamin A deficiency.	r 7326
A case of traumatic uterine rupture in a heifer.	7399
HERPES SIMPLEN Aujesky s disease in dogs.	7205
BETERAKIS Efficacy of micronized phenothiazine against Heterakis g linae in chickens.	jal- 7629
HETERODERA ROSTOCHIENSIS The population genetics of the potato cyst-nematode, Het odera rostochiensis, mathematical models to stimulate th effects of growing eelworm-resistant potatoes bred from Solanum tuberosum ssp. andigena.	ter- ne 7100
Observations on periodicity of hatching of eggs of the p to cyst-nematode, Reterodera rostochiensis Woll.	pota- 7110
HETEROPTERA Neurosecretory system of Heteroptera (Hemiptera) and a role of the aorta as a neurohaemal organ.	6520
Stored-grain insects and their control in New Jersey.	7647
HEXACHLOROBEWZEWE Time of year of infection of winter wheat by the dwarf b fungus.	ount 6862
EEXACHLOROPHENE Disinfection of tomato seed infested with Xanthomonas ve catoria.	esi- 6797
HEXOSE FHOSPHATES Observations on the utilization of the hexose monophosph pathway in nematode-infected rocts of tomato.	nate 7088
EIBERNATION Evidence of the oversummering of the greenbug in the Te: panhandle.	tas 6516
Field disease cycle of peppermint rust.	6773
Survival of Kanthomonas vesicatoria in soil and diseased tomato plants.	1 6854
Overwintering of stripe rust in winter wheat in Montana.	6904
Control of root maggots in swede turnips in Newfoundland with heptachlor and aldrin and the effect on parasites a overwintering pupae.	
A three-year overwintering study of the spotted alfalfa aphid.	7061

HIPPODAMIA CONVERGENS Biology and evaluation of certain predators of Therioaph maculata (Buckton).	is 6628
HISTOCHEMISTRY Histochemical studies of larval Macracanthorhynchus inge and certain spirobolid millipeds.	ns 6495
HI <b>STOLOGY</b> Pathological histology of tumors induced in oleander by Pseudomonas savastanoi.	6967
The histological relationship of resistance to the citru nematode in certain citrus rootstocks.	s 7114
Maduromycosis of the bovine nasal mucosa.	7479
Histologic and electron microscopic studies of agranuloc and hemal and hemolymph nodes in cattle.	ytes 7545
Microscopic study of bovine endometrium.	7751
HOG CHOLERA Hog cholera is on the way out.	7145
Hog cholera Breaks influenced by bacterial infection.	7219
Conferences appraise hog cholera eradication efforts.	7319
The enteropathogenic effect of Escherichia coli in rabbi and pigs.	ts 7324
Status of inactivated vaccines for hog cholera.	7352
Swine fever in two progeny testing stations.	7447
Breakdowns in swine-fever vaccinated herds.	7496
HOG CHOLERA BREAKS Hog cholera Breaks influenced by bacterial infection.	7219
HOG CHOLEBA VIEUS Susceptibility to hog cholera may be related to breed.	7179
Hemagglutination test for diagnosis of hog cholera.	7196
Prenatal hog cholera infection a potential source of ho cholera.	g 7297
Cerebellar hypoplasia, hypomyelinogenesis, and congenita tremors of pigs, associated with prenatal hog cholera va nation of sows.	1 cci- 7298
HOLCOCERA PULVEREA Incidence of predators and feasibility of their control through hand picking in lac cultivation on bush types of hosts.	7050
HONDUBAS Studies on ascospore production by Mycosphaerella musico in Honduras.	la 6930
HONEY Surveys for nosema disease of honey bees in California.	7021
HONEYCOMBS Occurrence of mite Varroa jacobsoni Oudemans in brood cells of homey bee, Apis indicaP.	6612
HOPLOLAIMIDAE On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Hoplolaimidae), a phytoparasitic nematode in the Punjab.	7096
HOPLOLAIMINAE Helicotylenchus thornei n sp (Nematoda, Hoplolaiminae) from a tomato plant field in Ludhiana, Punjab.	7091
HOPLOLAIMUS INDICUS On a nematode species of the genus Hoplolaimus Daday, 1905, from a citrus plant in the Punjab.	7094

# HYDROGEN PEROXIDE

		LIDROGEN /	FERUALI
HOPS Starvation tests with larvae of the cinnabar moth.	7043	HUMAN ENGINEERING Control of the tropical rat mite.	6678
HORDEDM Paraguat for selective control of range weeds.	7125	HUMAN NUTRITION Salmonellosis in animals threatens man.	7467
HORMONES Pregnancy hormones and brucellacidal activity in bovine	3	HUMANS Insecticides in human fat in New Zealand.	7663
Serum.	7213	The safe use of modern pesticides. 2.	7760
Vitamin D3 and ovine ring womb.	7257	HUMICOLA	
Effect of melatonin on thyroid hormone secretion rate a feed consumption of female rats.	and 7444	Effect of the soil carbon nitrogen ratio on soil fungi	6778
A study of the effects of various hormone treatments or reproductive activity of prepuberal and post-puberal be heifers and lactating beef cows.		HUMIDITY Moisture sensitivity, mechanical injury and gibberellin treatment of Beta vulgaris seeds.	6721
HORSES Epizootiology of equine viral rhinopneumonitis.	7286	Hydrothermal and hygrothermal inactivation of Monilinia fructicola and Rhizopus stolonifer spores.	6912
Recovery from grass sickness.	7306	The effect of grain moisture upon development of the right	
Nigropallidal encephalomalacia in the horse.	7307	weevil in green corn.	7049
Parafilaria multipapillosa in the horse.	7320	Effect of temperature and humidity on the fecundity and velopment of Cadra cautella Wlk. in wheat.	de- 7071
Current disease problems of horses.	7393	A study of factors influencing the effectiveness of dig	uat
To veterinary surgeons in equine practice Survey of us ine infections.	ter- 7430	(101 -ethylene-202 -dipyridylium dibromide) for potato killing.	vine 7127
Cardiovascular disease in horses.	7431	Factors affecting invasion of grains and seeds by Asper- lus flavus and effects of the fungus on germination of	
Uterine infections in mares1964 survey.	7432	seeds.	7644
Studies on equine respiratory virus.	7466	Influence of grain moisture and storage temperature on effectiveness of malathion as a grain protectant.	the 7649
Transmission of equine piroplasmosis by Dermacentor nit Neumann.	7483	Epoxidation of aldrin and heptachlor in soils as influe by autoclaving, moisture, and soil types.	7673
Colitis X of horses.	7485	Effects of relative humidity and temperature on the deg tion of peanut sugar and oil by Aspergillus flavus.	rada- 7714
Experimental Trypanosoma congolense infection in a hors	se. 7519	HYALOMMA AEGYPTIUM	
Recovery from subacute grass sickness.	7520	Mechanism of food transport in cattle-tick, Hyalomma ae tium.	gyp- 6562
Treatment of Strongyles in horses.	7525	HYDRACRYLIC ACID BETA-LACTONE The relative value of formalin and betapropiolactone as	in-
Laparo-cystotomy in a gelding.	7554	activating agents for Newcastle disease vaccine.	7231
Parafilaria multipapillosa in the horse.	7626	Duration of immunity trials with betapropiolactone-inac	
Toxicity of organic phosphorus insecticides to horses.		ted Newcastle disease virus vaccines.	7461
Toxicolcgical aspects of 2,2-dichlorovinyl dimethyl	7694	HYDRAZINE Toxicity of some hydrazine tranquillisers to dogs.	7446
phosphate (DDVP) in cows, horses, and white rats.	7699	HYDROCARBONS The effectiveness of chlorinated hydrocarbon insecticide	e
HOST INDEXING (PLANTS) The resistance of Zea mays to Puccinia graminis.	6794	mixtures for control of resistant and susceptible boll weevils.	6986
Identification of the viruses affecting commercial vari of pepper (Capsicum annum) in New Jersey.	ities 6925	Control of boll weevils resistant to chlorinated hydrocarbons.	7074
A virus infecting maize in South Dakota.	6927	HYDROCHLORIC ACID The effect of 2 hepta-5-methylbenzimidazole and hydroch	
HOST PLANTS Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia		acid on the growth of microflora found on poultry carca	7652
striiformis.	6903	HYDROCYANIC ACID Formation of hydrogen cyanide by the mycelial stage of a	
HOST RANGE Studies on the host range and pathogenicity of Erysipho polygoni.	e 6924	fairy ring fungus. Effect of methyl bromide and hydrocyanic acid fumigatio	6795 n on
HOT WATER TREATMENT (PLANTS)		the germination of flax seeds.	7650
Hydrothermal and hygrothermal inactivation of Monilinia fructicola and Rhizopus stolonifer spores.	a 6912	HYDROGEN Effect of soil exchangeable hydrogen and calcium ratio a the resulting pH on infection of citrus fibrous roots b	
HUMAN DISEASES Rabies in dogs and man sharply reduced.	7164	Phytophthora parasitica.	7747
A note on rabies and euthanasia in man.	7469	HYDROGEN PEROXIDE Inhibition of fungi by culture media previously exposed light	to 6954
Development of a synthetic medium for aseptic rearing o larvae of Stomoxys calcitrans (L.).	of 7567	light.	0954

and pigs.

HYDROGEN-ION CONCENTRATION HYDROGEN-ION CONCENTRATION The mechanism of the interaction between soil organic matter and herbicide toxicity and the influence of pH on herbicide phytotoxicity. 7698 The macerating enzyme of Rhizoctonia solani. 7701 Effect of soil exchangeable hydrogen and calcium ratio and the resulting pH on infection of citrus fibrous roots by Phytophthora parasitica. 7747 HYDROLYSIS The microbial hydrolysis of cellulose and some factors af-fecting the production of cellulase in a submerged culture of Alternaria sp. 7718 HYDRONEPHROSIS A case of retention pyonephrosis in a Corqi bitch. 7419 HYDROPHILIDAE Taxonomy and biology of the subfamily Berosinae of North and Central America and the West Indies (Coleoptera0 6471 Hydrophilidae. HYLASTINUS Further studies on control of the clover root borer in Virginia. 7080 HYLENYA An unidentified fungus parasitic on the seed-corn maggot. 6933 HYMENOPTE RA The venom of the mud-dauber wasp Sceliphron caementarium. 6620 First records of hymenopterous parasites of yellow scale of cotton Cerococcus hibisci Green (Homoptera, Coccidae). 6629 Stored-grain insects and their control in New Jersey. 7647 HYPERA A nematode parasite of the alfalfa weevil (Hypera postica 6614 (Gy11.)). Effects of low temperature on the survival of the alfalfa weevil from Alberta and Utah. 7047 HYPERKERATOSIS Groundnut toxicity. 7264 Groundnut toxicity. 7323 Factors other than groundnut relating to turkey X di-7477 sease . HYPHAE Fungistatic effects of a soil bacterium on conidia and hyphae of Helminthosporium sativum. 6842 HYPOCOTYLS Infection of seedling cotton hypocotyl by an isolate Rhizoctonia solani. 6781 HYPODERMA Systemic insecticides for cattle grub control. 7574 Feed lot tests with ronnel for control of cattle grubs. 7586 HYPOMAGNESEMIA A field trial of a heavy magnesium pellet. 7558 HYPONYCES The influence of various nitrogen compounds on sexual reproduction in Hypomyces solani f. cucurbitae. 6699 Pathogenicity of chlorinated-nitrobenzene-tolerant strains of Hypomyces solani f. cucurbitae race 2. 7713 Tolerance to chlorinated nitrobenzenes in Hypomyces solani f. cucurbitae and its mode of inheritance. 77 7738 HYPONYELINOGENESIS

Cerebellar hypoplasia, hypomyelinogenesis, and congenital tremors of pigs, associated with prenatal hog cholera vacci nation of sows. 7298 HYPOPLASIA Cerebellar hypoplasia, hypomyelinogenesis, and congenital tremors of pigs, associated with prenatal hog cholera vaccination of sows. 7298 Unusual cerebellar conditions in pigs. Part II. Cerebellar Hypoplasia in pigs. 7325 HYPOXANTHINE POINDTHINE Release of ribonucleic and amino acids by Phytophthora. 7745 HYTAKEROL. Metastatic calcification induced by hytakerol in chickens infected with Plasmodium gallinaceum. 7427 TERI VIRUS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes. 6683 ILEX A fungus leafspot of english holly (Ilex aquifolium). 6714 Systemic insecticides for control of scales, leaf miners, 7059 IMMUNITY Natural immunity of the bug Triatoma infestans to the protozoan Trypanosoma rangeli. 6666 Effect of revaccination on distemper antibody levels. 7368 Duration of immunity against Newcastle disease in chicks vaccinated with beta-propiolactone inactivated vaccine. 7390 Immunity to Fasciola hepatica infection in albino rats vac-cinated with irradiated metacercariae. 76 7638 IMMUNIZATION The occurence of polyphenoloxidase in the hemocytes of actively immunized larvae of the greater wax moth, Galleria mellonella. 6510 A method for inoculation of mosquito larvae. 6514 Inoculation and rust development on peanuts grown in the greenhouse. 6811 Theoretical relationships between inoculum potential and disease severity based on a study of the variation in vi lence among isolates of Verticillium albo-atrum. 6892 Limitations of lungworm vaccine. 7153 Use of irradiated vaccines increasing. 7162 Anaplasmosis vaccine announced. 7168 Wisconsin eradicates brucellosis. 7176 First poliomyelitis epizootic in large primates under study. 7178 7197 Cockers and labradors more resistant to distemper. African horse-sickness. 7200 The growth of rabies virus in tissue culture and its use as a living attenuated vaccine for domestic animals. 7224 7258 A vaccine for anaplasmosis. Evaluation of bacterins for control of swine abscesses. 7276 Vaccination against Johne s disease. 7288 Vaccination of puppies. 7303 Studies on an experimental vaccine for prophylaxis of 7314 shipping fever. Conferences appraise hog cholera eradication efforts. 7319 The enteropathogenic effect of Escherichia coli in rabbits 7324

INSECT BIOLOGY

Lactogenic immunity to transmissible gastroenteritis of swine. 733.	1 5
Status of inactivated vaccines for hog cholera. 735.	
Studies on myxovirus parainfluenza-3 vaccine for prevention of shipping fever in cattle. 739	1 5
Anthrax vaccination. 740	2
The characterization of a causitive agent of virus pig pneumonia. 741	
Immunologic and epizootiologic studies of epizootic bovine abortion. 742	5 I
Clinical appraisal of an avirulent oral erysipelas vaccine. 749	2 I
Breakdowns in swine-fewer vaccinated herds. 749	6
Observations on pathogenicity and immunogenicity of a cell-culture-modified foot-and-mouth disease virus. 749	1 8
Immunization experiments with lungworm larvae. 759	2 1
IMPIETRATURA (CITRUS) Effect of rootstock on the incidence of impietratura-dis- eased grapefruit fruits. 684	6
IMPIETRATURA (GRAPEFRUIT)	I
Effect of rootstock on the incidence of impietratura-dis- eased grapefruit fruits. 684	6 I
INACTIVATED VACCINES Status of inactivated vaccines for hog cholera. 735	2
INCLUSION BODIES Separation of bacterial spores and parasporal bodies with a fluerocarbon. 648	1 0
Purification of insect virus inclusion bodies with a fluoro carbon. 649	
The susceptibility of the house fly, Musca domestica Linnaeus, to Bacillus thuringiensis var. thuringiensis Berliner. 653	9
On the problem of crystals with rickettsial infections.	9
External symptoms Giemsa-stainable cell inclusions associated with virus infection in cacti. 672	0
INDALONE	
Use of an animal membrane in the evaluation of chemical repellents against the stable fly. 756	8
INDEXING Rapid-index methods for exocortis of citrus. 671	8
INDIA Criconema laterale Khan and Siddiqi, 1963 (Nematoda, Criconematidae), a parasite of citrus plant in the Pun-	
jab. 709	3 I
On Longidorus brevicaudatus (Schuurmans Stekhoven, 1951) Thorne, 1961, a nematode parasite of citrus plants in the Punjab. 709	7
A preliminary report on the occurence of infectious laryngo tracheitis of poultry in India. 751	
INDIANA Problems in the control of mint insects. 700	9
IBDIGESTION Gastric dyspepsia in calves. 733	7
Dyspepsia in calves. 741	1
INDOLEACETIC ACID Inhibition of indoleacetic acid oxidase in tobacco plants infected by Pseudcmonas solanacearum. 690	0
INDUSTRIAL WASTES Oxygen balance in a stream receiving domestic and oil refin ery effluents. 765	

INFECTIOUS BOVINE REINOTRACHEITIS VIRUS The occurrence and distribution in the United Kingdom of antibodies to parainfluenza 3 and infectious bovine rhino- tracheitis viruses in bovine sera. 728	32
INFECTIOUS BRONCHITIS Infectious bronchitis virus typesIncidence in the United States. 735	56
Infectious bronchitis virus- tissue distribution. 735	59
INFECTIOUS BRONCHITIS VIRUS A fluorescent antibody study of infectious bronchitis virus 743	
INFECTIOUS CANINE HEPATITIS A clinician s view of canine virus diseases. 738	86
INFECTIOUS DISEASES Infectivity stability of foot-and-mouth disease virus. 717	73
INFECTIOUS LARYNGOTRACHEITIS A preliminary report on the occurence of infectious laryngo tracheitis of poultry in India. 757	
INFECTIOUS LARYNGOTRACHEITIS VIRUS A preliminary report on the occurence of infectious laryngo tracheitis of poultry in India. 757	
INJURIES Moisture sensitivity, mechanical injury and gibberellin treatment of Beta vulgaris seeds. 672	21
INOCULUM Insects associated with wounds on trees that develop oak wilt. 698	89
INSECT ANATOMY Studies on ovarian structure, function and growth in adult Drosophila pseudo-obscura. 666	61
INSECT BEHAVIOR Nests and social behavior of halictine bees of India (Hy- menoptera, Halictidae). 648	86
Laboratory method for screening compounds as attractants to gypsy moth males. 649	
The effect of foraging behavior of moving honey bee colonic to crops before or after flowering has begun. 652	
Behavioural responses to contact with DDT in Anopheles atroparvus. 65:	31
The biological impact of the checkered beetles (Coleoptera( Cleridae) on populations of Ips bark beetles (Coleoptera0 Scolytidae). 656	
The house cricket, Acheta domesticus, and the house fly, Musca domestica, as a model predator-prey system. 667	13
Observations on the biology of Psorophora cyanescens.	35
INSECT BIOLOGY Taxonomy and biology of the subfamily Berosinae of North and Central America and the West Indies (Coleoptera0 Hydrophilidae. 647	71
Microbial isolations from the mid-gut of Culex tarsalis Coguillett. 65	11
The biological impact of the checkered beetles (Coleoptera( Cleridae) on populations of Ips bark beetles (Coleoptera0 Scolytidae). 656	
Bionomics of Hemithea tritonaria Walker (Lepidoptera, Geometridae), a pest of Moghania macrophylla (Willd) O Ktze. 659	91
Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 699	
Bionomics and control of certain Plusiinae and studies of an associated nuclear polyhedrosis virus. 699	92
Biology of the oak timberworm, Arrhenodes minutus. 708	35

INSECT BREEDING	
Control of Dermatobia hominis in Central America.	7594
INSECT BREEDING Artificial medium for rearing some lepidopterous corn insects.	7007
INSECT CAGES A cage for feeding insects through membranes.	6929
INSECT COLLECTING EQUIPMENT Locality and data labels for insects.	7752
INSECT CONTROL Inactivation by irradiation of spores of Bacillus thuri ensis var. thuringiensis.	ngi- 6506
INSECT DISEASES The incidence of virus diseases in honey bees.	6448
The occurrence of species of the genus Brevibacterium i insects.	n 6463
North American species of Aschersonia parasitic on Aley rodidae.	- 6464
Nosema laphymae n. sp. and the internal structure of th microsporidian spore.	e 6473
Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.	6474
An improved method for the isolation of Streptococcus pluton, and observations on its distribution and ecolog	y. 6484
Bacteria of grasshoppers of western Canada III. Freque cy of occurrence, pathogenicity.	n- 6499
Schizogregarine infection in grasshoppers.	6500
Fungus disease of adult parasite insects caused by Toru nigra (Marpmann).	la 6502
The bacterium Coccobacillus acridiorum d Herelle Its taxonomic position and status as a pathogen of locusts grasshoppers.	and 6504
A method for inoculation of mosquito larvae.	6514
Silicon content of the paraspora crystal of several crytalliferous bacteria.	6527
Pathogenicity of Spicaria rileyi to Pseudoplusia inclu- dens.	6536
The susceptibility of the house fly, Musca domestica Linnaeus, to Bacillus thuringiensis var. thuringiensis Berliner.	6539
The site of action of crystalliferous bacteria in Lepid tera larvae.	op- 6543
A crytalliferous bacterium associated with a blister d sease in the earthworm Eisenia foetida (Savingy).	i- 6546
Further studies on the isolation and crystallization of sect cytoplasmic viruses.	in- 6548
A virus disease of the Indian rhinoceros beetle, Orycte rhinoceros (Linnaeus), caused by a new type of insect virus, Rhabdionvirus oryctes gen. n., sp. n	s 6551
Transovarian transmission of some Thelohania (Nosematid Microsporidia) in mosquitoes of California and Louisian	
On Nosema heliothidis Lutz and Splendor, a microsporidi parasite of Heliothis zea (Boddie) and Heliothis viruscens (Fabricus) (Lepidoptera, Phalaenidae).	an 6568
On the problem of crystals with rickettsial infections.	6569
A microsporidian, Thelohania sp., in Pieris rapae.	6571
Variations in total hemocyte counts as induced by a nosemosis in the cabbage looper, Trichoplusia ni.	6572
Flagellated protozoa (Trypanosomidae) in the honey bee, Apis mellifera, in Australia.	6573

Preliminary laboratory results on the susceptibility of Aedes aegypti (Linnaeus) to Bacillus thuringiensis Ber- liner. 6575
Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera). 6576
Nosema hippodamiae n. sp., a microsporidian parasite of Hippodamia convergens Guerin (Coleoptera, Coccinellidae). 6577
Miscellaneous observations on protozoan infections of Nepa cinnerea Linnaeus including descriptions of two previously unknown species of Microsporidia, Nosema bialoviesianae sp. n. and Thelohania nepae sp.n. 6578
The relation between oxygen consumption and bacterial infec- tion in sawflies. 6580
Beauveria densa, pathogenic for the larvae of Chilo zonellus. 6584
Transmission of tumors in Locusta migratoria Linnaeus by nucleic acid extracted from the tumors. 6586
Bacteria and fungi associated with dead boll weevils (An- thonomus grandis) in a natural population. 6589
Laboratory technigue and apparatus for testing viruses applied as dusts. 6596
Incorporation of radioactive Uridine into the RNA of the lepidopteran Barathra brassicae. 6599
Morphological identification of virus-like particles in the corn leaf aphid, Rhopalosiphum maidis (Fitch). 6607
The pathology of a nuclear polyhedrosis of Rachiplusia- ou-(Guenee) (Lepidoptera) Noctuidae). 6608
Invertebrate pathology, cytology, and development. 6610
Occurrence of mite Varroa jacobsoni Oudemans in brood cells of honey bee, Apis indicaP. 6612
Toxins from the entomogenous fungus Metarrhizium anisopliae I. Production in submerged and surface cultures, and in inorganic and organic nitrogen media. 6618
Toxins from the entomogenous fungi Metarrhizium anisopliae. II. Symptoms and detection in moribund hosts. 6619
Susceptibility of nine insect species to infection by Ba- cillus thuringiensis war. thuringiensis. 6626
A substance in some commercial preparations of Bacillus thuringiensis var. thuringiensis toxic to sawfly larvae. 6631
Thelohania pristiphorae sp. n., a microsporidian parasite of the larch sawfly, Pristiphora erichsonii (Hymenoptera
Tenthredinidae. 6632
Possible virus disease in the European red mite. 6637
Epizootiology of a disease of the desert locust, Schistocerca gregaria (Forskal), caused by nonchromogenic strains of Serratia marcescens Bizio. 6644
On the pathogenesis of simultaneous virus infections in in- sects. 6650
Oxygen concentration in larval hemolymph of the Japanese beetle, Popillia japonica, infected with Bacillus
popilliae. 6659
A newly described virus of the winter moth, Operophthera brumata Hiibner (Lepidoptera, Geometridae). 6660
Natural immunity of the bug Triatoma infestans to the pro- tozoan Trypanosoma rangeli. 6666
Polyhedroses in neuropterous insects. 6684
INSECT ECOLOGY An improved method for the isolation of Streptococcus
pluton, and observations on its distribution and ecology. 6484

PAGE 114

6453

6498

INSECT EGGS

ECT EGGS viruslike transovarian factor affecting morphology in spi-6449 der mites.

An artificial ovipositional site for some Heteroptera that insert their eggs into plant tissue. 66 6627

INSECT FLIGBT

The flight range of the European chafer.

The horizontal and vertical distribution of flying insects near artificial windbreaks. 646 6462

#### INSECT GENETICS

Selection response and genetics of parathion resistance in the Pacific spider mite, Tetranychus pacificus. 6667

Effects of X-rays, tryptophan metabolites, and eye color mutants on the tumor-suppressor system in Drosophila melan 6668 ogaster.

Correlation between sperm redundancy and chiasma frequency. 6669

Genetic variation in a two-spotted spider mite, Tetranychus urticae, population plateaued by directed selection (Acarina, Tetranychoidae). 6673

Exchange and secondary nondisjunction in females of Droso-phila melanogaster homozygous for X chromosome inversions. 6674

Colonization and production of a dieldrin-resistant strain of Anopheles quadrimaculatus say. 6677

INSECT BISTOLOGY

- Histological observations on the development of crystalline inclusions of the rickettsial disease of Tipula paludosa 6550 Meigen.
- INSECT MIGBATION Long-range aerial transport of the harlequin bug and the greenbug into Minnesota. 6456
- INSECT MOBPBOLOGY

SECT MOBPBOLOGY A viruslike transovarian factor affecting morphology in spi-6449 der mites.

Mechanism of locust jumping.

The influence of environmental and nutritional factors on 6519 growth and caste determination of female honey bees.

Morphological and physiological distinction between two pop-ulations of the peach-potato aphid. 6523

A detailed morphological study of the external and internal genital organs of female Melanagromyza obtusa (Malloch), a serious pest of Cajanus indicus L. (Agromyzidae, Diptera). 6560

Morphology of the alimentary canal and associated glands of the mature larva of Achaea janata L. (Lepidoptera, noctuidae). 6583

Invertebrate pathology, cytology, and development. 6610

INSECT MUTATION

Effects of X-rays, tryptophan metabolites, and eye color mutants on the tumor-suppressor system in Drosophila melan ogaster. 6668

A preliminary report on mutations in the house fly. 6676

INSECT NUTBITION

Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iV. responses of D cucurbitae larvae to vitamin deficient 6512 diets.

Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iII. Development of a synthetic medium for D cucurbitae lar-

The influence of environmental and nutritional factors on growth and caste determination of female honey bees. 6 6519

Effects of soil insecticides on apple trees and resulting effect on mite nutrition. 7053

Effects of soil insecticides and absorbents on plant sugars and resulting effect on mite nutrition. 7054

INSECT PESTS

Preliminary biological observations on Linognathus africanus Kellog and Paine with a description of the first in-star nymph (Haematopinidae, Anoplura). 6482

Bionomics of Bemithea tritonaria Walker (Lepidoptera, Geometridae), a pest of Moghania macrophylla (Willd) O 6591 Ktze-

Occurrence of Eublemma silicula Swinhoe as pest of bajra 7023 in Delhi.

Water tensions in plants, an entomological approach. 7037 INSECT PETSIOLOGY

Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iII. Development of a synthetic medium for D cucurbitae lar-6513 vae.

The influence of environmental and nutritional factors on growth and caste determination of female honey bees. 6 6519

Neurosecretory system of Heteroptera (Hemiptera) and a role of the aorta as a neurohaemal organ. 6520

Mouthparts of the biting and blood-sucking type in Tanyderidae and Chironomidae (Diptera). 6521

Morphological and physiological distinction between two ulations of the peach-potato aphid. pop-6523

Postembryonic development of the brain in Bombyx mori. 6624

The normal bacterial flora of the alimentary canal of labor-atory stocks of the desert locust, Schistocerca gregaria Forskal. 6643

Studies of water conservation in cockroaches. 6653

- Studies on ovarian structure, function and growth in adult Drosophila pseudo-obscura. 6661
- INSECT POPULATION The responsibilities of veterinary practitioners as to the use of pesticides. 7229
- INSECT BEABING Laboratory studies on the rearing of Aphidius swithi (Hymenoptera, Braconidae) and its parasitism of Acythosi phon pisum (Homoptera, Aphididae).

6528

A laboratory rearing method for Lygus hesperus knight. 6984

Bionomics and control of certain Plusiinae and studies of an associated nuclear polyhedrosis virus. 6992

INSECT REPELLENTS The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana 6639 (Linn.).

Use of an animal membrane in the evaluation of chemical repellents against the stable fly. 7568

Methods for the evaluation of stable fly toxicants and repellents. 7579

- INSECT SUBVIVAL Effect of culm solidness on the survival of the wheat stem 7041 sawfly.
- INSECT TAXONOMY The Culicoides of New Mexico (Diptera, Ceratopogoni-6446 dae). The higher classification of the family Rhopalidae (Hemip-

together with a revision of the genus Arhyssus Stal 6450 (Rhopalidae0 Hemiptera).

A taxonomic study of the genus Cedusa in the New World (Bomoptera0 Derbidae). 6454

The black flies (Diptera0 Simuliidae) of western Massa-

INSECT TEMPERATURE	
chusetts.	6457
Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley.	6466
The aquatic and semi-aquatic Hemiptera of Oklahoma. the Lygaeidae of Oklahoma (Hemiptera).	6468
A preliminary study of the Syrphidae of Oklahoma (Dip- tera0 Syrphidae.	6469
Taxonomy and biology of the subfamily Berosinae of Nort and Central America and the West Indies (Coleoptera0 Hydrophilidae.	ћ 6471
INSECT TEMPERATURE Bffects of temperature on mortality of Heliothis zea la exposed to sublethal doses of a nuclear polyhedrosis vi	
INSECT VECTORS Recovery of aster yellows from excised organs of insect tors.	vec- 6770
Instability of symptoms of potato leaf roll virus.	6800
Reappraisal of transmission of tobacco mosaic virus by sects.	in- 6845
Effect of age of vector and of abdomen punctures on vir transmission.	us 6910
A cage for feeding insects through membranes.	6929
Insects associated with wounds on trees that develop oa wilt.	k 6989
Suspected cases of western encephalitis on increase.	7 17 4
Ticks in the united states serve as vectors of disease.	7187
African horse-sickness.	7200
Red squirrel disease.	7293
Tick-borne disease control.	7309
Anaplasmosis control preventing the introduction and spread in Anaplasmosis-free areas.	7387
Problems of anaplasmosis control in tick-infested areas the Northwest.	of 7474
Problems of establishing anaplasmosis-free herds in Mon na.	ta- 7491
A successful anaplasmosis eradication program.	7552
INSECTICIDE ADDITIVES The biological evaluation of spray additives and solven with Blattella germanica (Linn) and Periplaneta america (Linn.).	
INSECTICIDE RESIDUES Insecticides in human fat in New Zealand.	7663
Dissipation of malathion residues on tomato and pea.	7679
Analysis of egg yolk and poultry tissues for chlorinate secticide residues.	
Organochlorine pesticides in Antarctica.	7684
INSECTICIDE RESISTANT INSECTS Borphological and physiological distinction between two ulations of the peach-potato aphid.	pop- 6523
Laboratory selection of normal and chlordane-resistant German cockroaches for resistance to Malathion and Diazinon.	6535
Relationship between metabolism and differential toxici insects and mice of Diazinon, dimethoate, parathion, acethion.	
The influence of selection pressure on the development resistance in populations of Tetranychus telarius (L.).	

Colonization and production of a dieldrin-resistant strain of Anopheles guadrimaculatus say. 6677 Methylenedioxyphenyl derivatives as synergists for carbamate insecticides on susceptible, DDT-, and parathion-resistant 6679 house-flies. Some effects of age, preimaginal habitat, and adult food on susceptibility of boll weevil to certain insecticides. 6983 Spotted alfalfa aphid resistance in mature growth of alfalfa varieties. Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California. 7065 Resistance of Boophilus microplus to organo-phosphorus in-7503 Field studies of house fly resistance to organophosphorus insecticides. 7569 INSECTICIDES Mortality of the honey bee, Apis mellifera, in colonies treated with certain biological insecticides. 6508 Experiments on prolongation of the life of mosquito larvae 6581 by underfeeding. The effect of insecticides on transamination in th american cockroach. 6587 Laboratory technique and apparatus for testing viruses applied as dusts. 6596 6678 Control of the tropical rat mite. 6987 Insecticidal control of the Hessian fly. Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 69 6988 Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 699 6991 Evaluation of commonly used insecticides for the control of peach curl aphid, Anuraphis helichrysi Kalt. 6996 Evaluation of insecticides for control of the Fuller rose beetle on citrus in California. 7004 0-ethyl S-2(ethylthio)-ethyl alkylphosphonothioates as systemic insecticides. 7035 Effects of soil insecticides on apple trees and resulting 7053 Effects of soil insecticides and absorbents on plant sugars and resulting effect on mite nutrition. 7054 A systemic insecticide and bait for flea and rat control. 7561 Relationships between structure and insecticidal activity of some organotin compounds. 7688 The search for veterinary insecticides. iI. carbamates active against sheep blowfly. 7691 Metabolism of methylcarbamate insecticide chemicals in 7717 plants. 7753 Apparatus for insecticide assay. INSECTS The designation of chemicals in terms of the responses they elicit from insects. 6518 Note on the biology of Acraea bonasia Fabricius from east ern Nigeria (Lepidoptera, Nymphalidae. 6 6561 Relationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and 6570 acethion.

Establishment of an insect cell strain persistently infected with an insect virus. 6592

PAGE 116

INSECT TEMPERATURE

Susceptibility of nine insect species to infection by Ba cillus thuringiensis war. thuringiensis.	a- 6626	1
Action of DDT at an insect synapse.	6633	13
The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum.	7005	
The fate of phorate in soils.	7008	
0-ethyl S-2(ethylthio)-ethyl alkylphosphonothioates as systemic insecticides.	7035	
Forest-insect surveys in the central Rocky Mountains.	7077	
INTERFEROM Effects of cortisol and adrenalectomy on induction of in feron by endotoxin.	nter- 7468	
INTESTINAL HERNIA Intestinal herniation in the ewe.	7548	
INTESTINES Isolation of enteroviruses from intestinal tract of swit	ne. 7155	
Vitamin D-induced calcium binding factor in rat intestim mucosa.	nal 7388	J
INTRADERMAL ANTERAX VACCINE Anthrax vaccination.	7402	J
IODOPHENYL-3-NITEOPHENYL-5-PHENYLTETRAZOLIUM CHLORIDE, 2-) Succinoxidase activity in two species of Bracon (Hymeno) tera, Braconidae).	<b>P-,</b> 6595	J
IOWA Skunks and cows are rabies threat in Iowa.	7172	
IPS AVULSUS The biological impact of the checkered beetles (Coleopter Cleridae) on populations of Ips bark beetles (Coleopter Scolytidae).	era0 a0 6565	J
IPS GRANDICOLLIS The biological impact of the checkered beetles (Coleopter Cleridae) on populations of Ips bark beetles (Coleopter Scolytidae).		3
IRBISIA The fungus Entomophthora erupta (Dustan) attacking the black grass bug, Irbisia solani (Heidemann) (Hemiptera, Miridae), in California.	6538	J
IRIS Relation of the iris borer to bacterial soft rot of iris	s. 6774	
IRON SULFATES Iron deficiency anemia as a cause of stillbirths in swit	ne. 7437	K
IRRADIATION Inactivation by irradiation of spores of Bacillus thuris ensis war. thuringiensis.	ngi- 6506	K
Use of irradiated vaccines increasing.	7 16 2	
ISOBUTYLANINE Control of Penicillium decay of oranges with certain		
volatile aliphatic amines. ISODEIN	6741	
Soil treatments in lieu of spraying for plum curculio control in peach orchards.	7063	K
A comparison of the toxicity of insecticides for the com of corn earworm on sweet corn.	ntrol 7084	R
ISOPROPYLANINE Control of Penicillium decay of oranges with certain volatile aliphatic amines.	6741	ĸ
ISOTEX Control of pear borer and American plum borer in apple trees.	7024	

		NEF 0
IS	SBAEL Salmonellosis in slaughterhouses in Israel.	7375
13	KODIDES Ticks in the united states serve as vectors of disease.	7 187
	Anaplasmosis control preventing the introduction and spread in Anaplasmosis-free areas.	7387
	Problems of anaplasmosis control in tick-infested areas the Northwest.	of 7474
	Further attempts to infect animals with Theileria parva.	7598
	Bovine streptothricosis Production of lesions by the bi of the tick Amblyomma variegatum.	tes 7620
	Tick transmission of bovine pasteurellosis.	7621
	Studies on the distribution of the sheep tick (Ixodes rinus L.) and the occurrence of enzootic staphylococcal in fection of lambs in North-West Yorkshire and North-East	ı-
	Lancashire.	7641
31	APANESE B ENCEPHALITIS Complement-fixation test for detecting Japanese encephalitis virus.	7198
31	NUNDICE Cholelithiasis causing obstructive jaundice in a Boxer d	log. 7248
7/	ADNO C DICOXCO	7240
50	DENE S DISEASE The use and value of laboratory and skin tests in the di nosis of Johne s disease.	ag- 7148
	First report of Johne s disease in the Sudan.	7268
	Vaccination against Johne s disease.	7288
30	DHNIN TEST The use and value of laboratory and skin tests in the di nosis of Johne s disease.	.ag- 7148
	Significance of johnin test on naturally infected cattle	<b>71</b> 92
J	JGLANS Pathological anatomy of walnut branches infected by Hendersonula toruloidea.	6853
JI	JTE Note on the biology of Acraea bonasia Fabricius from eas ern Nigeria (Lepidoptera, Nymphalidae.	t- 6561
	Fertilizer and soil-fumigation effects on Pythium splend in south Florida.	ens 6934
K1	ALANCHOE Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum.	6916
		0,10
n /	ALE Haemoglobinaemia of cattle associated with the feeding o Brassicae species.	f 7272
	Observations on the blood picture of cattle, sheep and r bits fed on kale.	ab <del>-</del> 7458
	Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach.	7661
K.	ANSAS A three-year overwintering study of the spotted alfalfa aphid.	7061
KI	ENAF Fertilizer and soil-fumigation effects on Pythium splend in south Florida.	ens 6934
KJ	RPONE The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
	Control of the grape leaf folder in California.	7064
	Insecticidal baits for control of the imported fire ant,	

Insecticidal baits for control of the imported fire ant, Solenopsis saevissima richteri. 7571

PAGE 117

KEPONE

KETOSIS

KETOSIS Cysteamine therapy of primary bovine ketosis.	7233
An evaluation of some rapid tests on milk for the early tection of bovine ketosis.	de- 7417
The therapeutic use of cysteamine in bovine ketosis.	7507
KIDNEY BEANS Some effects of supplying benzylademine to leaves and p inoculated with viruses.	lants 6695
Berbicidal activity of vapors of 4-amino-3,5,6-trichlor olinic acid.	opic- 7123
KINETIN Effects of some cytokinins on tobacco and their relation tobacco mosaic virus infection.	on to 6915
KININS Effects of some cytokinins on tobacco and their relation tobacco mosaic virus infection.	on to 6915
KNEMIDOKOFTES Infestation of a parakeet with Knemidokoptes pilae.	7616
LABIDURA RIPARIA Bistology of the brain of Labidura riparia (Pallas) Der maptera).	6630
LABORATORY ANIMALS Further attempts to infect animals with Theileria parva	7598
LABRADOR RETRIEVER DOGS Cockers and labradors more resistant to distemper.	7197
LAC Incidence of predators and feasibility of their control	
through hand picking in lac cultivation on bush types o hosts.	of 7050
LACTOBACILLACEAE	
Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae,	
Brevibacteriaceae, Lactobacillaceae, and less important families.	6503
	6503
families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La	6503 dino 6803
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS</pre>	6503 dino 6803 1 7157
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis.</pre>	6503 dino 6803
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS</pre>	6503 dino 6803 1 7157 7167
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon</pre>	6503 dino 6803 1 7157 7167 7206 7240 tia
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs.</pre>	6503 di no 6803 1 7157 7167 7206 7240
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs.</pre>	6503 dino 6803 1 7157 7167 7206 7240 Jia 7339 7362
<ul> <li>families.</li> <li>LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover.</li> <li>LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease.</li> <li>LAMBS Ineffectivity of furazolidine in ovine vibriosis.</li> <li>Rift valley fever in lambs and sheep.</li> <li>Bypomyelinogenesis congenita in lambs.</li> <li>Effect of pasteurella bacterin on mortality and pneumon in lambs.</li> <li>Osteogenesis imperfecta in lambs.</li> </ul>	6503 dino 6803 1 7157 7167 7206 7240 iia 7339
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy. Chronic copper poisoning in lambs.</pre>	6503 dino 6803 11 7157 7206 7240 dia 7339 7362 7443 7487
<ul> <li>families.</li> <li>LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover.</li> <li>LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease.</li> <li>LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy.</li> </ul>	6503 dino 6803 11 7157 7206 7240 dia 7339 7362 7443 7487
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy. Chronic copper poisoning in lambs. Staphylococcal infection in lambs a study of live and lambs from tick-infested farms in North-West Yorkshire</pre>	6503 dino 6803 17157 7167 7206 7240 dia 7339 7362 7443 7487 dead 7543 emix-
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy. Chronic copper poisoning in lambs. Staphylococcal infection in lambs a study of live and lambs from tick-infested farms in North-West Yorkshire and North-East Lancashire. The anthelmintic activity of a phenothiazine-phenzidole</pre>	6503 dino 6803 17157 7167 7206 7240 dia 7339 7362 7443 7487 dead 7543 emix- 2595 ene
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy. Chronic copper poisoning in lambs. Staphylococcal infection in lambs a study of live and lambs from tick-infested farms in North-West Yorkshire and North-East Lancashire. The anthelmintic activity of a phenothiazine-phenzidole ture compared with that of thiabendazole in lambs in Ke </pre>	6503 dino 6803 17157 7167 7206 7240 dia 7339 7362 7443 7487 dead 7543 mix- mya595 sne
<pre>families. LADINO CLOVER Vectors of alfalfa and bean yellow mosaic viruses in La white clover. LAMB S QUARTERS ISU veterinarians suspect two weeds as cause of seasona swine disease. LAMBS Ineffectivity of furazolidine in ovine vibriosis. Rift valley fever in lambs and sheep. Bypomyelinogenesis congenita in lambs. Effect of pasteurella bacterin on mortality and pneumon in lambs. Osteogenesis imperfecta in lambs. White muscle disease, a selenium-responsive myopathy. Chronic copper poisoning in lambs. Staphylococcal infection in lambs a study of live and lambs from tick-infested farms in North-West Yorkshire and North-East Lancashire. The anthelmintic activity of a phenothiazine-phenzidole ture compared with that of thiabendazole in lambs in Ke Pield trials comparing the anthelmintic effect of Ruele (4-tert-buty1-2-chlorophenylmethyl methylphosphoramidat with that of phenothiazine.</pre>	6503 dino 6803 17157 7167 7206 7240 dia 7339 7362 7443 7487 dead 7595 me **********************************

residues of dieldrin.	7677
LAMENESS Fluorosis causes lameness.	7260
LAMINARIN Addition of fungal cell-wall components to soil for biological disease control.	6822
LAPBYGMA Nosema laphymae n. sp. and the internal structure of the microsporidian spore.	6473
LARVAE Laboratory evaluation of several insecticides against Chrysops larvae.	6549
Experiments on prolongation of the life of mosquito larv by underfeeding.	ae 6581
A nematode parasite of the alfalfa weevil (Hypera postic (Gyll.)).	a 6614
Effects of heterogeneous distribution and codistillation the results of tests with DDT against mosquito larvae.	on 6657
Toxicological action of DDT on three species of mosquito larvae.	6658
Mortality factors for the vetch bruchid, Bruchus brachialis.	7000
Effect of culm solidness on the survival of the wheat st sawfly.	еш 7041
Starvation tests with larvae of the cinnabar moth.	7043
Stalk shredding and plowing as methods for controlling t pink bollworm, Pectinophora gossypiella.	he 7083
The histological relationship of resistance to the citru nematode in certain citrus rootstocks.	s 7114
Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.).	7567
Survival of encysted eggs and larvae of the soybean cyst nematode, Beterodera glycines, ingested by swine.	7632
LASIODERMA The suitability of tobaccos for the growth of the cigare beetle, Lasioderma serricorne.	tte 7081
LATE BLIGBT (POTATOES) Histochemical studies on the dehydrogenases of potato affected by late blight.	6949
LATRODECTUS Effect of Latrodectus mactans tredecimguttatus venom on crayfish stretch receptor neurone.	the 7692
LAWNS Formation of hydrogen cyanide by the mycelial stage of a fairy ring fungus.	6795
LEAD The incidence of lead poisoning in calves in Northern Ir land.	e- 7529
LEAD ARSENATE Control of the grape leaf folder in California.	7064
LEAF CURL (TOBACCO) Inter-relationship between whitefly (Bemisia tabaci Gien population and the incidence of leaf curl in bidi tobacc (nicotiana tabacum L) in relation to different planting	) 0 7044
dates. LEAF ROLL (POTATOES)	7044
Instability of symptoms of potato leaf roll virus.	6800
LEAF RUST (PEANUTS) Some observations of peanut leaf rust and Cercospora lea spots in Texas.	f 6762

Acute toxic effects upon livestock and meat and milk

LEU	F	00	Ŧ	80	ъ	c
LLU	v	s	I	т	L	

LEAF SPOT (ALFALFA) A physiogenic leaf and stem spot of some forage legumes. 6790	The cont
Factors affecting growth, sporulation, pathogenicity, and dissemination of Leptosphaerulina briosiana. 6804	Chlo thos hydr
LEAF SPOT (BIRDS FOOT TREFOIL) Host-parasite relations of Stemphylium leafspot and stem canker of birdsfoct trefoil (Lotus corniculatus). 6737	Inte nast
LEAF SPOT (BIRDSFOOT TREPOIL) A physiogenic leaf and stem spot of some forage legumes.	Comp bana musa
6790 LEAF SPOT (ILEX AQUIFOLIUM) A fungus leafspot of english holly (Ilex aquifolium).	LEGISL Toxi
6714	The
LEAF SPOT (PEANUTS) Some observations of peanut leaf rust and Cercospora leaf spots in Texas. 6762	LEGUME Toxi
LEAF SPOT (RED CLOVER) A physiogenic leaf and stem spot of some forage legumes. 6790	An a prev
LEAF SPOT (REUS TRILOBATA) Control of Cylindrosporium leaf spot disease of Rhus tri-	Germ fumi
lobath and Shepherdia argentea seedlings. 6855 LEAF SPOT (SAFFLOWERS)	LEMA Labo with
Stemphyllium leafspot of safflower. 6870	LEMONS
LEAF SPOT (SHEPHERDIA ARGENTEA) Control of Cylindrosporium leaf spot disease of Bhus tri- lobath and Shepherdia argentea seedlings. 6855	Mech Citr
LEAF SPOT (VETCE) A physiogenic leaf and stem spot of some forage legumes. 6790	resp LEPIDO Memb
LEAFSPOT (ECHEVERIA) Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum.	Artiinse
6916	Effe
LEAFSPOT (KALANCHOE) Stemphylium leafspot of Echeveria, Kalanchoe, and Sédum.	lepi
6916	Stor
LEAFSPOT (SEDUM) Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum. 6916	LEPTOS Fact diss
LEAVES Some effects of supplying benzylademine to leaves and plants inoculated with viruses. 6695	Infe
The role of leaf microflora on epidemiology of the northern leaf blight of corn. 6697	LEPTOS Lept Role
A simple method of measuring rate of plant virus movement from inoculated tobacco leaves to stem tips. 6750	LEPTOS Role
Metabolism of resistant and susceptible cucumber varieties infected with cucumber mosaic virus. 6813	Abor to i
Response of plants to air pollutants. II. Effects of ozone concentration and leaf maturity on injury to Nicotiana tabacum. 6815	Abor - A
Ozone injury to the foliage of Pinus ponderosa. 6819	Peri
Red leaf disorders of pear in California and their relation to pear decline. 6836	in a LETTUC
Effects of ultraviolet preinoculation treatment of leaves on	An a yell
subsequent infection by tobacco mosaic virus and TMV. ribonucleic acid. 6899	LEUCOD Leuc
Changes in multiple molecular enzymes in rusted bean leaves. 6923	snai
Relation of Cercospora infection to oil application on the dorsal or ventral side of tung leaves. 6948	LEUKEM Bovi
Progressive distribution of southern bean mosaic virus antigen in bean leaves determined with a fluorescent anti- body stain. 6969	LEUKOC Low

The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
Chloroplast number in leaves of normal wheat plants and those infested with hessian fly or treated with maleic hydrazide.	1 7052
Interaction of growth regulators in the semescence of nasturtium leaf disks.	7702
Comparative anatomical study of leaves of young and ma	-
banana plants in relation to the morphology of Cercosponusae lesions.	
LEGISLATION Toxic chemicals.	7245
The safe use of toxic chemicals.	7660
LEGUMES Toxicity of cellulose acetate sheeting to leguminous p	lants. 7026
An analysis of the bloat complex and progress towards : prevention.	its 7236
Germination of cereal, sorghum, and small legume seeds fumigation with hydrogen phosphide.	after 7645
LENA	
Laboratory studies of three-lined potato beetle and con with various insecticides.	ntrol 7025
LEMONS Mechanical transmission of a latent lemon virus.	69 <b>7</b> 6
Citrus red mites resistant to demeton and over and the response to Tedion and Kelthane.	ir 7040
LEPIDOPTERA Membracidae attracted to black light.	6590
Artificial medium for rearing some lepidopterous corn insects.	7007
Effects of nectariless cottons on populations of three lepidopterous insects.	7029
Stored-grain insects and their control in New Jersey.	7647
LEPTOSPHAERULINA	
Pactors affecting growth, sporulation, pathogenicity, a dissemination of Leptosphaerulina briosiana.	and 6804
Infection of alfalfa by Leptosphaerulina briosiana.	6935
LEPTOSPIRA Leptospires isolated from Nutria.	7133
Role of deer in epizootiology of leptospirosis.	7212
LEPTOSPIROSIS	
Role of deer in epizootiology of leptospirosis.	7212
Abortion and infertility in sows in Ireland apparently to infection by Leptospira canicola.	due 7422
Abortion in the sow due to infection by Leptospira can - A preliminary report.	icola 7428
Peritoneal dialysis as an adjunct to Leptospirosis the in a dog.	тару 7473
LETTUCE An apparent strain of tobacco rattle virus associated y yellow spotting of lettuce.	with a 6757
LEUCODERMIA Leucodermia-like disease in the culture of giant Afric snail Achatina fulica Bowdich.	n 7134
LEUKEMIA Bovine leukemia.	<b>72</b> 89
LEUKOCYTES	
Low leukocyte levels protect cows from coliform mastiti	is. 7494

LΕ	U	K	0	P	E	N	I	A	

LEUKOPENIA	
LEUROPENIA Response of cows and calves to a Psittacosis-Lympho- granuloma group agents.	7 186
LEUKOSIS Canine leukosis in Sweden.	7234
LIFE CYCLE Some effects of age, preimaginal habitat, and adult for susceptibility of boll weevil to certain insecticides.	d on 6983
LIGHT Inhibition of fungi by culture media previously exposed light.	to 6954
Influence of light on growth of Aspergillus restrictus agar culture.	in 6957
A study of factors influencing the effectiveness of dig (101 -ethylene-202 -dipyridylium dibromide) for potato killing.	
LIGHT TRAPS Membracidae attracted to black light.	6590
LIGNIN Chitin-lignin amendments for control of bean root rot.	6807
LIGNOCELLULOSE The utilization of ligno-cellulose by common mold fungi	6816
LILIUM LONGIFLORUM The shallot aphid in the pacific northwest.	6452
LIMA BEANS Green-seeded downy mildew-resistant Fordhook lima beans	6958
The effect of Lygus bug control on the yield of lima be	ans. 7033
Pield tests with various insecticides for the control o Lygus bugs and the corn earworm on lima beans.	f 7066
Control of the two-spotted spider mite on beans with systemic insecticides applied in the soil.	7076
LIME Effect of lime applications to soil on Japanese beetle larval populations.	7048
Coralloid root systems in plants showing lime-induced cosis.	hlor- 7715
LIMNOLOGY A limnological investigation of the Aufwuchs community two mainstem Hissouri River reservoirs.	in 6451
LIMONIUS CALIFORNICUS Experiments on control of the sugar-beet wireworm in southern California bean fields.	7111
LINDANE Laboratory evaluation of several insecticides against Chrysops larvae.	6549
Effects of heterogeneous distribution and codistillatio the results of tests with DDT against mosquito larvae.	n on 6657
Control of the woolly apple aphid on roots of apple nur stock.	
Yield and guality of mushrooms from beds treated with lindane.	7075
Field studies of house fly resistance to organophosphor insecticides.	us 7569
Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Hippelates collusor (Townsend) in laboratory.	
Persistence of DDT, aldrin, and lindane in some midwest soils.	ern 7672
Toxic chemicals.	7685

LINOGNATHUS Cattle lice eradication studies- A-3-year evaluation.	7230
LINOGNATHUS AFRICANUS	
Preliminary biological observations on Linognathus afri nus Kellog and Paine with a description of the first in	
star nymph (Haematopinidae, Anoplura).	6482
LINURON The effect of oils on herbicidal activity of atrazine a	nd
linuron and of waxes and oils on the movement of EPTC i soil.	.n 7657
LIPIDS The free fatty acids and neutral lipids of the cuticula	T NOV
of the Mormon cricket, Anabrus simplex, Hald.	6605
LIPOMATOSIS Diffuse lipomatosis in a heifer.	7232
LIPOVITELLIN	
DDT-DEHYDROCHLORINASE iii. Solubilization of insecticid by lipoprotein.	es 6579
LISTERIOSIS	
A case of Erysipelothrix monocytogenes (Listeria monocy genes) in the cat.	'to- 7367
A case of Escherichia monocytogenes (Listera monocyto-	7522
genes) in a cat.	7533
LIVER Clostridium chavoei common in normal adult dogs.	7222
Studies on coccidiosis and vitaminA nutrition of broile	
	7451
LIVER DISEASES The influence of physical form of roughages and antibio	tic
administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty a	
and liver abscesses of steers fed all-concentrate ratio	ns.
	7347
LIVER FUNCTION TESTS A simple test for bovine liver dysfunction.	
	7355
	7355
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals.	
LIVESTOCK The growth of rabies virus in tissue culture and its us	e as
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals.	ie as 7224
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals.	e as 7224 7245
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease.	e as 7224 7245 7268
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals.	e as 7224 7245 7268 7269 7300
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease.	e as 7224 7245 7268 7269 7300
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and	e as 7224 7245 7268 7269 7300 rab-
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale.	re as 7224 7245 7268 7269 7300 rab- 7458 7564
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing o	e as 7224 7245 7269 7300 rab- 7458 7564 f
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES	e as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin.	e as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES Porcine gastric ulcers in the United States0 a review.	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678 7263
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES Porcine gastric ulcers in the United States0 a review. Symposium on calf diseases.	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678 7263 7330
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES Porcine gastric ulcers in the United States0 a review. Symposium on calf diseases. Experimental production and control of urolithiasis.	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678 7263 7330 7349
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing o larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES Porcine gastric ulcers in the United States0 a review. Symposium on calf diseases. Experimental production and control of urolithiasis. Current disease problems of horses.	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678 7263 7330 7349 7393
LIVESTOCK The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. Toxic chemicals. First report of Johne s disease in the Sudan. Mycotoxicosis and animal disease. Bracken poisoning of farm animals. Observations on the blood picture of cattle, sheep and bits fed on kale. Face fly control. Development of a synthetic medium for aseptic rearing of larvae of Stomoxys calcitrans (L.). Residue studies of livestock sprays containing Sevin. LIVESTOCK DISEASES Porcine gastric ulcers in the United States0 a review. Symposium on calf diseases. Experimental production and control of urolithiasis. Current disease problems of horses. Disease control in Africa.	re as 7224 7245 7268 7269 7300 rab- 7458 7564 f 7567 7678 7263 7330 7349 7393

Paraquat for selective control of range weeds. 7125

LYOPHILIZATION

tures.

LONGEVITY Comparisons of pea enation mosaic virus isolates.	68 <b>7</b> 8
An attempt to extend the longevity of the burrowing nem tode, Radopholus similis, with citrus root exudate.	a- 7098
LONGIDORUS BREVICAUDATUS On Longidorus hrevicaudatus (Schuurmans Stekhoven, 1951 Thorne, 1961, a nematode parasite of citrus plants in t Punjah.	) he 7097
LONGITARSUS Problems in the control of mint insects.	7009
LONICERA Starvation tests with larvae of the cinnabar moth.	7043
LOXOSCELES RECLUSA Loxosceles reclusa in southern California.	6472
LOXOSTEGE Influence of soil and moisture on the beet webworm, Loxostege sticticalis, and its parasites.	7112
LUKUNI VIRUS Bushbush, Ieri and Lukuni viruses, three unrelated new agents isolated from Trinidadian forest mosquitoes.	6683
LUPINE Malformed calf syndrome on Kodiak Island, Alaska.	7394
LUTEOTROPIN Lactogenic immunity to transmissible gastroenteritis of swine.	7335
LYCTIDAE A technique useful in comparing ponder-post beetle populations in the substructures of buildings.	6662
LYGUS Reappraisal of transmission of tobacco mosaic virus by sects.	in- 6845
A laboratory rearing method for Lygus hesperus knight.	6984
The effect of Lygus bug control on the yield of lima be	ans. 7033
Field tests with various insecticides for the control o Lygus bugs and the corn earworm on lima beans.	f 7066
LYGUS HESPERUS An artificial ovipositional site for some Heteroptera t	
insert their eggs into plant tissue. LYGUS LINEOLARIS	6627
Reappraisal of transmission of tobacco mosaic virus by sects.	in- 6845
LYMANTRIIDAE Hemerocampa pseudotsugata McDunnough, a new host for Beauveria bassiana (Balsamo) Vuillemin.	6524
LYMPHATIC SYSTEM Canine leukosis in Sweden.	7234
LYMPHOCYTES Lymphocyte counts relating to bovine lymphosarcoma.	7165
LYMPHOCYTIC CHORIOMENINGITIS VIRUS Antiviral activity of higher plants and propionin on ly cytic choriomeningitis infection.	mpho- 7313
LYMPHOMA A case of bovine lymphoma.	7 27 1
LYMPHOSARCOMA Lymphocyte counts relating to bovine lymphosarcoma.	7 16 5
Sudden death in a calf associated with advanced lymphat leucosis.	ic 7266
Bovine leukemia.	7289
Bovine lymphosarcoma.	7379

The clinical approach to abdominal disorders of the dog. 7502

Infection inhibition and germ-tube lysis of three cereal rusts by Bacillus pumilus. 6827 MACERATION The macerating enzyme of Rhizoctonia solani. 7701 MACRACANTHORHYNCHUS INGENS Histochemical studies of larval Macracanthorhynchus ingens and certain spirobolid millipeds. 6495 MACRONOCTUA Relation of the iris borer to bacterial soft rot of iris. 6774 CROPHAGES Rous sarcoma virus infection of chicken buffy coat macro-7472 MACROPHAGES MACROPHOMINA PHASEOLI Control of the charcoal root disease of white fir by fall soil fumigation. 6913 MACROSIPHUM Vectors of alfalfa and bean yellow mosaic viruses in Ladino white clover. 6803 Reappraisal of transmission of tobacco mosaic virus by in-6845 sects. MACROSIPHUM EUPHORBIAE Reappraisal of transmission of tobacco mosaic virus by in-6845 sects. MACROSTELES FASCIFRONS Recovery of aster yellows from excised organs of insect vectors. 6770 MADUROMYCOSIS Maduromycosis of the bovine nasal mucosa. 7479 MAGGOTS GGOTS Control of root maggots in swede turnips in Newfoundland with heptachlor and aldrin and the effect on parasites and overwintering pupae. 7039 MAGNESIUM Studies on the dietary requirement and interaction of mag-nesium with antibiotics in turkeys to 4 weeks of age. 7141 Three methods for controlling grass tetany in cattle and 7202 sheep. 7558 A field trial of a heavy magnesium pellet. MAGNOLTA KOBUS Antiviral activity of higher plants and propionin on lymphocytic choriomeningitis infection. 7313 MALATHTON Laboratory selection of normal and chlordane-resistant German cockroaches for resistance to Malathion and 6535 Diazinon. Effect of dDT resistance on the development of malathion resistance in house flies. 6574 The effect of insecticides on transamination in th american cockroach. 6587 The penetration of piperonyl butoxide as a synergist and as an antagonist in Musca domestica L. 6655 6655 Effects of heterogeneous distribution and codistillation on the results of tests with DDT against mosquito larvae. 6657 Field testing of insecticides for control of the Nantucket pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana. 700 7001 Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003 Experiments for the control of sap beetles in sweet corn

The recovery of Pasteurella multocida from lyophilised cul-

## MALATHION

7265

## М

11	LEIC BYDRAZIDE	
	grown for processing.	7014
	The effects of DDT and malathion upon forest soil microarthropods.	7015
	The second se	
	Increased tolerance of the boll weevil and cotton fleah to some chlorinated hydrocarbon insecticides in Central Texas in 1958.	7042
	Observations on soybean insects in maryland.	7051
	Response of different strains of the green peach aphid malathion.	to 7060
	Biology and control of the apple seed chalcid in North Carolina.	7072
	Pickleworm control and residue studies with malathion as phosdrin.	nd 7107
	Salt-marsh caterpillar control on cotton in Arizona.	7118
	Laboratory and field tests against mites and lice attac pcultry.	king 7562
	Residual effectiveness of certain insecticides in horn : control.	f1 <b>y</b> 7572
	House fly pupation under baseboards.	7575
	Malathion dust for chicken mite control.	7580
	The malathion dust-bath for control of five species of 3 on chickens.	lice 7581
	Stored-grain insects and their control in New Jersey.	7647
	Influence of grain moisture and storage temperature on effectiveness of malathion as a grain protectant.	the 7649
	Malathion residues on and in the leaves of Phaseolus vulgaris.	7674
	Dissipation of malathion residues on tomato and pea.	7679
	Residues of malathion on alfalfa and in milk and meat.	7680
	Effect of mineral oil solvent on the toxicity and speed action of malathion.	of 7686
12	LEIC BYDRAZIDE Chloroplast number in leaves of normal wheat plants and those infested with hessian fly or treated with maleic hydrazide.	7052
11	ALFORMED CALF STUDEOME	
	Malformed calf syndrome on Kodiak Island, Alaska.	7394
12	ALIGNANT CATARRE An outbreak of malignant catarrh among the Pere David deer.	7499
52	NIVIDIN-3-MONOGLUCOSIDE Inhibition of enzymes by the anthocyanin malvidin-3-mon coside.	oglu- 7730
11	MEALS Structure and pesticidal activities of derivatives of d trophenols. iII. structure and acaricidal activity of tain carbonates of 2-alkyl-5-methyl-4,6-dinitrophenols related compounds.	cer-
11	AMMILLABIA	
	External symptoms Giemsa-stainable cell inclusions associated with virus infection in cacti.	6720
11	NMATEES Bycosis in a manatee.	7285
9.2	NEB Control of Cylindrosporium leaf spot disease of Rhus tr lobath and Shepherdia argentea seedlings.	i− 6855
11	NGABESE SULFATE Pusarium wilt (race2) of tomato0 effect of lime and mic: nutrient soil amendments on disease development.	6775

MANGE Control of Myocoptes musculinus on guinea pigs.	7583
MANGOES New record of the occurrence of mango shoot-gall diseas the Upper Indo-Gangetic Plain.	e in 6921
Susceptibility of life stages of the Mexican fruit fly fumigation with ethylene chlorobromide.	to 6985
MANTIDS A preliminary account of the meiotic mechanism in ninet species of the Indian mantids.	een 6537
MANTIS BELIGIOSA Histological studies on the deutocerebrum of Poecilocer picus P (Orthoptera) and Mantis religiosa L (Dictyop- tera).	us 6625
MARASMIUS ORPEADES Formation of hydrogen cyanide by the mycelial stage of fairy ring fungus.	a 6795
BARYLAND Observations on soybean insects in maryland.	7051
MASONIELLA Effect of the soil carbon nitrogen ratio on soil fungi	6778
MASTITIS	
A report of the AVMA mastitis committee. The veterinary profession and programs of milk quality control.	7160
Phage typing of Staphylococcus aureus.	/169
Antibiotics in slow- and quick-release bases.	7256
Identification and persistence of phage types of Staphy coccus aureus in dairy herds in florida.	10- 7291
An evaluation of the California mastitis test and the N gretti field test as indicators of subclinical bovine m tis.	
A practitioner s mastitis control program.	7338
Incidence of mastitis in cows and buffaloes in north we India.	st 7389
Mycobacterium fortuitum as a cause of bovine mastitis Tuberculin sensitivity following experimental infection	s. 7459
Mastitis control proves its worth in New York.	7481
Low leukocyte levels protect cows from coliform mastiti	s. 7494
Towards control of mastitis.	7512
Mastitis, metritis and diarrhea in swine.	7514
Mastitis control programs effective in Connecticut.	7516
Advertisements, antibiotics and mastitis.	7524
Studies of a new penicillin, BRL 1921, for the treatmen and control of staphylococcal mastitis in cows.	t 7556
MATRICES Enzymes from conidia and matrix of Colletotrichum orbic lare grown on a natural medium.	u- 6857
MATTHIOLA Resistance in Matthiola incana to the turnip mosaic vir	us. 6884
MEAL Biological control of Phytophthora root rot of avocado alfalfa meal.	with 6978
MEALYBUG WILT A study of mealybug populations (Dysmicoccus brevipes	
(Ckl.)) in an ant-free field.	6994

 MEASUREMENT

 A simple method of measuring rate of plant virus movement from inoculated tobacco leaves to stem tips.
 6750

BROMIDE

Den its similiance and accomponent in skytepathology	NERGERY OF OTOT
Dew, its significance and measurement in phytopathology. 775	erecta on hatching of eggs of Meloidogyne javanica and
MEASURING EQUIPMENT Dew, its significance and measurement in phytopathology.	Meloidogyne aremaria. 7113
775	METABOLISM Relationship between metabolism and differential toxicity in
MEAT Acnte toxic effects npon livestock and meat and milk	insects and mice of Diazinon, dimethoate, parathion, and acethion. 6570
residnes of dieldrin. 767	
Residues of malathion on alfalfa and in milk and meat. 768	Metabolism of resistant and susceptible cncnmber varieties infected with cncnmber mosaic virns. 6813 )
MEAT PACKING INDUSTRY	Muscle necrosis and amyloidosis in the White Pekin duck. 7220
Salmonella and the U.S. meat industry action and reaction. 733	Respiratory activity and enzymes for glncose catabolism in fungus spores. 7704
MEGASELIA Yield and gnality of mnshrooms from beds treated with lindane. 707	Spore germination and carbon metabolism in Fusarinm solani. i. requirements for spore germination. 7709
MEDOSIS A preliminary account of the meiotic mechanism in nineteen	The mode of action of 2,6 dichloro-4-nitroaniline in Rhizopns arrhizns spores. 7729
species of the Indian mantids. 653	/ METABOLITES
HELANAGROMYZA OBTUSA A detailed morphological study of the external and internal genital organs of female Melanagromyza obtusa (Malloch), a sericus pest of Cajanus indicus L. (Agromyzidae, Dip-	Bffects of X-rays, tryptophan metabolites, and eye color mntants on the tnmor-snppressor system in Drosophila melan- ogaster. 6668
tera). 656	) A toxic metabolite from Ascochyta fabae having antibiotic activity. 6841
MELANOPLUS A mosaic virns transmitted by beetles and a grasshopper. 692	The mode of action of diphenamid (N, N-dimethyl 2, 2-di- phenylacetamide) in plants. 7126
HELATONIN Effect of melatonin on thyroid hormone secretion rate and feed consumption of female rats. 744	Metabolism of methylcarbamate insecticide chemicals in plants. 7717
	METALDÉHIDE
MELOIDOGYNE A comparison of Fnsarinm wilt indices of cotton varieties	Metaldehyde poisoning. 7254
with root-knot and sting nematodes as predisposing agents. 672	
Effects of Meloidogyne spp. and Tylenchorhynchus claytoni	Metaldehyde poisoning in the dog. 7532
on pea wilt incited by Fnsarinm oxysporium f. pisi race 1. 673	Metaldehyde poisoning. 7549 2 METALS
Variation within and among species of Meloidogyne. 688	
Effects of rapid ccoling to subzero temperatures on Meloi- dogyne hapla and M. incognita. 688	
Development of Heloidogyne hapla and H. incognita in alfalfa. 708	A stndy of the life history of the pigeon feather mite, Falcnlifer rostratns (Buchholz), 1869, in vivo and in vitro. 6493
Sweetpotato varietal reaction to species and races of root-knct nematodes. 708	
Materials discharged by plant-parasitic nematodes. 710.	dae) with preliminary ethnological study of behavior. 6594
Nematode-induced callus on carrot discs grown in vitro.	Effects of geographic isolation and host association on the evolntion of sexnality in Belminthosporinm. 6835
BELOIDOGYNE INCOGNITA ACRITA Observations on the ntilization of the hexose monophosphate pathway in nematode-infected rocts of tomato. 708	In vitro sporidial germination of Cronartium fusiforme. 7716
• • • • • • • • • • • • • • • • • • • •	METEORU
MELONS         Control of Pythium damping-off of melons by simultaneous           seeding and soil fumigation with chloropicrin.         696	The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006
MEMBRACIDAE Membracidae attracted to black light. 659	METHALLYL CHLOBIDE Susceptibility of certain stages of the rice weevil to a methallyl chloride fumigant formulation in wheat of various moistnres. 7045
BEBACANTHUS Economic importance of the chicken body louse. 758	
MENACANTHUS STRAMINEUS	Residual effectiveness of certain insecticides in horn fly control. 7572
Laboratory and field tests against mites and lice attacking ponltry. 756.	Control of the charcoal root disease of white fir by fall
MENTHA FIFERITA Influence of Fratylenchus penetrans alone and in combination with Verticillium albo-atrum on growth of	soil finigation. 6913 METHYL BROMIDE
peppermint. 670 Field disease cycle of peppermint rust. 677	chnm fragariae. 6772
Field disease cycle of peppermint rust. 677	Fumigation of bnildings to control the dry-wood termite,

METRYL BROMIDE PLUS TRICRLORONITROMETRANE Cryptoternes brevis. 7646 Effect of methyl bromide and hydrocyanic acid fumigation on the germination of flax seeds. 7650 Effect of methyl bromide salmonella pullorum. 7700 METRYL BROMIDE PLUS TRICRLORONITROMETRANE Control of the charcoal root disease of white fir by fall soil fumigation. 6913 METHYL PARATHION THYL PARATHLUN The effects of chemical insecticides and insecticidal adju-rente of a Poliothis nuclear polyhedrosis virus. 6557 Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 69 6988 Field testing of insecticides for control of the Nantucket pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana. 7001 Salt-marsh caterpillar control on cotton in Arizona. 7118 METRYL TRITHION Control of the grape leaf folder in California. 7064 METRYL-U17ACETOXYPROGESTERONE, 6-A study of the effects of various hormone treatments on the reproductive activity of prepuberal and post-puberal beef heifers and lactating beef cows. 7 7528 METRYL-6-METHOXY-8-HYDROXY-3,4-DIRYDROISOCOUMARIN, Production of 3-methyl-6-methoxy-8-hydroxy-3,4-dihydroiso-coumarin by carrot root tissue. 77 7736 METHYLISOTRIOCYANATE Release of methylisothiocyanate from soils treated with Mylone (3,5-dimethyl-tetrahydro-1,3,5,2H thiadiazine-2thione) 7744 METRITIS Pyometra in the lioness (Panthera leo). 7408 Mastitis, metritis and diarrhea in swine. 7514 METRONIDA ZOLE Effects of paromomycin sulfate on blackhead in turkeys. 7159 MEVINFROS Influence of timing and insect biology on the effectiveness of insecticides applied for control of European pine shoot moth, Rhyacionia buoliana. 699 6991 The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006 The effect of Lygus bug control on the yield of lima beans. 7033 Systemic insecticides for control of scales, leaf miners, 7059 Pickleworm control and residue studies with malathion and 7107 phosdrin. MICE Stability, toxicity, and reaction mechanism with esterases of certain carbamate insecticides. 6509 Exposure of white mice and guinea pigs to the nuclear-polyhedrosis virus of the cabbage looper, Trichoplusia ni 6545 Relationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and acethion. 6570 Fluorescent antibody studies for rabies in wildlife. 7163 Granulocytopoiesis in germfree mice. 7251 Antiviral activity of higher plants and propionin on lympho-cytic choriomeningitis infection. 7313

Disinfected water suppresses Pseudomonas in mice. 7357

Incidence of infection with Trichinella spiralis in dogs. 7611

Studies on the metabolism and residues of P32-labeled Delnav in a Hereford steer. 7676 MICHIGAN Scientific notes discovery in Michigan of Orgilus obscurator (Nees), a foreign parasite of the European pine shoot moth. 6465 MICROARTRROPODS The effects of DDT and malathion upon forest soil microarthropods. 7015 MICROBIOLOGY Biological studies of a new species of Anguina (Nematoda0 Tylenchidae) parasitic on Plantago aristata Michx. 7 115 MICROCOCCACEAE Bacteria of grasshoppers of western Canada Ii. The Pseudomonadaceae, Achromobacteraceae, Micrococcaceae, Bregibacteriaceae, Lactobacillaceae, and less important families. 6503 MICROFILARIAL INFESTATIONS Periodicity of Dirofilaria in the peripheral circulation 7171 of dogs. MICRONUTRIENTS Pusarium wilt (race2) of tomato0 effect of lime and micro nutrient soil amendments on disease development. 6 6775 MICROORGANISMS Symbiontic interrelationships between microbes and ambrosia beetles. iI. the organs of microbial transport and perpet-uation in Trypodendron betule and T. retusum (Coleoptera, 6477 Scolytidae). Microbial isolations from the mid-gut of Culex tarsalis Coquillett. 6511 The role of leaf microflora on epidemiology of the northern leaf blight of corn. 6697 Effects of oat straw and supplemental nitrogen on microbial antagonism in bean rhizosphere. 684 6848 7214 Fetal skin harbors most microorganisms. MICROSCOPY Light microscopy of the virogenic stromata of cytopolyhedroses. 6663 MICROSPORUM Dermatophytosis (ringworm) pathogenesis, diagnosis, and 7250 treatment. MIDOTHIOATE) The in vivo activity of several systemic insecticides against cattle grubs in South Dakota. 7582 MILK Antibiotics in milk--Postponement of M.B.B. reduced price 7154 schene. The excretion of dieldrin, DDT, and heptachlor epoxide in milk of dairy cows fed on pastures treated with dieldrin, 7668 DDT, and heptachlor. Acute toxic effects upon livestock and meat and milk residues of dieldrin. 7677 Residues of malathion on alfalfa and in milk and meat. 7680 MILK ANALYSIS An evaluation of some rapid tests on milk for the early de 7417 tection of bovine ketosis. Reptachlor residues on corn stover in relation to dairy 7670 cattle feeding. MILK FEVER The responses of cows to experimentally induced hypocalcemia. 7457 MILKY DISEASE

Virulence of species and strains of milky disease bacteria in the European chafer, Amphimallon majalis (Razoumowsky). 6648

MOSAIC	(BEANS)

MINEBAL OIL Effect of mineral oil solvent on the toxicity and speed action of malathion.	of 7686	MONACRIN The in vivo activity of several systemic insecticides against cattle grubs in South Dakota.	7582
MINKS Blood serum protein from mink with aleutian disease.	7185	MONILIASIS Candidiasis in pigs in northwest Wisconsin.	7235
Experimental transmission of Aleutian disease of mink.	7210	MONILINIA Plant introduction sour cherry selections - probable so	urces
Suspected synthetic oestrogen poisoning in mink.	7369	of brown rot resistance.	6823
Toxoplasmosis in mink.	7544	Hydrothermal and hygrothermal inactivation of Monilinia fructicola and Rhizopus stolonifer spores.	6912
MINNESOTA Long-range aerial transport of the harlequin bug and th greenbug into Minnesota.	e 6456	The effect of n-dodecylguanidine acetate on enzyme activ and the nucleotides of ribonucleic acid.	vity 7749
Salmonellosis in turtles in minnesota.	7553	MONKEYS Crotalaria spectabilis intoxication in Rhesus monkeys.	7226
HIRIDAE The fungus Entomophthora erupta (Dustan) attacking the		Fibrous dysplasia in a monkey and a kudu.	7555
black grass bug, Irbisia solani (Heidemann) (Hemiptera, Miridae), in California.	6538	Thiabendazole as an anthelmintic in research monkeys.	7606
MISSOURI RIVER A limnological investigation of the Aufwuchs community two mainstem Missouri River reservoirs.	in 6451	MONOAMINE OXIDASE Toxicity of some hydrazine tranquillisers to dogs.	7446
MITES The effect of infestation with Acarapis woodi (Rennie)	OD	MONTANA Overwintering of stripe rust in winter wheat in Montana.	
the mortality of honey bees.	6447		6904
The life history and the morphology of the earthworm mi Uroactinia anchor (Trouessart, 1902) (Acarina0 Uropodi- dae) with preliminary ethnological study of behavior.		MONUBON An evaluation of atrazine, simazine, monuron and diuron ten Hawaiian sugar cane plantations.	ов 7132
	6594	MORPHOLOGY	
Occurrence of mite Varroa jacobsoni Oudemans in brood cells of honey bee, Apis indicaF.	6612	Purification, morphology, and biochemical characterizat: of the Wisconsin pea streak virus.	ion 6872
Field control of cotton mites with Aramite aerial spray California.	in 6998	Morphological changes in a parasitic nematode due to acquired resistance of the host.	7624
Effects of soil insecticides on apple trees and resulti effect on mite nutrition.	ng 7053	MORTALITY Effects of temperature on mortality of Heliothis zea lan exposed to sublethal doses of a nuclear polyhedrosis vir	
Effects of soil insecticides and absorbents on plant su and resulting effect on mite nutrition.	gars 7054	Martality and fortility response of Mussa demostics lin	6558
Laboratory and field tests against mites and lice attac poultry.	king 7562	Mortality and fertility response of Musca domestica Lin- naeus to certain known mutagenic or anti-tumor agents.	6566
Infestation of a parakeet with Knemidokoptes pilae.	7616	Effects of heterogeneous distribution and codistillation the results of tests with DDT against mosquito larvae.	n on
MIVAGAWANELLA GROUP VIRUSES Response of cows and calves to a Psittacosis-Lympho- granuloma group agents.	7 186	Mortality factors for the vetch bruchid, Bruchus	6657
MO MO GENOTYPE Broakdown of no no registance in Digun catinum by there	21	brachialis. Effects of low temperature on the survival of the alfali	7000 fa
Breakdown of mo mo resistance in Pisum sativum by therm selection within certain strains of the bean yellow mos virus (BV2).		weevil from Alberta and Utah.	7047
BOBIL GPD 1442 Field control of cotton mites with Aramite aerial spray	in	Effect of pasteurella bacterin on mortality and pneumon: in lambs.	1a 7339
California.	6998	Pattern of mortality in avian nephrosis.	7454
MOGHANIA BACROPHYLLA Bionomics of Bemithea tritonaria Walker (Lepidoptera, Geometridae), a pest of Moghania macrophylla (Willd) 0		Mortality and morbidity in calves with salmonellosis.	7489
Ktze. Incidence of predators and feasibility of their control		MOSAIC (AGROPTEON BEPENS) Relation of Agropyron repens mosaic and wheat streak mos virus.	saic 6922
through hand picking in lac cultivation on bush types o hosts. MOLDS	7050	MOSAIC (ALFALFA) An investigation of thermal inactivation of alfalfa mosa virus.	aic 6817
The utilization of ligno-cellulose by common mold fungi	6816	MOSAIC (BEAN YELLOW) Vectors of alfalfa and bean yellow mosaic viruses in Lac	
The relation between storage molds and damage in high-m ture rice in aerated storage.	ois- 6894	white clover. MOSAIC (BEANS)	6803
BOLECULES Changes in multiple molecular enzymes in rusted bean le	aves. 6923	Progressive distribution of southern bean mosaic virus antigen in bean leaves determined with a fluorescent and body stain.	ti- 6969
		Transmission of bean mosaic virus in relation to length probes by aphids allowed either one or several acquisit;	

6724

MOSAIC (BROMUS)

probes.

6980 MOSAIC (BROMUS) Purification and properties of bromegrass mosaic virus.

6723

MOSAIC (COWPEAS) Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 69 6906

MOSAIC (CUCUMBERS) Metabolism of resistant and susceptible cucumber varieties infected with cucumber mosaic virus. 68 6813

Two unrelated viruses which cause woodiness disease of passion fruit (Passiflora edulis). 6937

MOSAIC (RASPBERRIES) Influence of heat-labile components of the raspberry mosaic virus complex on growth and yield of red raspberries.

MOSAIC (REDPEPPERS) Identification of the viruses affecting commercial varities 6925 of pepper (Capsicum annum) in New Jersey.

MOSAIC (SOYBEANS) Interaction of the soybean mosaic and bean pod mottle virus 687 es infecting soybeans. 6873

MOSAIC (SUGARCANE) Effect of heat treatment of sugarcane for control of ratoon 6981

stunting disease (RSD) on spread of mosaic. MOSAIC (TOBACCO)

Synthesis of tobacco mosaic virus forms in nucleus and cytoplasm. 6700

Studies on tobacco mosaic virus ( tmv) infection of suspen-ded callus cells. 683 6830

Reappraisal of transmission of tobacco mosaic virus by in-6845 sects.

Effects of ultraviolet preinoculation treatment of leaves on subsequent infection by tobacco mosaic virus and TMV. ribonucleic acid. 6899

The nature of stain uptake in ultrathin sections of tobacco 6901 mosaic virus.

Studies on the aggregation of tobacco mosaic virus in the ground cytoplasm and chloroplasts of tomato. 6 6902

Tobacco mosaic virus activity and growth of inoculated tobacco secondary single-cell clones. 6907

Effects of some cytokinins on tobacco and their relation to tobacco mosaic virus infection. 6915

The role of the coat protein in the inactivation of tobacco mosaic virus by ultraviolet light. 693 6931

6940 Sedimentation properties of two stone fruit viruses.

An electron microscope study of TMV lesions in Nicotiana glutinosa. 6955

Beat activation of different strains of tobacco mosaic virus infection on varieties of beans (Phaseolus vulgaris). 6970

Release of inhibited tobacco mosaic virus (TMV) infection by ultraviolet irradation as affected by time and temperature after inoculation. 6971

MOSAIC (TULIPA) Purification of tulip breaking virus. 6973

MOSAIC (TURNIPS) Resistance in Matthiola incana to the turnip mosaic virus. 6884 MOSAIC (WHITE CLOVER)

Seed transmission of white clover mosaic and clover yellow mosaic viruses in red clover. 6760 MOTHS Some relationships between Perezia pyraustae Paillot (Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae). 6459 On the structure of cytoplasmic polyhedra of some lepidoptera. 6489 Fungus infection of insects via the alimentary tract. 6530 The site of action of crystalliferous bacteria in Lepidop-6543 MOTTLE (BEAN POD) Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 69 6906 MOTTLE (BEAN PODS) Interaction of the soybean mosaic and bean pod mottle virus es infecting soybeans. 6873 MOUTH PARTS Nouthparts of the biting and blood-sucking type in Tanyderidae and Chironomidae (Diptera). 6521 MUCOR Multiplication of Xanthomonas vesicatoria on tomato seed lings. 6796 MURGANTIA Long-range aerial transport of the harlequin bug and the greenbug into Minnesota. 6456 MUSCA Face fly control. 7564 MUSCA DOMESTICA Production of compounds of cadmium and related metals as reproduction inhibitors in insects. 647 6476 Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to adult house flies. 6485 Cumulative effect of sublethal doses of myristyl chloroacetate on a highly DDT -resistant strain of Musca domestica L. 6491 The histopathological effects of certain carcinogenic 2-fluorenamine derivatives on larvae of the house fly 6507 Stability, toxicity, and reaction mechanism with esterases of certain carbamate insecticides. 65 6509 The susceptibility of the house fly, Musca domestica Linnaeus, to Bacillus thuringiensis var. thuringiensis 6539 Berliner. Mortality and fertility response of Musca domestica Lin-naeus to certain known mutagenic or anti-tumor agents. 6566 Relationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and acethion. 6570 Effect of dDT resistance on the development of malathion resistance in house flies. 6574 DDT-DEHYDROCHLORINASE iii. Solubilization of insecticides by lipoprotein. 6579 The house cricket, Acheta domesticus, and the house fly, Musca domestica, as a model predator-prey system. 6613 Dispersal of viable algae and protozoa by horse flies and mosquitoes (Diptera, Tabanidae, Culicidae). 6 6616

The effects on house flies of adding wheat germ and corn 6654 oils to fly media.

The penetration of piperonyl butoxide as a synergist and as an antagonist in Musca domestica L. 665 6655

The influence of selection pressure on the development of resistance in populations of Tetranychus telarius (L.). 6656

A preliminary report on mutations in the house fly.	6676	×.
Methylenedioxyphenyl derivatives as synergists for carb insecticides on susceptible, DDT-, and parathion-resist house-flies.		M
Comparative value of some synthetic compounds as synerg with barthrin in hcuse fly sprays.	ists 6680	H
Screening tests with synthetic compounds as synergists house fly sprays.	for 6682	
Selective toxicity and animal systemic effectiveness of several organophosphates.	7563	
House fly control in pig parlors.	7566	ä
Field studies of house fly resistance to organophosphor insecticides.	us 7569	
House fly pupation under baseboards.	7575	a
Methods for the evaluation of stable fly toxicants and repellents.	7579	-
Toxicity to house fly larvae of droppings from chickens insecticide-treated rations.	fed 7584	M
Relationships between structure and insecticidal activi some organotin compounds.	ty of 7688	ä
Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates.	7690	H
Toxicological aspects of 2,2-dichlorovinyl dimethyl phosphate (DDVP) in cows, horses, and white rats.	7699	×.
BUSCLES Buscle necrosis and amyloidosis in the White Pekin duck	7220	
Suspected myasthenia gravis in a dog.	7336	ă
HUSCULAE DYSTROPHY		
Muscular dystrophy in calves Simultaneous peracute and progressive types.	7316	×.
HUSHBOOMS Possible detrimental effect of Pythium artotrogus on th cultivated mushroom.	.e 6748	Ħ
Transmission of a virus disease of mushrooms by infecte spores.	d 6890	Ħ
Yield and guality of mushrooms from beds treated with lindane.	7075	М
MUSTARD GREENS Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach.	7661	
NUTAGENS		2
Mortality and fertility response of Musca domestica Lin naeus to certain known mutagenic or anti-tumor agents.	6566	
MYCANGIA		
Symbiontic interrelationships between microbes and ambr beetles. iI. the organs of microbial transport and per uation in Trypodendron betule and T. retusum (Coleopter Scolytidae).	pet-	
MICELION	• • • •	
Pormation of hydrogen cyanide by the mycelial stage of fairy ring fungus.	a 6795	83
Mycelial protein comparisons of isolates of cucurbit anthracnose fungi.	6808	
BICOBACTERIUM Significance of johnin test on naturally infected cattle	e. 7192	
Human tuberculosis in an otter.	7 25 3	E.
Mycobacterium fortuitum as a cause of bovine mastitis		Ţ
Tuberculin sensitivity following experimental infection	.s. 7459	N

N N	-BUTANO
MYCOCASTOR Leptospires isolated from Nutria.	7133
MYCOLOGY Beterothallism in Pyrenophora teres.	6809
MYCOPLASMA Polyserositis-arthritis complex in swine.	7182
Standardized infections for laboratory evaluation of co pounds against a chronic respiratory disease complex in chickens.	
Identification of Mycoplasma gallisepticum in lesion ti by immunofluorescence.	.ssue 7445
MYCOPLASMA GALLISEPTICUM ANTIGENS Experimental infection of chickens with Mycoplasma gal septicum and subsequent re-isolation of the organism fr the body tissues.	li- :om 7478
MYCOPLASHOSIS Isolation of Mycoplasma sp. from the oviducts of dairy cows.	7358
MYCOSIS Mycosis in a manatee.	7285
BYCOSPHAERELLA Studies on ascospore production by Mycosphaerella music in Honduras.	ola 6930
AYCOSTATIN Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica.	6765
MYCOTOXICOSIS Mycotoxicosis and animal disease.	7152
Mycotoxicosis and animal disease.	7269
NYLONE Release of methylisothiocyanate from soils treated with Mylone (3,5-dimethyl-tetrahydro-1,3,5,2H thiadiazine-2- thione).	
BYOCOPTES Control of Byocoptes musculinus on guinea pigs.	7583
MYODECENERATION Myodegeneration in cattle grazing cassia species.	7354
MYOPATHY White muscle disease, a selenium-responsive myopathy.	7443
MYRISTYL CHLOROACETATE Cumulative effect of sublethal doses of myristyl chloro acetate on a highly DDT -resistant strain of Musca domestica L.	- 6491
MYXOVIRUSES The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals.	e as 7224
Studies on an experimental waccine for prophylaxis of shipping fewer.	7314
Studies on myxovirus parainfluenza-3 vaccine for preven of shipping fever in cattle.	tion 7395
Epizootiology of bowine myxowirus parainfluenza 3(sf-4) Nebraska cattle as determined by antibody titers.	in 7398
MYZUS The shallot aphid in the pacific northwest.	6452
Instability of symptoms of potato leaf roll virus.	6800
Vectors of alfalfa and bean yellow mosaic viruses in La white clover.	dino 6803
HYZUS PERSICAE Morphological and physiological distinction between two ulations of the peach-potato aphid.	pop- 6523
N-BUTANOL	
Purification and properties of bromegrass mosaic virus.	6723

PAGE 127

N-BUTANOL

	SUBJE
N-BOTYLAMINE	
Properties of tulare apple mosaic virus.	6821
N-BUTYLAMINE Control of Penicillium decay of oranges with certain volatile aliphatic amines.	6741
n-DODECYLGUANIDINE ACETATE The effect of n-dodecylguanidine acetate on enzyme ac and the nucleotides of ribonucleic acid.	tivity 7749
N-POLYHALOETHYLTHIO HYDANTOINS	
Comparative bactericidal properties of N-polyhaloethy hydantoins.	7737
N-PROPYLAMINE Control of Penicillium decay of oranges with certain volatile aliphatic amines.	6741
NABAN Inversion phenomenon induced by nabam derivatives.	6728
NABIS AMERICOPERUS An artificial ovipositional site for some Heteroptera insert their eggs into plant tissue.	that 6627
NALED Selective toxicity and animal systemic effectiveness several organophosphates.	of 7563
NAPHTHENES The effect of oils on herbicidal activity of atrazine linuron and of waxes and oils on the movement of BPTC soil.	
NAPHTHOL, 1- Residues of Sevin and 1-naphthol on forage from aeria: applications of Sevin in oil.	L 7020
NAPHTHYL-N-METHYL CARBANATE,1- Control of the grape leaf folder in California.	7064
NARCISSUS TAZETTA Antiviral activity of higher plants and propionin on a cytic choriomeningitis infection.	Lympho- 7313
NASAL MUCOSA Maduromycosis of the bovine nasal mucosa.	7479
NEBRASKA Epizootiology of bovine myxovirus parainfluenza 3(sf-4 Nebraska cattle as determined by antibody titers.	4) in 7398
NECK ROT (ONIONS) Control of Botrytis neck rot of onions by fungicidal o and desiccant chemicals.	lusts 6779
NECROSIS Detection of the tobacco veinal necrosis strain of po virus Y in Solanum cardenasii and S. andigenum introd into the United States.	
Movement of tobacco necrosis virus in systemically in soybeans.	fected 6867
Muscle necrosis and amyloidosis in the White Pekin du	ck. 7220
Pathologic changes associated with feeding various le of Crotalaria spectabilis seed to poultry.	vels 7508
NECROTIC RING SPOT (BLUEBERRIES) Relationships of viruses associated with ringspot dis- of blueberry.	eases 6798
NECROTIC RING SFOT (PRUNUS) Comparison of strains of Prunus necrotic ringspot and dwarf viruses with viruses of the Pfeffinger (rasp least type.	prune af) 6696
NEMAPHOS Effect of root extract of Asparagus racemosus and Tage erecta on hatching of eggs of Meloidogyne javanica and Meloidogyne arenaria.	etes 1 7113
NEMATOCIDES Hairy root (Agrobacterium rhizogenes) of field roses.	6829

NEMATODE VECTORS Hairy root (Agrobacterium rhizogenes) of field roses. 6829 NEMATODES Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize. 6585 A nematode parasite of the alfalfa weevil (Hypera postica (Gyl1.)). 6614 Potential use of Dylox and other insecticides in a control program for field crop pests in California. 66 6687 comparison of Fusarium wilt indices of cotton varieties with root-knot and sting nematodes as predisposing agents. 6727 A plant-parasitic nematode of the genus Rotylenchulus found in california. 710 7102 Materials discharged by plant-parasitic nematodes. 7103 Decline of grapefruit trees in relation to citrus nematode populations and tree recovery after chemical treatment. 7106 Lesion nematode injury to carrot. 7108 Nematode-induced callus on carrot discs grown in vitro. 7109 The histological relationship of resistance to the citrus nematode in certain citrus rootstocks. 7114 Gastrointestinal nematodes in beef yearlings. 7215 Morphological changes in a parasitic nematode due to acquired resistance of the host. 7624 Survival of encysted eggs and larvae of the soybean cyst nematode, Heterodera glycines, ingested by swine. 7632 The activity of the fungus, Catanaria anguillulae, against plant-parasitic nematodes. 77 7719 NEMATODIASIS The control of Nematodirus fillicollis infection by strate 7321 gic anthelmintic medication. The action of pure microbial phenothiazine on the infesta-tions of Nematodirus battus in lambs. 76 7612 simple method for the culture and recovery of larvae of 7636 intestinal nematodes of sheep. NEMATODIRUS Thiabendazole as an anthelmintic in cattle and sheep. 7588 NEOAPLECTANA CHRESINA Record of nematodes parasitising Chilo zonellus Swinhoe 6585 stem borer of maize. NEONYCIN Salmonella resistance increases. 7424 NEOPLASES Effects of X-rays, tryptophan metabolites, and eye color mutants on the tumor-suppressor system in Drosophila melan-6668 ogaster. -An unusual spindle-cell tumour of the mandible of a cow. 7296 7.379 Bovine lymphosarcoma. Fibrous dysplasia in a monkey and a kudu. 7555 NEPHRITIS Role of aggregated bovine serum albumin in pathogenesis of serum sickness nephritis in rabbits. 7403 NERIUM Physiological factors involved in tumor production by the oleander knot pathogen, Pseudomonas savastanoi. 6802

Pathological histology of tumors induced in oleander by Pseudomonas savastanoi. 6967

NERVES Chemical changes in nerves from birds affected by fowl p		NITRATES Diagnosis and causes of nitrate poisoning. 7513
-1	7351	NITROBENZENE
NERFOORS SYSTEM Neurosecretory system of Heteroptera (Hemiptera) and a role of the aorta as a neurohaemal organ.	6520	Pathogenicity of chlorinated-nitrobenzene-tolerant strains of Hypomyces solani f. cucurbitae race 2. 7713
Potency tests of sempyle-type rabies vaccines of nervous tissue origin for use in animals.	; 7283	Tolerance to chlorinated nitrobenzenes in Hypomyces solani f. cucurbitae and its mode of inheritance. 7738
Effect of Latrodectus mactans tredecimguttatus venom on crayfish stretch receptor neurone.	the 7692	NITROFURANS The use of Thiofuradene as a growth stimulant and anthel- mintic in the production of pork in the Bahamas. 7302
NET BLOTCH (BARLEY) Studies on the nature of barley resistance to Helmintho- sporium teres.	6780	Intensive veal production and a hitherto untried nitrofuran- A preliminary trial. 7329
NEUROPTERA	0,00	NITBOFUBAZONE Salmonella resistance increases. 7424
	6684	NITROGEN
NEW HAMPSHIRE The effect of dapple apple and stem pitting on apple tre		The influence of various nitrogen compounds on sexual reproduction in Hypomyces solani f. cucurbitae. 6699
growth and yields in New Hampshire over a fourteen-year	6868	Bffect of the soil carbon nitrogen ratio on soil fungi.
NEW JERSEY	_	6778
Field evaluation of Sevin as an insecticide for pests of vegetables in New Jersey.	: 7010	Microbial antagonism in bean rhizosphere as affected by oat straw and supplemental nitrogen. 6847
Stored-grain insects and their control in New Jersey.	7647	Effects of oat straw and supplemental nitrogen on microbial antagonism in bean rhizosphere. 6848
NEW MEXICO The Culicoides of New Mexico (Diptera, Ceratopogoni- dae).	6446	Plant extracts, residues, and soil minerals in relation to competition of quackgrass (Agropyron repens) with oats and alfalfa. 7128
NEW ZEALAND		Toxicity of nitrate nitrogen to cattle. 7423
Bacterial spot of ivy caused by Xanthomonas hederae (Arnaud, 1920, Dowson 1939, in New Zealand.	6740	Some factors that influence the deactivation of atrazine in
Insecticides in human fat in New Zealand.	7663	
NEWCASTLE DISEASE Report of the committee on fowl pest, 1962.	7149	NITROPHENOL The treatment of ankylostomiasis and of spirocercosis in dogs by the new compound, 2,6-diiodo-4-nitrophenol. 7607
Duration of immunity against Newcastle disease in chicks vaccinated with beta-propiolactone inactivated vaccine.	5 7390	NOCARDIA Diagnosis antigens for the detection of nocardiosis in ani- mals. 7460
NEWCASTLE DISEASE VACCINES Report of the committee on fowl pest, 1962.	7149	NOCARDIOSIS Diagnosis antigens for the detection of nocardiosis in ani- mals. 7460
The relative value of formalin and betapropiolactone as activating agents for Newcastle disease vaccine.	in- 7231	NOCTUIDAE Content of nucleic acid in intact nuclear polyhedral bodies
Duration of immunity against Newcastle disease in chicks vaccinated with beta-propiolactone inactivated vaccine.	7390	isolated from virus-infected beet armyworms Spodoptera exi- gua (Lepidoptera Noctuidae). 6526
Duration of immunity trials with betapropiolactone-inact		Hypoproteinemia in a noctuid larva during the course of a granulosis. 6582
	7401	NOMENCLATORE The designation of chemicals in terms of the responses they
NEWCASTLE DISEASE VIRUS Effects of cortisol and adrenalectomy on induction of in feron by endotoxin.	nter- 7468	elicit from insects. 6518
NICARAGUA Cotton insects in Nicaragua.	7036	NORTHERN IRELAND The incidence of lead poisoning in calves in Northern Ire- land. 7529
NICOTINE The suitability of tobaccos for the growth of the cigare beetle, Lasioderma serricorne.	ette 7081	NORTHERN LEAP BLIGET (CORN) The role of leaf microflora on epidemiology of the northern leaf blight of corn. 6697
Materials discharged by plant-parasitic nematodes.	7 10 3	NORTEWEST Problems of anaplasmosis control in tick-infested areas of
Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach.	7661	the Northwest. 7474
NICOTINIANA		NOSEMA DISEASE Surveys for nosema disease of honey bees in California.
The response to temperature of cabbage virus A infection Nicotiana glutinosa.	in 6758	7021 NUCLEIC ACIDS
NIGROPALLIDAL ENCEPHALOMALACIA Nigropallidal encephalomalacia in the horse.	7307	Content of nucleic acid in intact nuclear polyhedral bodies isolated from virus-infected beet armyworms Spodoptera exi- qua (Lepidoptera Noctuidae). 6526
NIPAECOCCUS VASTATOR Further records of parasites of Nipaecoccus Vastator Mas kell (Homoptera, Coccidae) from India.	5- 6475	

# NUCLEIC ACIDS

7133

## NUCLEOTIDES

- NUCLEOTIDES The effect of n-dodecylguanidine acetate on enzyme activity and the nucleotides of ribonucleic acid. 7749
- NUTRIA Leptospires isolated from Nutria.
- NUTRIENT SOLUTIONS (PLANTS) Spring black stem of alfalfa in relation to temperature, moisture, wounding, and nutrients and some observations on pathogen dissemination. 6866
- Reproduction of Pratylenchus penetrans on corn roots cultured on various nutrient media. 6896
- NUTRITION
  - Pathogenicity, vitamin nutrition, and cultural characteristics of isolates of Phytophthora parasitica from carnation and other hosts in hawaii. 6768
- 0- (3-CHLORO-4-NITRO-PHENYL)0,0-DIMETHYL PHOSPHOBOTHIOATE) Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 6988
- 0-(4-TERT-BUTYL-2-CHLOROPHENYL) 0-METHYL METHYL-PHOSPHORA-The in vivo activity of several systemic insecticides against cattle grubs in South Dakota. 7582
- O-METHYL C- (4-TERT-BUTYL CHLOROPHENYL) ETHYLPHOSPHORAMIDO-Toxicity of organic phosphorus insecticides to horses. 7694
- 0,0-DIETHYL 0-NAPHTALIMIDOPHOSPHOROTHIOATE Control of the grape leaf folder in California. 7064
- 0,0-DIETHYL S- (ISOPROPYLTHIO) METHYL PHOSPHORODITHIOATE Insecticidal control of the Bessian fly. 6987
- 0,0-DIETHYL S(2-DIETHYLAMINO)-ETHYL PHOSPHOROTHIOATE Laboratory studies on the effectiveness of Chipman R-6199 against some cotton pests. 7070
- OAT STRAN Microbial antagonism in bean rhizosphere as affected by oat straw and supplemental nitrogen. 6847
- Effects of oat straw and supplemental nitrogen on microbial antagonism in bean rhizosphere. 6848

## OATS

- Effects of barley yellow dwarf virus on yield of oats as influenced by variety, virus strain, and developmental stage of plants at inoculation.

   6744

   Greenbug dispersal and distribution of barley yellow dwarf virus in Wisconsin.

   6812

   Effects of Ustilago avenae on growth of two oat varieties.

   6832
- Free amino acid and amide content of tobacco and oats infected by wildfire and halo blight bacteria. 6851
- Measuring the pathogenic potential of Puccinia coronata var. avenae. 6879
- Uptake of Helminthosporium victoriae toxin by oat tissue. 6889
- Photosynthetic phosphorylation by chloroplasts isolated from rust-infected oats. 6972
- Plant extracts, residues, and soil minerals in relation to competition of guackgrass (Agropyron repens) with oats and alfalfa. 7128
- Pactors affecting invasion of grains and seeds by Aspergillus flavus and effects of the fungus on germination of the seeds. 7644
- The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7657
- Influence of oat and alfalfa residues on soil respiration, fungistasis, and survival of Verticillium albo-atrum.

OCTACHLORO-3a,4,7a-TETRAHYDRO-4,7-METHANOPHTHALAN,1,3,4,5, The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7006 OESOPHAGOSTOMUM Thiabendazole as an anthelmintic in research monkeys. 7606 OESTRIDAE Control of Dermatobia hominis in Central America. 7594 Further experiences with the systemic insecticides Etrolene and Ruelene in 1960-61. 7600 OHIO Viral causes of bovine abortion in ohio. 7493 OILS The effects on house flies of adding wheat germ and corn 6654 oils to fly media. Relation of Cercospora infection to oil application on the dorsal or ventral side of tung leaves. 6948 The effect of oils on herbicidal activity of atrazine an linuron and of waxes and oils on the movement of EPTC in and soil. 7657 Effects of relative humidity and temperature on the degrada tion of peanut sugar and oil by Aspergillus flavus. 771 7714 OLEFINS Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates. 7690 OLPIDIUM Prolonging the motility and virus-transmitting ability of Olpidium zoospores with chemicals. 7 7726 OMASUM A case of distension of the omasum. 7371 ONIONS Control of Botrytis neck rot of onions by fungicidal dusts 6779 and desiccant chemicals. Studies on the host preference of the onion thrips, Thrips tabaci Lindeman to the varieties of onion. 7073 OOGONIUM GERMINATION Oogonium germination in Phytophthora infestans. 7724 OOSPORES Oospore characters in the classification of Sclerophthora 6883 and Sclerospora species. 7724 Ocgonium germination in Phytophthora infestans. A slender-spored Dactylella parasitic on Pythium oospores. 7728 drechsler, c. **OPEROPHTERA** A newly described virus of the winter moth, Operophthera brumata Hilbner (Lepidoptera, Geometridae). 6660 OPTIC NERVE TIC NERVE Postembryonic development of the optic ganglia in Bombyx 6623 ORANGE STAIN Orange stain, a storage disease of rice caused by Penicillium puberulum. 6895 ORANGES Control of Penicillium decay of oranges with certain volatile aliphatic amines. 6741 ORGANIC COMPOUNDS Control of Penicillium decay of oranges with certain volatile aliphatic amines. 6741

Toxicity of organic phosphorus insecticides to horses. 7694

ORGANOPHOSPHORUS COMPOUNDS Organochlorine pesticides in Antarctica. 7684

## ORGANOTIN COMPOHNDS Relationships between structure and insecticidal activity of some organotin compounds. 7688 ORGILUS OBSCURATOR Scientific notes. discovery in Michigan of Orgilus obscurator (Nees), a foreign parasite of the European pine shoot moth. 6465 ORTHS TRISTICOLOR An artificial ovipositional site for some Heteroptera that insert their eggs into plant tissue. 6627 ORNAMENTAL TREES The effect of Criconemoides curvatum and Pratylenchus penetrans cn wocdy ornamentals. 7099 ORNITHONYSSUS 6678 Control of the tropical rat mite. ORNITHONYSSUS SYLVIARUM Laboratory and field tests against mites and lice attacking 7562 poultry. Control of the northern fowl mite, Ornithonissus sylviarum (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199. 7573 OBNITHOSIS Experimental ornithosis in calves. 7147 ORTHOCIDE Effects of 2,6-dichloro-4-nitroaniline on Rhizopus species and its comparison with other fungicides on control of 6838 Rhizopus rot of peaches. OSMOSIS Resistance to powdery mildew in grapevines related to osmotic value and associated factors. 6756 OSTEOPHYTES Vertebral osteophytes in the cat. 7243 OSTERTACIA Thiabendazole as an anthelmintic in cattle and sheep. 7588 Efficacy of thiabendazole against Cooperia spp. and Ostertagia ostertagi in cattle. 7631 OSTRINIA NUBILALIS Heptachlor residues on corn stower in relation to dairy cattle feeding. 7670 OTITIS Surgical treatment of chronic otitis in a Poodle. 7373 The occurrence of Baillietia auris in Zebu cattle in Ni-7609 geria. OTTERS Human tuberculosis in an otter. 7253 OUCHTERLONY AGAR Rapid plant virus assay combines density-gradient centrifugation and Ouchterlony agar diffusion serological 7712 tests. OVARIES Studies on ovarian structure, function and growth in adult Drosophila pseudo-obscura. 6661 OVEX Citrus red mites resistant to demeton and over and their 7040 response to Tedion and Kelthane. OWTHE ABORTION WIRES. vine abortion virus in ewes and fetuses. 7195 OVINE VIBRIOSIS 7167 Ineffectivity of furazolidine in ovine vibriosis. OVIPOSITION The effect of grain moisture upon development of the rice 7049 weevil in green corn. OVIPOSITORS An artificial ovipositional site for some Heteroptera that insert their eggs into plant tissue. 66 6627

## OXTDASES An inexpensive, versatile oxygen electrode. 7756 OXYGEN The relation between oxygen consumption and bacterial infec-6580 tion in sawflies. Oxygen balance in a stream receiving domestic and oil refinery effluents. 7655 An inexpensive, versatile oxygen electrode. 7756 OXYGEN ELECTRODES An inexpensive, versatile oxygen electrode. 7756 OXYTETRACYCLINE Recovery from subacute grass sickness. 7520 OXYTOCIN Incomplete dilation of the ovine cervix. 7515 OZONE Response of plants to air pollutants. II. Effects of ozone concentration and leaf maturity on injury to Nicotiana tabacum. 6815 Ozone injury to the foliage of Pinus ponderosa. 6819 P-CHLOROPHENYL PHENYL SULFONE Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003 P-DIOXANEDITHIOL S,S-BIS (0,0-DIETHYL PHOSPHORODITHIOATE) Studies on the metabolism and residues of P32-labeled 7676 Delnav in a Hereford steer. PACIFIC NORTHWEST The shallot aphid in the pacific northwest. 6452 PANCREAS NCREAS The clinical approach to abdominal disorders of the dog. 7502 PANONYCHUS Possible virus disease in the European red mite. 6637 Soil injection as a means of applying systemic acaricides to fruit trees. Citrus red mites resistant to demeton and ovex and their 7040 response to Tedion and Kelthane. PANTOMORUS Evaluation of insecticides for control of the Fuller rose 7004 beetle on citrus in California. PAPAVER Control of downy mildew of opium poppy by root application 6788 of fungicides. PARA-DIMETHYLAMINOBENZENEDIAZO SODIUM SULFONATE Evidence for two different pathogens of peanut pod rot. 6754 PARAFFIN OILS The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in 7657 soil. PARAFFIN WAX The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in 7657 soil. PARAFLOW Control of pear borer and American plum borer in apple 7024 trees. PARAINFLUENZA-3 VACCINES Studies on an experimental vaccine for prophylaxis of 7314 shipping fever. Studies on myxovirus parainfluenza-3 vaccine for prevention of shipping fever in cattle. 739 7395 PARAINFLUENZA-3 VIRUS The occurrence and distribution in the United Kingdom of antibodies to parainfluenza 3 and infectious bovine rhino-tracheitis viruses in bovine sera. 72

PAGE 131

7282

## PARATNELDENZA-3 VIEDS

PARAKEETS	
Bpizootiology of bovine myxovirus parainfluenza 3(sf-4) Nebraska cattle as determined by antibody titers.	in 7398
PARAKEETS Infestation of a parakeet with Knemidokoptes pilae.	7616
PARAQUAT Darkness and the activity of diguat and paraguat on ton broad bean and sugar beet.	ato, 7119
Paraquat for selective control of range weeds.	7125
Dipyridylium residues in an aquatic environment.	7662
PARASITES	
Control of root maggots in swede turnips in Newfoundlar with heptachlor and aldrin and the effect on parasites overwintering pupae.	
PARASITIC BRONCHITIS Bffect of diethylcarbamazine on parasitic bronchitis in calves.	7591
PARASITIC INSECTS Fleas (Siphonaptera) of Alabama and their host relation ship.	6467
Fungus disease of adult parasite insects caused by Toru nigra (Marpmann).	la 6502
Two new species of parasites reared from Stomopteryx ne nerteria (Meyrick) (Lepidoptera, Gelechidae).	erte 6615
White-pine shoot borer (Eucosma gloriola Heinrich).	7002
Diapause and secondary parasites nullify the effectiver of rose-aphid parasites in riverside, california, 1957-	
PARASITISM	on
The effect of infestation with Acarapis woodi (Rennie) the mortality of honey bees.	6447
Some relationships between Perezia pyraustae Paillot (Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae).	6459
(Sporozoa, Nosematidae) and Pyrausta nubilalis	
(Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae). North American species of Aschersonia parasitic on Aley	-
(Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae). North American species of Aschersonia parasitic on Aley rodidae.	6464
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of</li> </ul>	6464 6470 6474
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Material</li> </ul>	6464 6470 6474 5- 6475
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Makell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos</li> </ul>	6464 6470 6474 8- 6475 3:-
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Makell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythosphon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of</li> </ul>	6464 6470 6474 5- 6475 5- 6528 6576
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aley rodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Ma kell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe</li> </ul>	6464 6470 6474 5- 6475 528 6576 6585
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aley rodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Ma kell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize.</li> <li>A nematode parasite of the alfalfa weevil (Hypera posti</li> </ul>	6464 6470 6474 .s- 6475 .i- 6528 6576 6585 .ca 6614
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis (Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aley rodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Ma kell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize.</li> <li>A nematode parasite of the alfalfa weevil (Hypera posti (Gyll.)).</li> <li>First records of hymenopterous parasites of yellow scal</li> </ul>	6464 6470 6474 5- 6475 6528 6576 6585 6585 6585 6585 6585 6585
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Makell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize.</li> <li>A nematode parasite of the alfalfa weevil (Hypera posti (Gyll.)).</li> <li>First records of hymenopterous parasites of yellow scal cotton Cerococcus hibisci Green (Homoptera, Coccidae).</li> </ul>	6464 6470 6474 5 6475 6528 6576 6585 6585 6614 e of 6629 .us 6636
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Makell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize.</li> <li>A nematode parasite of the alfalfa weevil (Hypera posti (Gyll.)).</li> <li>First records of hymenopterous parasites of yellow scal cotton Cerococcus hibisci Green (Homoptera, Coccidae).</li> <li>Tetrahymena sp. parasitic in the larvae of Chilo zonell (Swinhoe).</li> </ul>	6464 6470 6474 5- 6528 6576 6585 6585 6614 e of 6629 .us 6636 070- 6666
<ul> <li>(Sporozoa, Nosematidae) and Pyrausta nubilalis</li> <li>(Hubner) (Lepidoptera, Pyralidae).</li> <li>North American species of Aschersonia parasitic on Aleyrodidae.</li> <li>Studies of eugregarina in insects.</li> <li>Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.</li> <li>Further records of parasites of Nipaecoccus vastator Makell (Homoptera, Coccidae) from India.</li> <li>Laboratory studies on the rearing of Aphidius smithi (Hymenoptera, Braconidae) and its parasitism of Acythos phon pisum (Homoptera, Aphididae).</li> <li>Nosema leptocoridis sp. n., microsporidian parasite of Leptocoris trivittatus (Say) (Hemiptera).</li> <li>Record of nematodes parasitising Chilo zonellus Swinhoe stem borer of maize.</li> <li>A nematode parasite of the alfalfa weevil (Hypera posti (Gyll.)).</li> <li>First records of hymenopterous parasites of yellow scal cotton Cerococcus hibisci Green (Homoptera, Coccidae).</li> <li>Tetrahymena sp. parasitic in the larvae of Chilo zonell (Swinhoe).</li> <li>Natural immunity of the bug Triatoma infestans to the ptozoan Trypanosoma rangeli.</li> </ul>	6464 6470 6474 5- 6475 6- 528 6576 6- 585 6- 6585 6- 6614 6- 629 

An unidentified fungus parasitic on the seed-corn maggot. 6933

On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Hoplolaimidae), a phytoparasitic nematode in the Punjab. 7096 Materials discharged by plant-parasitic nematodes. 7103 A survey and review of parasitic diseases of wild and game birds in Great Britain. 7618 Morphological changes in a parasitic nematode due to acquired resistance of the host. 7624 The role of selected management systems in the control of sheep parasites. 7642 PARASITOLOGY Economic parasitology. 7635 PARATHION Laboratory evaluation of several insecticides against 6549 Chrysops larvae. Relationship between metabolism and differential toxicity in insects and mice of Diazinon, dimethoate, parathion, and 6570 acethion. The influence of selection pressure on the development of resistance in populations of Tetranychus telarius (L.). 6656 Effects of heterogeneous distribution and codistillation on the results of tests with DDT against mosquito larvae. 6657 Selection response and genetics of parathion resistance in the Pacific spider mite, Tetranychus pacificus. 66 6667 Methylenedioxyphenyl derivatives as synergists for carbamate insecticides on susceptible, DDT-, and parathion-resistan 6679 house-flies. The beet armyworm, Spodoptera exigua, an economic pest of citrus in California. 6 6982 Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 69 6988 Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003 on cherry and peach. Experiments for the control of sap beetles in sweet corn 7014 grown for processing. The effect of copper compounds on control of citrus rust mite with zineb. 7022 Control of pear borer and American plum borer in apple 7024 trees. Control of the grape mealybug on apricots. 7030 The effect of Lygus bug control on the yield of lima beans. 7033 Plum curculio control experiments in 1955-58. 7062 Control of the grape leaf folder in California. 7064 Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California. 7065 Brief history of aphid control on potatoes in south Florida, 1946-59. 7079 Salt-marsh caterpillar control on cotton in Arizona. 7118 Effect of parathion on parasites of oriental fruit moth cocoons and Trichogramma minutum in peach orchards. 7565 House fly pupation under baseboards. 7575 Parathion and EPN residue studies on Concord grapes. 7683 PARESIS Pathological changes in the tarsi of cattle suffering from paresis spastica, examined by means of X-rays. 7318

PAGE 1.32

PARKS	Plum curculio control experiments in 1955-58. 7062
Formation of hydrogen cyanide by the mycelial stage of a fairy ring fungus. 6795	Soil treatments in lieu of spraying for plum curculio control in peach orchards. 7063
PAROMOMYCIN SULFATE Effects of paromomycin sulfate on blackhead in turkeys. 7159	Effect of parathion on parasites of oriental fruit moth cocoons and Trichogramma minutum in peach orchards. 7565
PARSLEY Influence of soil temperature on a crown rot disease of parsley caused by Phytophthora parasitica. 6769	PEANUT BUTTER Insecticidal baits for control of the imported fire ant, Solenopsis saevissima richteri. 7571
PARSNIPS The effect of soil treatments of chlordane or heptachlor on the flavor of turnips, parsnips, and carrots. 7671	PEANUT MEAL An outbreak of poisoning in store cattle attributed to Bra- zilian groundnut meal. 7273
PARTICLE SIZE DETERMINATION A probabilistic analysis of fungus control by foliar appli- cation of chemicals. 6726	PEANUTS Evidence for two different pathogens of peanut pod rot. 6754
PARTURITION Ineffectivity of furazolidine in ovine vibriosis. 7167	Variation in susceptibity to Sclerotium rolfsii among pea- nut varieties. 6755
Vitamin D3 and ovine ring womb 7257	Some observations of peanut leaf rust and Cercospora leaf spots in Texas. 6762
PASTEURELLA Studies on an experimental vaccine for prophylaxis of shipping fever. 7314	Varietal response in groundnut to Sclerotium bataticola. 6806
PASTEURELLA BACTERINS Respiratory disease in vaccinated feeder cattle. 7211	Inoculation and rust development on peanuts grown in the greenhouse. 6811
Hog cholera Breaks influenced by bacterial infection.	Toxicity in groundnuts. 7156
7219 Effect of pasteurella bacterin on mortality and pneumonia in lambs. 7339	Groundnut toxicity. Aspergillus flavus toxin (aflatoxin) in animal products preliminary communication. 7225
PASTEURELLOSIS	Groundnut toxicity. 7264
The recovery of Pasteurella multocida from lyophilised cul- tures. 7265	Groundnut toxicity Aspergillus flavus toxin (aflatoxin) in animal products. 7322
PASTURES	Groundnut toxicity. 7323
Formation of hydrogen cyanide by the mycelial stage of a fairy ring fungus. 6795	Groundnut toxicity as the cause of exudative hepatitis (oedema disease) of guinea-pigs. 7455
PATHOGENICITY Pathogenicity, vitamin nutrition, and cultural characteris- tics of isolates of Phytophthora parasitica from carnation and other hosts in hawaii. 6768	Factors other than groundnut in the production of aflatoxin. 7476
Heterothallism in Pyrenophora teres. 6809	Factors other than groundnut relating to turkey I di- sease . 7477
Relationship of genes conditioning pathogenicity of Brysiphe graminis f. sp. hordei on barley. 6828	Pactors affecting invasion of grains and seeds by Aspergil- lus flavus and effects of the fungus on germination of the seeds. 7644
Studies on the host range and pathogenicity of Erysiphe 6924	Effects of relative humidity and temperature on the degrada-
Comparison of pathogenicity of various isolates of Borde- tella bronchiseptica in young pigs. 7488	tion of peanut sugar and oil by Aspergillus flavus. 7714 PEARLMILLET
Observations on pathogenicity and immunogenicity of a cell-culture-modified foot-and-mouth disease virus. 7498	Sporangial germination of Sclerospora graminicola and inoculation of Pennisetum glaucum. 6882
PATHOLOGY Pathology of the Northern fur seal. 7392	Occurrence of Eublemma silicula Swinhoe as pest of bajra in Delhi. 7023
	PEARS
PEACHES Control of peach bacterial spot with Xanthomonas pruni bac- teriophage. 6730	Phytopathological notes. inducing infection of pear rootlets by Phytophthora cactorum in pot tests. 6810
Transmission of Pseudomonas syringae in peach trees by bud propagation. 6736	Red leaf disorders of pear in California and their relation to pear decline. 6836
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus species and its comparison with other fungicides on control of Rhizopus rot of peaches. 6838	PEAS Purification, morphology, and biochemical characterization of the Wisconsin pea streak virus. 6872
Control of western X-disease virus in Utah orchards. 6951	Comparisons of pea enation mosaic virus isolates. 6878
Laboratory studies on the toxicity of various insecticides to different stages of the oriental fruit moth. 6988	A new pea streak virus related to red clover vein mosaic virus (RCVMV) 6977
Evaluation of commonly used insecticides for the control of peach curl aphid, Anuraphis helichrysi Kalt. 6996	The fate of phorate in soils. 7008
Evaluation of chemicals for control of a spider mite complex on cherry and peach. 7003	Dissipation of malathion residues on tomato and pea. 7679

PEAS 7062

7063

r two different pathogens of peanut pod rot.	6754
n susceptibity to Sclerotium rolfsii among pe es.	a- 6755
ations of peanut leaf rust and Cercospora lea xas.	f 6762
sponse in groundnut to Sclerotium bataticola.	6806
and rust development on peanuts grown in the	6811
groundnuts.	7156
oxicity. Aspergillus flavus toxin (aflatoxin) acts preliminary communication.	in 7225
oxicity.	7264
oxicity Aspergillus flavus toxin (aflatoxin) acts.	in 7322
oxicity.	7323
exicity as the cause of exudative hepatitis ease) of guinea-pigs.	7455
er than groundnut in the production of aflato	xin. 7476
er than groundnut relating to turkey X di-	7477
ecting invasion of grains and seeds by Asperd	il-
ecting invasion of grains and seeds by Aspergand effects of the fungus on germination of t	he 7644
relative humidity and temperature on the degr nut sugar and oil by Aspergillus flavus.	ada- 7714
germination of Sclerospora graminicola and of Pennisetum glaucum.	6882
of Eublemma silicula Swinhoe as pest of bajra	7023
ogical notes.	
fection of pear rootlets by Phytophthora pot tests.	6810
sorders of pear in California and their relat line.	ion 6836
a, morphology, and biochemical characterizati onsin pea streak virus.	оп 6872
of pea enation mosaic virus isolates.	6878
treak virus related to red clover vein mosaic 7)•••	: 6977
phorate in soils.	7008
of malathion residues on tomato and pea.	7679

E

E

P

P , P

P

ł

Ρ

E

P

PECTINASE
PECTINASE The macerating enzyme of Rhizoctonia solani. 7701
PECTINOPHORM A cytoplasmic polyhedrosis virus, Smithiavirus pectinopho- rae sp. n. of the pink bollworm, pectinophora gossypiella (Saunders). 6556
PECTINOFHORM GOSSYPIELLA Effects of nectariless cottons on populations of three lepidcpterous insects. 7029
PEKIN DUCKS Muscle necrosis and amyloidosis in the White Pekin duck. 7220
PELARGONIUM
Differentiation of viruses transmitted from Pelargonium hortorum. 6865
PENICILLIN Studies on the dietary requirement and interaction of mag-
nesium with antibiotics in turkeys to 4 weeks of age. 7141
A new penicillin. 7261
Zinc bacitracin and chick growth. 7274
Microbiological studies on a new penicillin, BRL 1621.
7382
An outbreak of acute disease in Chester Zoo diagnosed as anthrax. 7385
A new penicillin. 7531
Staphylococcal infection in lambs a study of live and dead
lambs from tick-infested farms in North-West Yorkshire and North-East Lancashire. 7543
Studies of a new penicillin, BRL 1921, for the treatment and control of staphylococcal mastitis in cows. 7556
PENICILLIUM Control of Penicillium decay of oranges with certain volatile aliphatic amines. 6741
Sym-dibromotetrachloroethane - a new fungistat for control of citrus fruit decay. 6742
Fungi attacking seeds in dry seed-beds. 6759
Orange stain, a storage disease of rice caused by Penicil- lium puberulum. 6895
PENICILLIUM DIGITATUM Biphenyl-resistant citrus green mold reported in Florida. 6914
PENICILLIUM RUBRUM On the fungistatic and fungicidal properties of an anti- biotic produced by Penicillium rubrum. 6791
PENTACHLORONITROBENZENE Suppression of corn head smut by in-furrow applications of pentachloronitrobenzene. 6747
Evidence for two different pathogens of peanut pod rot. 6754
PENTOBARBITAL Metaldehyde poisoning in the dog. 7532
PENTOBARBITAL SODIUM
Physiological and pharmacological factors which influence the incidence of acute pulmonary alterations following vago- tomy in the domestic cock. 7136
A report on the dosage of pentoharbitone sodium required to induce anaesthesia in ferrets. 7440
PEPPER (SPICE) European corn borer control in peppers. 6990
PEPTOCOCCUS The effect of 2 hepta-5-methylbenzimidazole and hydrochloric acid on the growth of microflora found on poultry carcasses. 7652

PERICONIA Purification of the selective toxin of Periconia circinat 7 PERIPLANETA	
PERIPLANETA	a. 755
Relationship between metabolism and differential toxicity insects and mice of Diazinon, dimethoate, parathion, an acethion.	
The effect of insecticides on transamination in th americ cockroach.	an 587
Action of DDT at an insect synapse. 6	633
PERIPLANETA AMERICANA Evaluation of compounds of cadmium and related metals as production inhibitors in insects.	re- 5476
Relationship between metabolism and differential toxicity insects and mice of Diazinon, dimethoate, parathion, an	y in
	5570
The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana (Linn.).	
Studies of water conservation in cockroaches.	5653
PERITONEOM Peritoneal dialysis as an adjunct to Leptospirosis therap in a dog. 7	ру 7473
PERITONITIS A case of distension of the omasum. 7	371
PERONOSPORA ARBORESCENS	
Control of downy mildew of opium poppy by root application of fungicides.	on 5788
PERONOSPORA FARINOSA Field experiments on sugar-beet downy mildew (Peronospora farinosa). (	1 5717
PEBSIMMONS Wilting of persimmon caused by Cephalosporium diospyri.	5966
PERTHANE	
The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades. 7	006
Plum curculio control experiments in 1955-58. 7	7062
PEST CONTEOL The search for veterinary insecticides. iI. carbamates active against sheep blowfly. 7	7691
PESTICIDE APPLICATION A probabilistic analysis of fungus control by foliar appl cation of chemicals.	Li- 5726
Suppression of corn head smut by in-furrow applications of	of 5747
Control of downy mildew of opium poppy by root application	n
	5788
	it
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi	ne
A study of factors influencing the effectiveness of diqua (101 - ethylene-202 - dipyridylium dibromide) for potato vi killing. The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in	ле 7127 1
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7	.ne 127
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. 7 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7 PESTICIDE RESIDUES	ле 7127 1
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. 7 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7 PESTICIDE RESIDUES Science and education a new awareness. 7 Pesticides and the soil fauna. I. effects of aldrin and	.пе 7127 1 1657
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. 7 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7 PESTICIDE RESIDUES Science and education a new awareness. 7 Pesticides and the soil fauna. I. effects of aldrin and DDT in an arable field. 7 Pesticide residues in poultry samples, USDA study shows.	ne 7127 1 7657 7122
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. 7 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7 PESTICIDE RESIDUES Science and education a new awareness. 7 Pesticides and the soil fauna. I. effects of aldrin and DDT in an arable field. 7 Pesticide residues in poultry samples, USDA study shows. 7	.ne 7127 1 7657 7122 7656
A study of factors influencing the effectiveness of diqua (101 -ethylene-202 -dipyridylium dibromide) for potato vi killing. 7 The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7 PESTICIDE RESIDUES Science and education a new awareness. 7 Pesticides and the soil fauna. I. effects of aldrin and DDT in an arable field. 7 Pesticide residues in poultry samples, USDA study shows. Toxic chemicals. 7	.ne 7127 1 7657 7122 7656 7659

D	11	TC	T	01	.00	· 7

PESTICIDES Testing of pesticides against cabbage aphid, Brevicoryne brassicae linn.	6622
Pesticides and animal poisoning.	7497
The safe use of toxic chemicals.	7660
Measuring the surface area of apples for expression of pesticide residues.	7666
Toxic chemicals.	7734
Toxic chemicals.	7735
Pesticide safety education.	7759
The safe use of modern pesticides. 2.	7760
PETS	
Salmonellosis, a pet-implicated zoonosis.	7527
PETUNIA Symptomless hosts of the potato spindle tuber virus (PS:	FV). * 6837
PHACIDIUM ABLETIS Pathogenicity of Phacidium abietis.	6911
PHALTAN	ioc
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus spec: and its comparison with other fungicides on control of	
Rhizopus rot of peaches.	6838
PHENACASPIS Systemic insecticides for control of scales, leaf miners and lace bugs.	5 <b>,</b> 7059
PHENOCOCCUS Phenococcus solane Perris, a toxicogenic insect.	6993
PHENOLASES The occurence of polyphenoloxidase in the hemocytes of actively immunized larvae of the greater wax moth, Galleria mellonella.	6510
PHENOLS Antifungal phenolic acids in apple fruits after infectio with Sclerotinia fructigena.	on 6746
Diphenoxylate a useful drug in the symptomatic treatmen acute and chronic diarrhoea in domestic and wild animal	t of s. 7414
Plant polyphenols as antioxidants for ascorbic acid.	7707
PHENOTHIAZINE Field trials comparing the anthelmintic effect of Ruele (4-tert-bntyl-2-chlorophenylmethyl methylphosphoramidat with that of phenothiazine.	
The action of pure microbial phenothiazine on the infest tions of Nematodirns battus in lambs.	ta- 7612
Efficacy of micronized phenothiazine against Heterakis linae in chickens.	gal <del>-</del> 7629
The role of selected management systems in the control sheep parasites.	of 7642
PHENOXYACETIC ACID COMPOUNDS Decomposition of 2,4-D and related phenoxyacetic acids an Arthrobacter species.	by 7658
PHENOXYBENZAMINE Physiological and pharmacological factors which influen the incidence of acute pulmonary alterations following tomy in the domestic cock.	
PHOLADORIS Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley.	6466
PHOMA Behavior of Phoma herbarnm var. medicaginis on resistan and snsceptible species of medicago.	t 6702

PHORATE	
Insecticidal control of the Hessian fly.	6987
Soil injection as a means of applying systemic acaricide fruit trees.	es to 6997
The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum.	7005
The fate of phorate in soils.	7008
The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat.	7027
Observations on soybean insects in maryland.	7051
Systemic insecticides for control of scales, leaf miners and lace bugs.	<sup>5</sup> , 7059
Biology and control of the apple seed chalcid in North Carolina.	7072
Control of the two-spotted spider mite on beans with systemic insecticides applied in the soil.	7076
The use of phorate to control aphids and the Hessian fly winter wheat.	y on 7078
Residues in established alfalfa treated with granulated phorate (Thimet) and their effect on cattle fed the hay	7667
PHOSPHANIDON Effectiveness of insecticides against the Enropean corn borer and green peach aphid on peppers.	7017
Systemic insecticides for control of scales, leaf miner: and lace bugs.	s, 7059
PHOSPHINE Germination of cereal, sorghum, and small legume seeds fumigation with hydrogen phosphide.	after 7645
PHOSPHORAMIDOTHIOIC ACID Control of the oriental rat flea with systemic insection fed to rats.	ides 6542
Systemic insecticides for cattle grub control.	7574
PHOSPHORUS Effect of organic phosphorous pesticides on certain phy pathogenic bacteria.	to- 6743
Treatment of animals poisoned by organic phosphorus compounds.	7151
Toxicity of organic phosphorus insecticides to horses.	7694
PHOTOSYNTHESIS Photosynthetic phosphorylation by chloroplasts isolated rust-infected oats.	from 6972
PHYLLOCOPTRUTA The effect of copper compounds on control of citrus rus mite with zineb.	t 7022
PHYLLOTRETA Field evaluation of Sevin as an insecticide for pests o vegetables in New Jersey.	f 7010
PHYMATOTRICHUM Recognition of Phymatotrichum root rot of cotton and alfalfa in an aerial snrvey.	6858
PHYSALIS Symptomless hosts of the potato spindle thber virus (PS	TV). * 6837
PHYSALIS HINIHA An evaluation of Solanum nigrnm and Physalis minima as snscepts of Xanthomonas vesicatoria.	6 <b>79</b> 2
PHYSIOLOGY The pathogenisis of diarrhea in the newborn calf, with special reference to physiologic functions and environm conditions.	ental 7436
Physiology of asexual reproduction in Aphanomyces enteiches.	7743

	SUBJEC
PHYTATES	
<pre>PHYTATES Zinc availability in the chick as affected by phytate, o cium and ethylenediaminetetraacetate.</pre>	cal- 7139
PHYTOACTIN Absorption, toxicity, and hio-assay of high-potency fungicides in Frunus domestica.	6765
PHITOALEXIN Resistance of soybeans to three Phytophthora species due the production of a phytoalexin.	e to 6783
PHYTOPATHOLOGY Report and abstracts of the 1963 annual meeting of the Potomac division of the American Phytopathological Society.	6685
Report and ahstracts of the 1963 annual meeting of the Pacific Division of the American Phytopathological Society.	6689
Abstracts of papers accepted for presentation at the fir fifth annual meeting of the American Phytopathological Society, Amherst, Mass., August 26, 27, 28, 29, 1963.	
	6690
Symposium on requirements and interpretations of hiometeorological observations.	
invitational papers presented at the fifty-fourth annual meeting of the Maerican Phytopathological Society. corvallis, oregon, august 26-29, 1962.	6691
Possible detrimental effect of Pythium artotrogus on the cultivated mushroom.	e 6748
Influence of soil temperature on a crown rot disease of parsley caused by Phytophthora parasitica.	6769
An inexpensive, versatile oxygen electrode.	7756
Dew, its significance and measurement in phytopathology.	
	7757
PHYTOPHAGA Insecticidal control of the Hessian fly.	6987
Chloroplast number in leaves of normal wheat plants and those infested with hessian fly or treated with maleic hydrazide.	7052
PHYTOPHTHORA Pathogenicity, vitamin nutrition, and cultural character tics of isolates of Phytophthora parasitica from carnat	ion
and other hosts in hawaii. Influence of soil temperature on a crown rot disease of	6768
parsley caused by Phytophthora parasitica.	6769
Induced susceptibility in soybean plants genetically re: tant to Phytophthora sojae.	sis- 6782
Resistance of soybeans to three Phytophthora species due the production of a phytoalexin.	e to 6783
Nature of resistance of soyheans to three Phytophthora species.	6784
Phytopathological notes. inducing infection of pear rootlets hy Phytophthora cactorum in pot tests.	6810
Potentilla species as hosts for Phytophthora fragariae.	6824
Spring black stem of alfalfa in relation to temperature, moisture, wounding, and nutrients and some observations pathogen dissemination.	on 6866
Phytophthora cinnamomi root rot of Douglas-fir.	6875
Effect of fungicides on the respirat . of three species soil fungi.	
Influence of root exudates of cacao and other plants on spore development of Phytophthora palmivora.	6947
Inhibition of fungi hy culture media previously exposed light.	to
	6954
Biological control of Phytophthora root rot of avocado of	With

alfalfa meal.	6978
Saprophytism and persistence in soil hy Phytophthora cinnamomi.	6979
Oogonium germination in Phytophthora infestans.	7724
A slender-spored Dactylella parasitic on Pythium oospore drechsler, c.	es. 7728
Release of rihonucleic and amino acids hy Phytophthora.	7745
Effect of soil exchangeable hydrogen and calcium ratio a the resulting pH on infection of citrus fibrous roots by Phytophthora parasitica.	and 7747
PHYTOPHTHORA DRECHSLERI Genetics and cytology of Phytophthora.	6752
PHYTOPHTHORA MEGASPERMA Phytophthora root rot of alfalfa in Minnesota.	6751
PHYTOPHTHORA PARASITICA NICOTIANAE Calcium nutrition in relation to the black shank disease tobacco.	e of 6825
PHYTOSTREPTIN	
Absorption, toxicity, and hio-assay of high-potency fungicides in Prunus domestica.	6765
PHYTOTOXICITY The mechanism of the interaction hetween soil organic ma and herhicide toxicity and the influence of pH on herhic phytotoxicity.	atter cide 7698
PICEA Fomes annosus.	6705
Infection of spruce seedlings by Cylindrocladium scopari	ium. 6715
Pathogenicity of Phacidium ahietis.	6911
Forest-insect surveys in the central Rocky Mountains.	7077
Aerial forest spraying against spruce budworm- A problem mutual interest in Canada and the United States.	of 7117
PICROTOXIN Effect of Latrodectus mactans tredecinguttatus venom on crayfish stretch receptor neurone.	the 7692
PIERIS A microsporidian, Thelohania sp., in Pieris rapae.	6571
On the pathogenesis of simultaneous virus infections in sects.	in- 6650
Breeding Pieris brassicae apparently free from granulosi virus.	is 6670
PIERIS RAPAE Bionomics and control of certain Plusiinae and studies o an associated nuclear polyhedrosis virus.	of 6992
PIGEONS A study of the life history of the pigeon feather mite, Falculifer rostratus (Buchholz), 1869, in vivo and in vitro.	6493
Methyridine in the control of intestinal capillariasis i birds.	in 7637
PIGMENTS (PLANT) Orange stain, a storage disease of rice caused by Penici lium puherulum.	1- 6895
PIGWEED ISU veterinarians suspect two weeds as cause of seasonal swine disease.	7157
PINEAPPLES Phenococcus solane Perris, a toxicogenic insect.	6993
A study of mealyhug populations (Dysmicoccus hrewipes (Ckl.)) in an ant-free field.	6994

	0000000	
		PLANT DISEASE RESISTANCE
PINUS	(324	musae lesions. 7720
Black root rot of pine. Ozone injury to the foliage of Pinus ponderosa.	6771 6819	PLANT BUDDING Transmission of Pseudomonas syringae in peach trees by bud
Pathogenicity of Phacidium abietis.	6911	propagation. 6736
Influence of timing and insect biology on the effective of insecticides applied for control of European pine s moth, Rhyacionia buoliana.	veness	PLANT COMPOSITION The influence of selected nematode species and number of consecutive plantings of corn and sorghum on forage produc- tion, soil, and water use efficiency. 7087
Field testing of insecticides for control of the Nantu pine moth, Rhyacionia frustrana, and the European pine shoot moth, R. buoliana.		An investigation of the toxic plant - rayless goldenrod (Aplopappus heterophyllus). 7703
White-pine shoot borer (Eucosma gloriola Heinrich).	7002	PLANT DISEASE CONTROL Transmission of Pseudomonas syringae in peach trees by bud propagation. 6736
The effects of DDT and malathion upon forest soil microarthropods.	7015	Control of downy mildew of opium poppy by root application of fungicides. 6788
Natural factors control the pine tortoise scale in the Northeast.	9 7034	Bydrothermal and hygrothermal inactivation of Monilinia fructicola and Rhizopus stolonifer spores. 6912
Forest-insect surveys in the central Rocky Mountains.	7077	Control of the charcoal root disease of white fir by fall soil fumigation. 6913
The biology of the pine webworm, Tetralopha robustella Wisconsin.	n, in 7116	PLANT DISEASE RESISTANCE Varietal resistance to clover rot in white clover. 6694
PINUS BANKSIANA The influence of seasonal DDT applications upon arthro populations in jack pine stands.	opod 7056	Sources of resistance to halo blight in Phaseolus vulgaris. 6698
PINUS PONDEROSA Control of the charcoal root disease of white fir by b	fall	Behavior of Phoma herbarum var. medicaginis on resistant and susceptible species of medicago. 6702
soil fumigation. PINUS TAEDA	6913	Inheritance of stem rust resistance in two wheat varieties, Marguis and Kota. 6706
Toxicity of BHC to loblolly pine seedlings. PIPER NIGRUM	7068	Susceptibilty of Gossypium arboreum and Gossypium hirsutum to seedling anthracnose. 6710
Inheritance of resistance in pepper to bacterial spot.	6725	Inheritance of resistance in pepper to bacterial spot. 6725
A soil-borne virus disease of pepper in california.	6852	Effects of Meloidogyne spp. and Tylenchorhynchus claytoni
PIPERAZINE Thenium and piperazine combined, in the treatment of 1 worm and roundworm infestation in the dog.	hook- 7599	on pea wilt incited by Fusarium oxysporium f. pisi race 1. 6732
PIPERONYL BUTOXIDE The penetration of piperonyl butoxide as a synergist a an antagonist in Musca domestica L.	and as 6655	Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745
Comparative value of some synthetic compounds as syne with barthrin in house fly sprays.		Variation in susceptibity to Sclerotium rolfsii among pea- nut varieties. 6755
Screening tests with synthetic compounds as synergists house fly sprays.	s for 6682	Resistance to powdery mildew in grapevines related to osmotic value and associated factors. 6756
PIROPLASMOSIS Ticks in the united states serve as vectors of disease	e.	Monogenic chlorotic lesion resistance to Helminthosporium turcicum in corn seedlings. 6767
	7 187	Studies on the nature of barley resistance to Helmintho- sporium teres. 6780
The preservation of Babesia bigemina, Anaplasma centra and A. marginale by deep-freezing.	ale 7239	Induced susceptibility in soybean plants genetically resis- tant to Phytophthora sojae. 6782
Current disease problems of horses.	7393	Resistance of soybeans to three Phytophthora species due to
Tick-borne fever in East Africa.	7416	the production of a phytoalexin. 6783
Transmission of equine piroplasmosis by Dermacentor n: Neumann.	itens 7483	Nature of resistance of soybeans to three Phytophthora species. 6784
Tick-borne fever as a cause of abortion and stillbirt; cattle.	hs in 7557	An evaluation of Solanum nigrum and Physalis minima as suscepts of Xanthomonas vesicatoria. 6792
The application of blood transfusion in cattle with palar reference to redwater (Babesia bovis).	articu- 7623	The resistance of Zea mays to Puccinia graminis. 6794 Metabolism of resistant and susceptible cucumber varieties
PITH		infected with cucumber mosaic virus. 6813
Relationship of water content and living cells to spra Diplodia zeae in corn stalks.	ead of 6849	Calcium nutrition in relation to the black shank disease of tobacco. 6825
PLANT ANATOMY Anatomical aspects of resistance in sweetpotato to Pu- wilt.	sarium 6956	Effect of rootstock on the incidence of impietratura-dis- eased grapefruit fruits. 6846

Comparative anatomical study of leaves of young and mature banana plants in relation to the morphology of Cercospora

PAGE 137

Relationship of the genes conditioning resistance to Ery-siphe graminis f. sp. hordei in some varieties of barley

PLANT DISEASE TRANSMISSION	
used to differentiate races of this pathogen.	6856
Breakdown of mo mo resistance in Pisum sativum by th selection within certain strains of the bean yellow wirus (BV2).	
Comparisons of pea enation mcsaic virus isolates.	6878
Resistance in Matthiola incana to the turnip mosaic	virus. 6884
Hostiparasite interaction in blackspot disease of ro caused by Diplocarpon rosae Wolf.	ses 6886
Common antigens in Xanthomonas malvacearum and Gossy hirsutum and their possible relationship to host spe and disease resistance.	
Factors affecting resistance of wheat to scab caused Ghibberella zeae.	bу 6893
A virus infecting maize in South Dakota.	6927
Screening sorghum varieties for resistance to the co kernel smut fungus in Irag.	vered 6936
Anatomical aspects of resistance in sweetpotato to F wilt.	usarium 6956
Green-seeded downy mildew-resistant Fordhook lima be	ans. 6958
Nature and inheritance of resistance to Albugo candi- radish.	da in 6965
A biotype of the spotted alfalfa aphid on alfalfa.	7046
The histological relationship of resistance to the c nematode in certain citrus rootstocks.	itrus 7114
PLANT DISEASE TRANSMISSION The shallot aphid in the pacific northwest.	6452
Transmission of Pseudomonas syringae in peach trees propagation.	by bud 6736
A virus-like particle in Avon and Fundy potatoes.	6739
Influence of temperature on rate of growth of five f pathogens of turfgrass and on rate of disease spread	
Approach graft transmission of Tulare apple mosaic v between apple and Gomphrena globosa.	irus 6753
Reappraisal of transmission of tobacco mosaic virus sects.	by in- 6845
Differentiation of viruses transmitted from Pelargon hortorum.	ium 6865
Interaction of the soybean mosaic and bean pod mottle es infecting soybeans.	e virus- 6873
Epidemiology of glume blotch of wheat.	6888
Transmission of a virus disease of mushrooms by infers	cted 6890
Effect of age of vector and of abdomen punctures on transmission.	virus 6910
A mosaic virus transmitted by beetles and a grasshop	per. 6926
A virus infecting maize in South Dakota.	6927
Transmission of the stubborn and psorosis A viruse citrus to an herbaceous host.	s of 6928
Rough fruit of sweet cherry.	6950
Dodder transmission of citrange stunt virus, a virus ciated with tatter leaf of citrus.	asso- 6952
The infectious nature of pollen from certain virus-in stone fruit trees.	nfected 6963

Mechanical transmission of a latent lemon virus. 6976

Transmission of bean mosaic virus in relation to length of probes by aphids allowed either one or several acguisition 6980 probes. Prolonging the motility and virus-transmitting ability of Olpidium zoospores with chemicals. 7 7726 PLANT DISEASES Report and abstracts of the 1963 annual meeting of the Potomac division of the American Phytopathological Society. 6685 Report and abstracts of the 1963 annual meeting of the Pacific Division of the American Phytopathological Society. 6689 Growth and survival of the pathogen causing russet scab on 6709 A visit to M. W. Beijerinck at his home laboratory in december, 1925. 6763 Factors affecting the pathogenesis of Pythium species on cotton (Gossypium hirsutum L) seedlings. 6920 New record of the occurrence of mango shoot-gall disease in the Upper Indo-Gangetic Plain. 6921 PLANT DORMANCY Cold-induced dormancy and its reversal in uredospores of Puccinia graminis tritici. 6713 PLANT EXTRACTS Plant extracts, residues, and soil minerals in relation to competition of guackgrass (Agropyron repens) with oats and alfalfa. 7128 PLANT GALLS ANI GALLS Pathological histology of tumors induced in oleander by Pseudomonas savastanoi. 6967 Biological studies of a new species of Anguina (Nematoda0 Tylenchidae) parasitic on Plantago aristata Michx. 7 7115 PLANT GENETICS Heterothallism in Pyrenophora teres. 6809 PLANT GRAFTING Approach graft transmission of Tulare apple mosaic virus between apple and Gomphrena globosa. 6753 Studies on a virus causing stem grooving and graft-union abnormalities in Virginia Crab apple. 6843 PLANT GROWTH INHIBITORS BHC translocation from treated soil and the effect on growth of red clover. 6686 Studies on the nature of barley resistance to Helminthosporium teres. 6780 The effect of phorate applied to seed on the growth, 7005 development and insects attacking grain sorghum. DDT deposits on grapes as affected by growth and 7682 weathering. Isolation and characterization of a germination inhibitor 7721 from sugar beet fruit. Inhibition of enzymes by the anthocyanin malvidin-3-monoglu-7730 PLANT HISTOLOGY Anatomical aspects of resistance in sweetpotato to Fusarium wilt. 6956 PLANT HOSTS Variation within and among species of Meloidogyne. 6885

 PLANT INJURIES

 Infecting seven-day-old alfalfa seedlings with wilt bacteria

 through wounded Cotyledons.
 6789

 Spotted alfalfa aphid resistance in mature growth of alfalfa

 varieties.
 7019

Sampling alfalfa seed for clover seed chalcid damage.

7067

#### PLANT TRANSLOCATION

Paraguat for selective control of range weeds. 7125
PLANT INTEODUCTION

Plant introduction sour cherry selections - probable sources of brcwn rot resistance. 6823

PLANT METABOLISM

Observations on the utilization of the hexose monophosphate pathway in nematode-infected roots of tomato. 7088

The mcde of action of diphenamid (N, N-dimethyl 2, 2-diphenylacetamide) in plants. 7126

Physiological and metabolic changes induced by lethal concentrations of 2,4-D in the cocklebur (Xanthium spp.).

Effects of relative humidity and temperature on the degradation of peanut sugar and oil by Aspergillus flavus. 7714

Metabolism of methylcarbamate insecticide chemicals in plants. 7717

PLANT MOBFROLOGY Beterothallism in Fyrenophora teres. 6809

Comparative anatomical study of leaves of young and mature banana plants in relation to the morphology of Cercospora musae lesions. 7720

## PLANT NEMATODE RESISTANCE

Sweetpotato varietal reaction to species and races of root-knct nematodes. 7089

Evaluation of several techniques for screening alfalfa for resistance to Ditylenchus dipsaci. 7090

The population genetics of the potato cyst-nematode, Beterodera rostochiensis, mathematical models to stimulate the effects of growing eelworm-resistant potatoes bred from Solanum tuberosum ssp. andigena. 7100

#### PLANT NEMATODES

The influence of selected nematode species and number of consecutive plantings of corn and sorghum on forage production, soil, and water use efficiency. 7087

Observations on the utilization of the hexose monophosphate pathway in nematode-infected roots of tomato. 7088

Helicotylenchus thornei n sp (Nematoda, Hoplolaiminae) from a tomato plant field in Ludhiana, Punjab. 7091

On two plant parasitic mematodes from a cauliflower field in the Punjab. 7092

Criconema laterale Khan and Siddiqi, 1963 (Nematoda, Criconematidae), a parasite of citrus plant in the Punjab. 7093

On a nematode species of the genus Boplolaimus Daday, 1905, from a citrus plant in the Punjab. 7094

Studies on two plant nematode species of the genus Xiphinema Cobb, 1913. 7095

On Helicotylenchus indicus Siddiqi, 1963 (Nematoda, Hoplolaimidae), a phytoparasitic nematode in the Punjab. 7096

On Longidorus brevicaudatus (Schuurmans Stekhoven, 1951) Thorne, 1961, a nematode parasite of citrus plants in the Punjab. 7097

An attempt to extend the longevity of the burrowing nematode, Radopholus similis, with citrus root exudate. 7098

The effect of Criconemoides curvatum and Pratylenchus penetrans on woody ornamentals. 7099

The population genetics of the potato cyst-nematode, Heterodera rostochiensis, mathematical models to stimulate the effects of growing eelworm-resistant potatoes bred from Solanum tuberosum ssp. andigena. 7100

Population dynamics and fumigation studies of certain nematodes associated with roots of wheat in Nebraska. 7101

Observations on periodicity of hatching of eggs of the potato cyst-nematode, Heterodera rostochiensis Woll. 7110

Effect of root extract of Asparagus racemosus and Tagetes erecta on hatching of eggs of Meloidogyne javanica and 7113 Meloidogyne arenaria. Biological studies of a new species of Anguina (Nematodad Tylenchidae) parasitic on Plantago aristata Michx. 7 7115 PLANT NUTRITION Mechanism of soil fungistasis. 6787 Pactors affecting the pathogenesis of Pythium species on cotton (Gossypium hirsutum L) seedlings. 6920 PLANT NUTRITIONAL DEFICIENCIES Pusarium wilt (race2) of tomato0 effect of lime and micro-nutrient soil amendments on disease development. 67 6775 Calcium nutrition in relation to the black shank disease of 6825 tobacco. PLANT PEST RESISTANCE Studies on the host preference of the onion thrips, Thrips tabaci Lindeman to the varieties of onion. 70 7073 PLANT PHYSIOLOGY Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745 Effect of SMDC on germination, plant growth, and fusarium 6805 wilt incidence of cumin (Cuminum cyminum). Physiology of Rhizopus infection on carrot. 6814 Effects of some cytokinins on tobacco and their relation to 6915 tobacco mosaic virus infection. Physiological and metabolic changes induced by lethal concentrations of 2,4-D in the cocklebur (Xanthium spp.). 7705 PLANT REGULATORS The effect of growth substances on Verticillium wilt of tomato plants. 6909 Spotted alfalfa aphid resistance in mature growth of alfalfa varieties. 7019 Interaction of growth regulators in the senes ence of nasturtium leaf disks. 7702 PLANT REPRODUCTION Heterothallism in Pyrenophora teres. 6809 PLANT BESIDUES Relation of decomposing plant residues to root growth of 6840 alfalfa. Plant extracts, residues, and soil minerals in relation to competition of quackgrass (Agropyron repens) with oats and alfalfa. 71 128 Influence of oat and alfalfa residues on soil respiration, fungistasis, and survival of Verticillium albo-atrum. 7723 PLANT SENESCENCE Factors affecting the pathogenesis of Pythium species on cotton (Gossypium hirsutum L) seedlings. 6920 Interaction of growth regulators in the senescence of nasturtium leaf disks. 7702 PLANT TEMPEBATURE Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745

Breakdown of mo mo resistance in Pisum sativum by thermal selection within certain strains of the bean yellow mosaic virus (BV2). 6859

PLANT TRANSLOCATION Translocation of C14-labeled compounds in cotton and oaks. 7708

	SUBURCI II	ND.
PLANTAGO ARISTATA		
PLANTAGO ARISTATA Biological studies of a new species of Anguina (Nematoda		A
Tylenchidae) parasitic on Plantago aristata Michx.	7115	A: M
The influence of selected nematode species and number of		
consecutive plantings of corn and sorghum on forage prod tion, soil, and water use efficiency.	uc- 7087	G
Influence of tillage, row spacing, and atrazine on sorgh and weed yields frcm nonirrigated sorghum across Nebrask	um a. 7120	z
PLANTING DATE		в
Inter-relationship between whitefly (Bemisia tabaci Gien population and the incidence of leaf curl in bidi tobacc (nicotiana tabacum L) in relation to different planting	0	в
dates.	7044	A C
	7037	A
Plant polyphenols as antioxidants for ascorbic acid.	7707	s
PLASMODIOFBORA A new race of Plasmodiophora brassicae affecting badger		т
- 11	6898	M
PLASHODIUM Metastatic calcification induced by hytakerol in chicken infected with Plasmodium gallinaceum.	s 7427	G (
PLATYNOSOMUM		С
Lesions associated with liver fluke infection in a cat.	7587	₽
PLEUROPNEUMONIA		s
The effect of Tylosin against experimental and natural is fection with Mycoplasma in goats.	n- 7294	A
PLEUROPNEUMONIA-LIKE ORGANISMS Carbomycin for pleuropneumonia-like organism infection.	7267	T 1
Standardized infections for laboratory evaluation of com-		M
pounds against a chronic respiratory disease complex in	7315	s
Identification of Mycoplasma gallisepticum in lesion tis:	sue	M
	7445	E h
PLUMS Studies on the passage of Prunus ringspot virus complex through plum seed.	6942	C P
Bffect of parathion on parasites of oriental fruit moth coccoons and Trichogramma minutum in peach orchards.	7565	T T
PLUSIINAE Bionomics and control of certain Plusiinae and studies o an associated nuclear polyhedrosis virus.	f P0 6992	OI F
PNEUMONICOSIS		S
Pulmonary aspergillosis in a cow.	7435 PC	OI P
	7144	c a
Pneumonia in calves caused by parainfluenza virus type 3	7246	A (
Effect of pasteurella bacterin on mortality and pneumonizin lambs.	a Pi 7339	OI A
POD ROT (FEANUTS) Evidence for two different pathogens of peanut pod rot.	P(	OL F
		07
POECILOCERUS PICTUS Histological studies on the deutocerebrum of Poeciloceru.		OL T
picus F (Orthoptera) and Mantis religiosa L (Dictyop- tera).	6625	s
POINTER DOGS Cockers and labradors more resistant to distemper.	P0 7197	D.
POISONING		P
Treatment of animals poisoned by organic phosphorus	7 15 1	P
PAGE 140		

Antidote for tannic acid poisoning in rabbits.	7191
Arsenical poisoning of race horses.	7252
Metaldehyde poisoning.	7254
Groundnut toxicity.	7264
An outbreak of poisoning in store cattle attributed to F zilian groundnut meal.	7273
Arsenical poisoning of racehorses.	7279
Basic slag toxicity in cattle and sheep.	7280
Bracken poisoning of farm animals.	7300
Acorn poisoning in a cow and a sheep.	7308
Cypress poisoning.	7328
Aminophylline poisoning in dogs.	7350
Suspected synthetic oestrogen poisoning in mink.	7369
Toxicity of some hydrazine tranguillisers to dogs.	7446
Metaldehyde poisoning.	7449
Groundnut toxicity as the cause of exudative hepatitis (oedema disease) of guinea-pigs.	7455
Chronic copper poisoning in lambs.	7487
Pesticides and animal poisoning.	7497
Synthetic oestrogen poisoning.	7500
Arsenical poisoning of racehorses.	7523
The incidence of lead poisoning in calves in Northern In land.	:e- 7529
Metaldehyde poisoning in the dog.	7532
Sulphur poisoning in ewes.	7547
Metaldehyde poisoning.	7549
Evidence for a difference in toxicity between common and hairy vetch seeds for chicks.	1 7687
Control of thar (Hemitragus jemlahicus), evaluation of a poisoning technique.	7689
Toxic chemicals.	7740
The safe use of modern pesticides. 2.	7760
POISONOUS FUNGI Factors other than groundnut relating to turkey X disease .	7477
POISONOUS PLANTS Plant extracts, residues, and soil minerals in relation competition of quackgrass (Agropyron repens) with oats a alfalfa.	to nd 7128
An investigation of the toxic plant - rayless goldenrod (Aplopappus heterophyllus).	7703
POISONS Antidote for tannic acid poisoning in rabbits.	7208
POLIOMYELITIS First poliomyelitis epizootic in large primates under st	udy. 7178
POLLEN The infectious nature of pollen from certain virus-infections stone fruit trees.	ted 6963
POLLINATION Distance from the apiary as a factor in alfalfa pollinat	ion. 6461
Pollination of red clover in Minnesota.	6611

I	20	R	т	H	E	т	R	I	1

	PORTHETRI
POLYHEDBROSES Further tests on the use of a polyhedrosis virus in the control of the cotton leafworm Prodenia litura, Fabricius.	
64 Mode of multiplication of silkworm nuclear polyhedrosis virus II. Multiplication of the virus in the early period of the LD50 time curve. 64	Descriptions and characteristics of a nuclear polyhedrosis virus and a granulosis virus of the armyworm, Pseudaletia unipuncta (Eaworth) (Lepidoptera, Noctuidae). 6646
The potential role of a feeding stimulant used in combina-	Synergism between two viruses of the armyworm, Pseudaletia
tion with the nuclear polyhedrosis virus of Heliothis. 64	79 Thermal inhibition of certain polyhedrosis virus diseases. 6649
Protection of a susceptible insect host against a nuclear polyhedrosis virus by ether extracts from insect larvae. 64	On the pathogenesis of simultaneous virus infections in in- 88 sects. 6650
On the structure of cytoplasmic polyhedra of some lepidcptera. 64	Light microscopy of the virogenic stromata of cytopolyhedro- 89 ses. 6663
Purification of insect wirus inclusion bodies with a fluor carbon. 64	
Polyhedrosis and granulosis viruses causing single and double infections in the spruce budworm, Choristomeura	Polyhedroses in neuropterous insects. 6684
	92 Bionomics and control of certain Plusiinae and studies of an associated nuclear polyhedrosis virus. 6992
Mortality of the honey bee, Apis mellifera, in colonies treated with certain biological insecticides. 65	08 POLYPLOIDY The haploid behavior of Urocystis colchici teliospores.
Pathology of a nuclear polyhedrosis virus of the cabbage looper, Trichoplusia ni (Hubmer). 65	7725
Content of nucleic acid in intact nuclear polyhedral bodie isolated from virus-infected beet armyworms Spodoptera exi gua (Leridoptera Noctuidae). 65	
A modified azan staining technique for inclusion body	New notes on the structure of Pterosiphonia (Rhodomelace- ae, Ceramiales), and their systematic relationship with Polysophonia. 6481
A new nuclear polyhedrosis of the cabbage looper, Tricho- plusia ni. 65	POODLE DOGS 44 Hereditary retinal atrophy in the poodle. 7238
- Exposure of white mice and guinea pigs to the nuclear-	Surgical treatment of chronic otitis in a Poodle. 7373
polyhedrosis virus of the cabbage looper, Trichoplusia ni. 65 The isolation of a polyhedrosis virus from a grasshopper. 65	45 POPILLIA Oxygen concentration in larval hemolymph of the Japanese beetle, Popillia japonica, infected with Bacillus
Purther studies on the isolation and crystallization of in-	<ul> <li>Effect of lime applications to soil on Japanese beetle</li> </ul>
sect cytoplasmic viruses. 65 Serological studies of the cytoplasmic- and nuclear-	48 larval populations. 7048 POPULATION
	52 Influence of host and nonhost plants upon populations of Thielawiopsis basicola in soil. 6704
Studies of two strains of cytoplasmic-polyhedrosis virus. 65.	53 Variation within and among species of Meloidogyne. 6885
Effects of age on mortality of Beliothis zea and heliothis virescens larvae exposed to a nuclear polyhedrosis virus. 65:	odera rostochiensis, mathematical models to stimulate the
A cytoplasmic polyhedrosis virus, Smithiavirus pectinopho- rae sp. n. of the pink bollworm, pectinophora gossypiella (Saunders). 65	Population dynamics and fumigation studies of certain nema-
The effects of chemical insecticides and insecticidal adju- vants of a Heliothis nuclear polyhedrosis virus. 65	
Effects of temperature on mortality of Heliothis zea larva exposed to sublethal doses of a nuclear polyhedrosis virus 65	greenbug into Minnesota. 6456
The relation of pE to the activity of inclusion bodies of a Beliothis nuclear polyhedrosis. 65	Estimating immature populations of rice weevils in wheat by using subsamples. 6460 59
Studies on lipids in the hemolymph of the silkworm, Bombyx mori, during the course of nucleopolyhedrosis. 65	67
A feeding stimulant to increase effectiveness of, and a field test with, a nuclear polyhedrosis virus of Heliothis 65	
RNA changes in insect tissue with a nuclear-polyhedrosis virus. 65	PORIA Poria weirii root rot. 6722 98
A cytoplasmic polyhedrosis of the alfalfa caterpillar. 66.	PORTHETRIA Laboratory method for screening compounds as attractants to 38 gypsy moth males. 6494
	PAGE 1.

POTATOES	
Residues of Sevin and 1-naphthol on forage from aerial applications of Sevin in oil.	7020
POTATOES Growth and survival of the pathogen causing russet scab potatoes.	on 6709
A virus-like particle in Avon and Fundy potatoes.	6739
A simple method of measuring rate of plant virus moveme from inoculated tobacco leaves to stem tips.	nt 6750
Instability of symptoms of potato leaf roll virus.	6800
Potato yellow vein virus in Equador.	6826
Symptomless hosts of the potato spindle tuber virus (PS	TV). * 6837
Histochemical studies on the dehydrogenases of potato affected by late blight.	6949
Streptomycin resistance a technique for the direct a of potato scab organisms from soil.	ssay 6953
The fate of phorate in soils.	7008
Effectiveness of insecticides against the European corn borer and green peach aphid on peppers.	7017
Laboratory studies of three-lined potato beetle and con with various insecticides.	trol 7025
Response of different strains of the green peach aphid malathion.	to 7060
Brief history of aphid control on potatoes in south Florida, 1946-59.	7079
The population genetics of the potato cyst-nematode, He odera rostochiensis, mathematical models to stimulate t effects of growing eelworm-resistant potatoes bred from Solanum tuberosum ssp. andigena.	ter- he 7100
Observations on periodicity of hatching of eggs of the	pota-
to cyst-nematode, Heterodera rostochiensis Woll. A study of factors influencing the effectiveness of dig	7110 uat
(101 -ethylene-202 -dipyridylium dibromide) for potato killing.	
POTENTILLA Potentilla species as hosts for Phytophthora fragariae.	6824
POULTBY	
Report of the committee on fowl pest, 1962.	7149
Carbomycin for pleuropneumonia-like organism infection.	7267
A mixture of diaveridine and sulfaquinoxaline as a cocc stat for pcultry. I. Preliminary studies on efficiency	idio-
against Eimeria tenella and E. necatrix infections, and toxicity in poultry.	on 7270
Observations on an avian strain of Pasteurella haemolyt	ica. 7332
A haemolytic cocco-bacillus recovered from poultry.	7340
Factors influencing the survival of coliforms in the du deep litter houses.	st of 7344
A haemolytic coccobacillus recovered from poultry.	7345
Infectious bronchitis virus typesIncidence in the Uni States.	teđ 7356
Infectious bronchitis virus- tissue distribution.	7359
Pathologic changes associated with feeding various leve of Crotalaria spectabilis seed to poultry.	ls 7508
Haemophilus gallinarum - Intraflock spread.	7559
Laboratory and field tests against mites and lice attac poultry.	king 7562
Pesticide residues in poultry samples, USDA study shows	•
PAGE 142	

DOMIMORC

POULTRY MEAT The effect of 2 hepta-5-methylbenzimidazole and hydrochlo acid on the growth of microflora found on poultry carcass 7	ric es. 652
POULTS An outbreak of Salmonella pullorum infection in turkey poults. 7	364
POWDERY MILDEW (CUCUMBERS) Predisposition to powdery mildew. 6	975
POWDERY MILDEW (GRAPES) Resistance to powdery mildew in grapevines related to osmotic value and associated factors. 6	756
PRATYLENCHUS Influence of Pratylenchus penetrans alone and in combination with Verticillium albo-atrum on growth of peppermint. 6	707
The fungous flora of nonsuberized roots of poorly growing cherry trees.	749
Reproduction of Pratylenchus penetrans on corn roots cul- tured on various nutrient media.	896
Lesion nematode injury to carrot. 7	108
PRATYLENCHUS PENETRANS The effect of Criconemoides curvatum and Pratylenchus penetrans on woody ornamentals. 7	099
PREDACEOUS INSECTS The house cricket, Acheta domesticus, and the house fly, Musca domestica, as a model predator-prey system.	613
PREDATORY ANIMALS Pyometra in the lioness (Panthera leo). 7	408
PREGNANCY Injected saponins as abortifacients. 7	203
A practitioner s mastitis control program. 7	338
The prenatal migration of Toxocara canis larvae and their relationship to infection in pups. 7	: 397
PRICES Antibiotics in milkPostponement of M.B.B. reduced price scheme. 7	, 154
PRIMATES First poliomyelitis epizootic in large primates under stu 7	idy. 178
PRISTIPHORA Thelohania pristiphorae sp. n., a microsporidian parasite the larch sawfly, Pristiphora erichsonii (Hymenoptera Tenthredinidae. 6	of 632
PROCAINE Procaine as an antibiotic and antifungal agent. 7	189
PRODENIA Further tests on the use of a polyhedrosis virus in the control of the cotton leafworm Prodenia litura, Fabricius 6	5 <b>.</b> 5445
PROMETONE The mechanism of the interaction between soil organic mat and herbicide toxicity and the influence of pH on herbici phytotoxicity.	

Analysis of egg yolk and poultry tissues for chlorinated in-secticide residues. 7681

POULTRY HOUSES Factors influencing the survival of coliforms in the dust of deep litter houses. 7344

7659

PROPIONIBACTERIUM FREUDENREICHII Antiviral activity of higher plants and propionin on lympho-cytic choriomeningitis infection. 7313

	C			

PROTEINS Mycelial protein comparisons of isolates of cucurbit	PS EU De
	308 vi un
The role of the coat protein in the inactivation of tobaco mosaic virus by ultraviolet light.	
Blood serum protein from mink with aleutian disease. 7	nn 185
Mode of action of 2,6 dichloro-4-nitroaniline (DCNA) in	Se
Rhizopus arrhizus. 7	750 PSE0
PROTEUS Procaine as an antibiotic and antifungal agent. 7	Cu 189 cu
PROTOZOA	PSEU
Some relationships between Perezia pyraustae Paillot (Sporozoa, Nosematidae) and Pyrausta nnbilalis	Sa
	459 PSE0 Co 470
	PSEC
Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.	Ba 474 Ps BI
The natural mechanism of suppression of Nosema apis Zande: in enzootically infected colonies of the honey bee, Apis	
	483 PSEU Ps
Amoeba disease of the honey bee, Apis mellifera Linnaeus, and an attempt at its chemical control.	te 533
Flagellated protozoa (Trypanosomidae) in the honey bee,	Ph ol
	573 Ba
Nosema hippodamiae n. sp., a microsporidian parasite of Hippodamia convergens Guerin (Coleoptera, Coccinellidae).	so
	577 In ir
Miscellaneous observations on protozoan infections of Nep cinnerea Linnaeus including descriptions of two previousl	a
unknown species of Microsporidia, Nosema bialoviesianae	- Ps 578
Dispersal of viable algae and protozoa by horse flies and	Pr
	516 Di
PROME DWARF (PLUMS) Comparison of strains of Prunus necrotic ringspot and prun	ne ac
dwarf viruses with viruses of the Pfeffinger (rasp leaf) type.	696
PRUNES	C c h y
Comparison of strains of Prunus necrotic ringspot and prun dwarf viruses with viruses of the Pfeffinger (rasp leaf)	PSEU
	696 Va ge
Rate and pattern of prune dwarf virus movement within inoculated cherry trees. 6	761 PSEC
Pirst and second year effects on Cytospora canker disease	Sc ⊽u
of Italian prune trees sprayed with four concentrations of cycloheximide thiosemicarbazone.	r 764 pset Ti
Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica. 6	765
Variability in rates of movement of different strains of	PSEU
	818 de
Studies on the passage of Prunus ringspot virus complex through plum seed. 6	PSEU 942 Bi
PRUNUS DOMESTICA	aı
Pirst and second year effects on Cytospora canker disease of Italian prune trees sprayed with four concentrations of	PSEU f Au
cycloheximide thiosemicarbazone. 6	764 AI
PRONUS MAHALEB Variability in rates of movement of different strains of	
	818 PSEU Po
PSALLUS SERIATUS Increased tolerance of the boll weevil and cotton fleahop	per Pł
to some chlorinated hydrocarbon insecticides in Central Texas in 1958. 7	042 PSOC
	St

PSEUDALETTA Descriptions and characteristics of a nuclear polyhedro virus and a granulosis virus of the armyworm, Pseudalet unipuncta (Haworth) (Lepidoptera, Noctuidae).	
Synergism between two viruses of the armyworm, Pseudale nnipuncta (Haworth) (Lepidoptera, Noctnidae).	tia 6647
Sevin residues on soybeans following its nse for armywo control.	rm 7669
PSEUDANTHONOMUS Currant fruit weevil, Pseudanthonomus validus, a pest o cultivated highbush blueberry.	f 7069
PSEUDENYS SCRIPTA Salmonellosis in turtles in rhode island.	7486
PSEUDOCOCCUS Control of the grape mealybug on apricots.	7030
control of the grape mearybuy on apricots.	1030
PSEUDOMONADACEAE Bacteria of grasshoppers of western Canada Ii. The Psendomonadaceae, Achromobacteraceae, Micrococcaceae, Brevibacteriaceae, Lactobacillaceae, and less important families.	6503
PSEUDOMONAS	
Pseudomonas caryophylli in carnation. I. Relation of so temperature to symptom expression.	il 6734
Physiological factors involved in tnmor production by t oleander knot pathogen, Psendomonas savastanoi.	he 6802
Bacterial wilt of bird-of-paradise cansed by Psendomona solanacearum.	s 6863
Inhibition of indoleacetic acid oxidase in tobacco plan infected by Pseudomonas solanacearnm.	ts 6900
Pathological histology of tnmors induced in oleander by Pseudomonas savastanoi.	6967
Procaine as an antibiotic and antifnngal agent.	7189
Disinfected water suppresses Pseudomonas in mice.	7357
The effect of 2 hepta-5-methylbenzimidazole and hydroch acid on the growth of microflora fonnd on ponltry carca	
Comparative bactericidal properties of N-polyhaloethylt hydantoins.	hio 7737
PSEUDOMONAS GLYCINIA Variability in pathogenicity in the bacterial blight pa gen of soybeans.	tho- 6731
PSEUDOMONAS PHASEOLICOLA	
Sources of resistance to halo blight in Phaseolus vulgaris.	6698
PSEUDOMONAS SYRINGAE Transmission of Pseudomonas syringae in peach trees by propagation.	bud 6736
PSEUDOPLUSIA Pathogenicity of Spicaria rileyi to Pseudoplusia inclu- dens.	6536
PSEUDOPLUSIA INCLUDENS Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus.	of 6992
PSEUDORABIES Aujesky s disease in dogs.	7205
An outbreak of Aujeszky disease in pigs in Lincolnshire	7410
PSEUDOTSUGA Poria weirii root rot.	6722
Phytophthora cinnamomi root rot of Douglas-fir.	6875
PSOCOPTERA Stored-grain insects and their control in New Jersey.	
	7647

PSOROPHORA

PSOROPHORA Observations on the biology of Psorophora cyanescens.	6635
PSOBOPTES Psoroptic cattle scabies eradication activities for 196	2. 7193
PSOROSIS (CITRUS) Transmission of the stubborn and psorosis A viruses o citrus to an herbaceous host.	f 6928
PTERIDIUM Bracken poisoning of farm animals.	7300
PTEROSIPHONIA New notes on the structure of Pterosiphonia (Rhodomelac ae, Ceramiales), and their systematic relationship with	
Polysophonia. PUBLIC HEALTH The safe use of toxic chemicals.	7660
PUCCINA Genetic model for physiologic studies of mechanisms governing development of infection type in wheat stem r	ust. 6876
PUCCINIA Environmental and other factors influencing development southwestern cotton rust (Puccinia stakmanii)	of 6708
Cold-induced dormancy and its reversal in uredospores o Puccinia graminis tritici.	f 6713
Field disease cycle of peppermint rust.	6773
Inoculation and rust development on peanuts grown in th greenhouse.	e 6811
Infection inhibition and germ-tube lysis of three cerea rusts by Bacillus pumilus.	1 6827
Three distinct pathogenic types of stripe rust in the western states.	6861
Measuring the pathogenic potential of Puccinia coronata	
var. avenae.	6879
var. avenae. Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu	gene
Use of rust (Puccinia helianthi) races to discover new	gene us). 6880
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia	gene us). 6880 - 6903
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis.	gene us). 6880 - 6903
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Belianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust	gene us). 6880 - 6903 6904 orium 7711
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le	gene us). 6880 - 6903 6904 orium 7711 af
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le spots in Texas. PUCCINIA GRAMINIS	gene us). 6880 - 6903 6904 orium 7711 af 6762
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le spots in Texas. PUCCINIA GRAMINIS The resistance of Zea mays to Puccinia graminis. PUCCINIA SORCHI	gene us). 6880 - 6903 6904 orium 7711 af 6762 6794
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le spots in Texas. PUCCINIA GRAMINIS The resistance of Zea mays to Puccinia graminis. PUCCINIA SORGHI The resistance of Zea mays to Puccinia graminis. PULLORUM DISEASE	gene us). 6880 - 6903 6904 orium 7711 af 6762 6794 6794 7340 ce
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le spots in Texas. PUCCINIA GRAMINIS The resistance of Zea mays to Puccinia graminis. PUCCINIA SORGHI The resistance of Zea mays to Puccinia graminis. PULCENNIA SORGHI The resistance of Zea mays to Puccinia graminis. PULCENNIA SORGHI The resistance of Zea mays to Puccinia graminis. PULLORUM DISEASE A haemolytic cocco-bacillus recovered from poultry. PULMONARY EDEMA Physiological and pharmacological factors which influen the incidence of acute pulmonary alterations following	gene us). 6880 - 6903 6904 orium 7711 af 6762 6794 6794 6794 7340 ce vago-
Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu Effects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia striiformis. Overwintering of stripe rust in winter wheat in Montana Electron microscopy of the sheath surrounding the haust of Erysiphe graminis. PUCCINIA ARACHIDIS Some observations of peanut leaf rust and Cercospora le spots in Texas. PUCCINIA GRAMINIS The resistance of Zea mays to Puccinia graminis. PUCCINIA SORGHI The resistance of Zea mays to Puccinia graminis. PULLORUM DISEASE A haemolytic cocco-bacillus recovered from poultry. PULMONARY EDEMA Physiological and pharmacological factors which influen- the incidence of acute pulmonary alterations following tomy in the domestic cock.	gene us). 6880 - 6903 6904 orium 7711 af 6762 6794 6794 7340 ce vago- 7136 7441 d

PURIFICATION           Purification, morphology, and biochemical characterization           of the Wisconsin pea streak virus.           6872
PURPUEA HEMORRHAGICA A possible case of purpura haemorrhagica in a dog. 7376
Purpura haemorrhagica in a dog. 7465
A possible case of purpura haemorrhagica in a dog. 7517
PYEMIA Staphylococcal infection in lambs a study of live and dead lambs from tick-infested farms in North-West Yorkshire
and North-East Lancashire. 7543
PYLORIC STENOSIS Pyloric stenosis in the dog. 7418
Pyloric stenosis in the dog. 7429
PYRAUSTA European corn borer control in peppers. 6990
European corn borer populations in relation to the estimation of crop loss. 6995
Increase of European corn borers following soil application of large amounts of dieldrin. 7028
PYRENOPHORA Heterothallism in Pyrenophora teres. 6809
PYRETERUM
Effect of temperature on the susceptibility of grubs of Trogoderma granarium Everts to pyrethrins. 6534
Stored-grain insects and their control in New Jersey. 7647
Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates. 7690
PYRIDINE Materials discharged by plant-parasitic nematodes. 7103
PYTHIOM Influence of temperature on rate of growth of five fungus pathogens of turfgrass and on rate of disease spread. 6745
Possible detrimental effect of Pythium artotrogus on the cultivated mushroom. 6748
Ewidence for two different pathogens of peanut pod rot. 6754
Addition of fungal cell-wall components to soil for biological disease control. 6822
Inoculum potential and effective fungicide dosage in soil. 6869
Pactors affecting the pathogenesis of Pythium species on cotton (Gossypium hirsutum L) seedlings. 6920
Pertilizer and soil-fumigation effects on Pythium splendens in south Plorida. 6934
A method for evaluating soil fungicides. 6939
Control of Pythium damping-off of melons by simultaneous seeding and soil fumigation with chloropicrin. 6961
A slender-spored Dactylella parasitic on Pythium oospores. drechsler, c. 7728
P32-DELNAV Studies on the metabolism and residues of P32-labeled Delnav in a Hereford steer. 7676
QUEEN BEES Storage of queen honey bees, Apis mellifera (Hymenoptera, Apidae) in solitary confinement. 6602
QUERCUS Ceratocystis fagacearum in roots of infected bur oaks and the recurrence and spread of oak wilt. 6831
Aronalogation of C10 labeled companying in action and acho

Translocation of C14-labeled compounds in cotton and oaks.

	7708
The microbial hydrolysis of cellulose and some factors a fecting the production of cellulase in a submerged cult of Alternaria sp.	af- ure 7718
QUINOLINOL BENZOATE, 8- Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica.	6765
QUINOLINOL CITRATE, 8- Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica.	6 <b>7</b> 65
QUINOLINOL SULFATE, 8- Absorption, toxicity, and bio-assay of high-potency fungicides in Prunus domestica.	6765
RABBIT PAPILLOMA VIEUS Immunofluorescent studies of virus-induced rabbit papil (Shope) in vitro.	loma 7504
RABBITS Antidote for tannic acid poisoning in rabbits.	7 19 <b>1</b>
Antidote for tannic acid poisoning in rabbits.	7208
Response of rabbits and guinea rigs to vesicular stomat virus.	itis 7217
The enteropathogenic effect of Escherichia coli in rabb and pigs.	its 7324
Role of aggregated bowine serum albumin in pathogenesis serum sickness nephritis in rabbits.	of 7403
Observations on the blood picture of cattle, sheep and : bits fed on kale.	rab- 7458
Effects of cortisol and adrenalectomy on induction of i feron by endotoxin.	nter- 7468
Selective toxicity and animal systemic effectiveness of several organophosphates.	7563
RABIES Fluorescent antibody studies for rabies in wildlife.	7163
Rabies in dogs and man sharply reduced.	7164
Skunks and cows are rabies threat in Iowa.	7172
Wildlife rabies increases.	7180
Wildlife rabies increases. Effect of rabies virus inoculated into foxes and skunks	
Effect of rabies wirus inoculated into foxes and skunks Potency tests of sempyle-type rabies waccines of nervou	7207
Bffect of rabies wirus inoculated into foxes and skunks Potency tests of sempyle-type rabies waccines of nerwou tissue origin for use in animals.	7207 7283
Bffect of rabies virus inoculated into foxes and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man.	7207 s
Bffect of rabies wirus inoculated into foxes and skunks Potency tests of sempyle-type rabies waccines of nerwou tissue origin for use in animals.	7207 5 7283 7469
Effect of rabies virus inoculated into foxes and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man. RABIES VIRUS The growth of rabies virus in tissue culture and its us	7207 5 7283 7469 e as
Effect of rabies virus inoculated into foxes and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man. RABLES VIEUS The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. RACE HORSES	7207 7283 7469 e as 7224
Effect of rabies wirus inoculated into fores and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man. EABLES VIRUS The growth of rabies wirus in tissue culture and its us a living attenuated vaccine for domestic animals. EACE HORSES Arsenical poisoning of race horses.	7207 7283 7469 8 7224 7252
Effect of rabies virus inoculated into fores and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man. EABLES VIEUS The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. EACE HOESES Arsenical poisoning of race horses. Arsenical poisoning of racehorses.	7207 7283 7469 7224 7252 7279 7523
Effect of rables virus inoculated into fores and skunks Potency tests of sempyle-type rables vaccines of nervou tissue origin for use in animals. A note on rables and euthanasia in man. EABIES VIRUS The growth of rables virus in tissue culture and its us a living attenuated vaccine for domestic animals. EACE HORSES Arsenical poisoning of race horses. Arsenical poisoning of racehorses. Arsenical poisoning of racehorses. BACHIPLOSIA OU Bionomics and control of certain Plusiinae and studies	7207 7283 7469 e as 7224 7252 7279 7523 of
Effect of rabies virus inoculated into fores and skunks Potency tests of sempyle-type rabies vaccines of nervou tissue origin for use in animals. A note on rabies and euthanasia in man. PABLES VIRUS The growth of rabies virus in tissue culture and its us a living attenuated vaccine for domestic animals. BACE HORSES Arsenical poisoning of race horses. Arsenical poisoning of racehorses. Arsenical poisoning of racehorses. BACHIPLOSIA OU Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus. BADIATION	7207 7283 7469 e as 7224 7252 7279 7523 of 6992
Effect of rables virus inoculated into fores and skunks Potency tests of sempyle-type rables vaccines of nervou tisue origin for use in animals. A note on rables and euthanasia in man. EABIES VIRUS The growth of rables virus in tissue culture and its us a living attenuated vaccine for domestic animals. EACE HOBSES Arsenical poisoning of race horses. Arsenical poisoning of racehorses. Arsenical poisoning of racehorses. EACHIPLUSIA OU Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus. EADIATION Control of Myocoptes musculinus on guinea pigs. EADIOACTIVE TRACERS Blood loss caused by Haemonchus contortus in sheep.	7207 7283 7469 7224 7252 7279 7523 of 6992 7583
Effect of rables virus inoculated into fores and skunks Potency tests of sempyle-type rables vaccines of nervou tissue origin for use in animals. A note on rables and euthanasia in man. EABLES VIRUS The growth of rables virus in tissue culture and its us a living attenuated vaccine for domestic animals. EACE HORSES Arsenical poisoning of race horses. Arsenical poisoning of racehorses. Arsenical poisoning of racehorses. EACHIPLUSIA OU Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus. EADIATION Control of Hyocoptes musculinus on guinea pigs. EADIOACTIVE TRACERS Blood loss caused by Haemonchus contortus in sheep. Metabolism of methylcarbamate insecticide chemicals in plants.	7207 7283 7469 7224 7252 7279 7523 of 6992 7583
Effect of rables virus inoculated into fores and skunks Potency tests of sempyle-type rables vaccines of nervou tissue origin for use in animals. A note on rables and euthanasia in man. PABIES VIRUS The growth of rables virus in tissue culture and its us a living attenuated vaccine for domestic animals. PACE HORSES Arsenical poisoning of race horses. Arsenical poisoning of racehorses. Arsenical poisoning of racehorses. PACHIPLOSIA OU Bionomics and control of certain Plusiinae and studies an associated nuclear polyhedrosis virus. PADIATION Control of Myocoptes musculinus on guinea pigs. RADIOACTIVE TRACERS Blood loss caused by Haemonchus contortus in sheep. Metabolism of methylcarbamate insecticide chemicals in	7207 7283 7469 7224 7252 7279 7523 of 6992 7583 7216

RADIOGRAPHY Elbow dysplasia in the German Shepherd dog.	7277
The radiographic features of calcinosis circumscripta (Kalkgicht, calcium gout) in the dog.	7538
RADIOISOTOPES Radiostrontium toxicity in miniature swine.	7420
Translocation of C14-labeled compounds in cotton and o	aks. 7708
RADISHES Nature and inheritance of resistance to Albugo candida radish.	in 6965
RADOPHOLUS SIMILIS An attempt to extend the longewity of the burrowing ne tode, Radopholus similis, with citrus root exudate.	ma- 7098
<b>BAILLIETINIASIS</b> The occurrence of Raillietia auris in Zebu cattle in N geria.	i- 7609
RAMS Ram epididymitis versus brucellosis.	7184
RANGES Paraguat for selective control of range weeds.	7125
RAPHOPLUSIA Problems in the control of mint insects.	7009
BASP LEAF (PRUNUS)	
Comparison of strains of Prunus necrotic ringspot and dwarf viruses with viruses of the Pfeffinger (rasp lea type.	
RASPBERRIES Influence of heat-labile components of the raspberry m virus complex on growth and yield of red raspberries.	osaic 6724
BATCON STUNT (SUGARCANE) Effect of heat treatment of sugarcane for control of r stunting disease (RSD) on spread of mosaic.	atoon 6981
BATS Control of the oriental rat flea with systemic insecti fed to rats.	cides 6542
Vitamin D-induced calcium binding factor in rat intest mucosa.	
Effect of melatonin on thyroid hormone secretion rate feed consumption of female rats.	and 7444
A systemic insecticide and bait for flea and rat contr	
Selective toxicity and animal systemic effectiveness o	
several organophosphates. Immunity to Fasciola hepatica infection in albino rats	
cinated with irradiated metacercariae. Beritable resistance to warfarin in rats.	7638 7693
	1035
Toxicological aspects of 2,2-dichlorovinyl dimethyl phosphate (DDVP) in cows, horses, and white rats.	7699
RATTLE DISEASE (TOBACCO) An apparent strain of tobacco rattle virus associated yellow spotting of lettuce.	with a 6757
Electron microscopy of tobacco rattle type viruses. allen jr, t l.	6844
RECIRCULATION Distribution and sorption of liquid fumigants applied wheat by recirculation.	to 6688
RED CLOVER Follination of red clover in Minnesota.	6611
BHC translocation from treated soil and the effect on growth of red clover.	6686
A physiogenic leaf and stem spot of some forage legume	s. 6790

PAGE 145

## RED CLOVER

phosdrin.

#### RED LEAF DISEASE (PEARS)

A new pea streak virus related to red clover vein mosaic virus (RCVMV).. 6977 Further studies on control of the clover root borer in Virginia. 7080 RED LEAF DISEASE (PEARS) Red leaf disorders of pear in California and their relation to pear decline. 6836 RED WATER DISEASE Bacillary hemoglobinuria (redwater disease) in florida. 7617 REDPEPPERS (VEGETABLE) A soil-borne virus disease of pepper in california. 6852 Identification of the viruses affecting commercial varities of pepper (Capsicum annum) in New Jersey. 692 6925 7675 DDT residue studies on peppers. REFERENCE MATERIALS Report and abstracts of the 1963 annual meeting of the Pacific Division of the American Phytopathological Society. 6689 REFUSE DISPOSAL Drosophila breeding in refuse from tomato canneries. 7031 REOVIRUSES Similarities between wound-tumor virus and the humanpathogenic reoviruses. 6932 Characterization and classification of newly isolated avian enteric viruses. 7284 REPORTS Report and abstracts of the 1963 annual meeting of the Pacific Division of the American Phytopathological 6689 Society. Abstracts of papers accepted for presentation at the fifty-fifth annual meeting of the American Phytopathological Society, Amherst, Mass., August 26, 27, 28, 29, 1963. 6690 REPRODUCT TON Evaluation of compounds of cadmium and related metals as reproduction inhibitors in insects. 6476 The influence of various nitrogen compounds on sexual reproduction in Hypomyces solani f. cucurbitae. 6699 Multiplication of Xanthomonas vesicatoria on tomato seed 6796 lings Reproduction of Pratylenchus penetrans on corn roots cul tured on various nutrient media. 6896 Influence of vitamin D on avrious aspects of the reproductive process in mature hens. 7142 The haploid behavior of Urocystis colchici teliospores. 7725 REPRODUCTIVE ORGANS A detailed morphological study of the external and internal genital organs of female Melanagromyza obtusa (Malloch), a serious pest of Cajanus indicus L. (Agromyzidae, Dip-6560 tera). The reproductive system of the pink sugarcane mealybug, Saccharicoccus sacchari Cockerell (Homoptera, Pseudococidae. 6665 RESERPINE Physiological and pharmacological factors which influence Physiological and pharmacorrelater alterations following vago the incidence of acute pulmonary alterations following 713 tomy in the domestic cock. ĩ36 RESERVOIRS A linnological investigation of the Aufwuchs community in two mainstem Missouri River reservoirs. 6 6451 RESIDUES Evaluation of insecticides for control of the Fuller rose beetle on citrus in California. 7004

Toxaphene residues in hogs. 7578 Nicotine residues in field-treated cauliflower, celery, 7661 green beans, kale, mustard greens and spinach. A colorimetric method for the determination of Co-Ral in animal tissues. 7665 Measuring the surface area of apples for expression of pesticide residues. 7666 Residues in established alfalfa treated with granulated Residues in established alfalls the test of the hay. phorate (Thimet) and their effect on cattle fed the hay. 7667 The excretion of dieldrin, DDT, and heptachlor epoxide in milk of dairy cows fed on pastures treated with dieldrin, 7668 Sevin residues on soybeans following its use for armyworm 7669 control. Heptachlor residues on corn stover in relation to dairy 7670 cattle feeding. The effect of soil treatments of chlordane or heptachlor on the flavor of turnips, parsnips, and carrots. 767 Persistence of DDT, aldrin, and lindane in some midwestern soils. 7672 Epoxidation of aldrin and heptachlor in soils as influenced by autoclaving, moisture, and soil types. 767 7673 Malathion residues on and in the leaves of Phaseolus vulgaris. 7674 DDT residue studies on peppers. 7675 Studies on the metabolism and residues of P32-labeled Delnav in a Hereford steer. 7676 Acute toxic effects upon livestock and meat and milk residues of dieldrin. 7677 Residue studies of livestock sprays containing Sevin. 7678 Residues of malathion on alfalfa and in milk and meat. 7680 DDT deposits on grapes as affected by growth and weathering. 7682 Parathion and EPN residue studies on Concord grapes. 7683 RESISTANCE Morphological changes in a parasitic nematode due to acquired resistance of the host. 7624 Heritable resistance to warfarin in rats. 7693 RESISTANT STRAINS Salmonella resistance increases. 7424 RESPIRATION Effect of fungicides on the respiration of three species of soil fungi. 6941 Respiratory activity and enzymes for glucose catabolism in fungus spores. 7704 Influence of oat and alfalfa residues on soil respiration, fungistasis, and survival of Verticillium albo-atrum.

Residues of Sevin and 1-naphthol on forage from aerial

Pickleworm control and residue studies with malathion and

Possible hazards in the veterinary use of antibiotics with

particular reference to their use as food additives.

7020

7107

7146

7723

applications of Sevin in oil.

Respiratory disease in vaccinated feeder cattle. 7211

RESPIRATORY DISEASES

Epizootiology of bovine myxovirus parainfluenza 3(sf-4) in Nebraska cattle as determined by antibody titers. 7398

Studies on equine respiratory virus.	7466	RHODE ISLAND Salmonellosis in turtles in rhode island.
RETINA Hereditary retinal atrophy in the poodle.	7238	BHODODENDRON Systemic insecticides for control of scal and lace bugs.
REVIEWS Biological races of Albngo candida.	7722	RHODOTORULA The effect of 2 hepta-5-methylbenzimidazo
HAMNUS Beasnring the pathogenic potential of Puccinia coronat var. avenae.	ta 68 <b>7</b> 9	acid on the growth of microflora found on
		RHOPALIDAE
REINITIS Common problems in the pig.	7144	The higher classification of the family B tera) together with a revision of the gen (Bhopalidae0 Hemiptera).
Chronic rhinitis in cats.	7275	RHOPALOSIPHUM
REINOTRACEBITIS Infections bovine rhinotracheitis abortion and its rel ship to nntrition in California beef cattle.	lation- 7278	Morphological identification of virns-lik corn leaf aphid, Bhopalosiphna maidis (Pi
Viral causes of bovine abortion in ohio.	7493	Vectors of alfalfa and bean yellow mosaic white clover.
REIZOCTONIA Influence of temperature on rate of growth of five fur pathogens of turfgrass and on rate of disease spread.	ngns	RHUS TRILOBATA Control of Cylindrosporinm leaf spot dise lobath and Shepherdia argentea seedlings.
·····	6745	RHYACIONIA
Evidence for two different pathogens of peannt pod rot	t. 6754	Influence of timing and insect biology on of insecticides applied for control of En moth, Rhyacionia bnoliana.
Infection of seedling cotton hypocotyl by an isolate Rhizoctonia solani.	6781	Field testing of insecticides for control pine moth, Rhyacionia frnstrana, and the
Identification of three physiologic races of Rhizoctor solani isolated from seedling cotton.	nia 6905	shoot moth, R. bnoliana.
A method for evaluating soil fungicides.	6939	RIBONUCLEIC ACID Incorporation of radioactive Uridine into lepidopteran Barathra brassicae.
Inhibition of fungi by cnlture media previonsly expose light.	ed to 6954	Phrification and properties of bromegrass
The macerating enzyme of Rhizoctonia solani.	7701	
HEIZOME Fnsarium yellows and rhizome rot of common ginger.	6945	Effects of ultraviolet preinoculation tre subsequent infection by tobacco mosaic vi ribonucleic acid.
RHIZOPUS		Release of ribonncleic and amino acids by
The role of Drosophila melanogaster in th epiphytology Geotrichnm, Rhizorns, and other fruit rots of tomato.	y of 6716	The effect of n-dodecylgnanidine acetate
Physiology of Rhizopus infection on carrot.	6814	and the nucleotides of ribonncleic acid.
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus spe		Mode of action of 2,6 dichloro-4-nitroani Rhizopus arrhizns.
and its comparison with other fungicides on control of Rhizopus rot of peaches.		RICE
Variations in tolerance of Rhizopus species to 2,6-dic -4-nitroaniline.	chloro 6839	The relation between storage molds and da ture rice in aerated storage.
Hydrothermal and hygrothermal inactivation of Monilini	ia	Orange stain, a storage disease of rice c lium pubern1nm.
fracticola and Rhizopus stolonifer spores.	6912	Factors affecting invasion of grains and
Production of pectinolytic and cellulolytic enzymes by Rhizopus stolonifer.	y 6919	lus flavus and effects of the fnngns on g seeds.
Relation of seed-borne fungi to boll rots of cotton.	6960	RICKETTSIAL DISEASES Histological observations on the developm
The mode of action of 2,6 dichloro-4-nitroaniline in Rhizogus arrhizns spores.	7729	inclusions of the rickettsial disease of Meigen.
Bode of action of 2,6 dichloro-4-nitroaniline (DCNA) i Rhizogns arrhizns.	in 7750	On the problem of crystals with rickettsi
REIZOSPHERE Influence of host and nonhost plants upon populations	of	RIFT VALLEY PEVER VIRUS Rift valley fever in calves, goats and pi
Thielaviopsis basicola in soil.	6704	Rift valley fever in lambs and sheep.
Bicrobial antagonism in bean rhizosphere as affected l straw and snpplemental nitrogen.	by oat 6847	RINDERPEST Snbendocardial haemorrhage in rinderpest-
Effects of oat straw and snpplemental nitrogen on mich antagonism in bean rhizosphere.	robial 6848	
Antibiotic production by Streptomyces sp. in corn rhizosphere.	6864	Fatal strike caused by Chrysomia bezzia buffaloes.
		Vaccination of calves against rinderpest.

REODODENDEON Systemic insecticides for control of scales, leaf miner	
and lace bugs. RHODOTORULA	7059
The effect of 2 hepta-5-methylbenzimidazole and hydroch acid on the growth of microflora found on ponltry carca	
REOPALIDAE The higher classification of the family Rhopalidae (Hem tera) together with a revision of the genus Arhyssns St (Rhopalidae0 Hemiptera).	
REOPALOSIPEUM Morphological identification of virns-like particles in corn leaf aphid, Rhopalosiphnm maidis (Fitch)	the 6607
Vectors of alfalfa and bean yellow mosaic virnses in La white clover.	dino 6803
RHUS TRILOBATA Control of Cylindrosporinm leaf spot disease of Rhns tr	÷_
lobath and Shepherdia argentea seedlings.	6855
HYACIONIA Influence of timing and insect biology on the effective of insecticides applied for control of Enropean pine sh moth, Rhyacionia bnoliana.	ness oot 6991
Field testing of insecticides for control of the Nantuc pine moth, Rhyacionia frnstrana, and the European pine shoot moth, R. bnoliana.	ket 7001
RIBONUCLEIC ACID	
Incorporation of radioactive Uridine into the BNA of th lepidopteran Barathra brassicae.	e 6599
Phrification and properties of bromegrass mosaic wirns.	6723
Effects of ultraviolet preinoculation treatment of leav subsequent infection by tobacco mosaic virus and THV. ribonucleic acid.	es on 6899
Release of ribonncleic and amino acids by Phytophthora.	7745
The effect of n-dodecylgnanidine acetate on enzyme acti and the nucleotides of ribonncleic acid.	
Mode of action of 2,6 dichloro-4-nitroaniline (DCNA) in Rhizopus arrhizns.	7750
RICE	
The relation between storage molds and damage in high-m ture rice in aerated storage.	6894
Orange stain, a storage disease of rice caused by Penic lium pubern1nm.	il- 6895
Factors affecting invasion of grains and seeds by Asper lus flavus and effects of the fnngns on germination of seeds.	gil- the 7644
RICKETTSIAL DISEASES	
Histological observations on the development of crystal inclusions of the rickettsial disease of Tipnla palndos	
Meigen.	0000
On the problem of crystals with rickettsial infections.	6569
RIFT VALLEY PEVER VIRUS Rift valley fever in calves, goats and pigs.	7194
Rift walley fewer in lambs and sheep.	7206
RINDERPEST Snbendocardial haemorrhage in rinderpest-infected cattl	e. 7495
Patal strike caused by Chrysomia bezziana in cattle a buffaloes.	nd 7633
Vaccination of calves against rinderpest.	7634

# RINDERPEST 7486

## RING MOTTLE (BEETS)

ALNO BOILED (DEELO)	
RING MOTTLE (BEETS) Beet ring mottle disease.	6738
RING SPOT (DABLIA) A ringspot virus from dahlia.	6793 <sup>:</sup>
RING SPOT (PRUNUS) Studies on the passage of Prunus ringspot virus complex through plum seed.	6942
RING SPOT (TOBACCO) Relationships of viruses associated with ringspot disea of blueberry.	ses 6798
RINGWORM Dermatophytosis (ringworm) pathogenesis, diagnosis, an treatment.	d 7250
Parafilaria multipapillosa in the horse.	7320
Parafilaria multipapillosa in the horse.	7626
Griseofulvin in the treatment of bovine ringworm.	7628
ROCKY MOUNTAIN SPOTTED FEVER	
Ticks in the united states serve as vectors of disease.	7187
ROCKY MOUNTAINS Forest-insect surveys in the central Rocky Mountains.	7077
RODENT CONTROL Heritable resistance to warfarin in rats.	7693
RODENTICIDES Heritable resistance to warfarin in rats.	7693
ROE Dipyridylium residues in an aguatic environment.	7662
RONNEL Control of the oriental rat flea with systemic insectic fed to rats.	ides 6542
Effect of ronnel upon the adult rice weevil, Sitophilus oryza.	7012
A systemic insecticide and bait for flea and rat contro	1. 7561
Laboratory and field tests against mites and lice attac poultry.	king 7562
House fly control in pig parlors.	7566
Field studies of house fly resistance to organophosphor insecticides.	us 7569
Residual effectiveness of certain insecticides in horn control.	fly 7572
Control of the northern fowl mite, Ornithonissus sylvia (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199.	rum 7573
Organophosphate systemics as sprays and feed additives : cattle grub control.	for 7577
The in vivo activity of several systemic insecticides against cattle grubs in South Dakota.	7582
Feed lot tests with ronnel for control of cattle grubs.	7586
Further experiences with the systemic insecticides Etro and Ruelene in 1960-61.	lene 7600
Toxicity of organic phosphorus insecticides to horses.	7694
ROOT EXCRETIONS	•
Pactors affecting the pathogenesis of Pythium species of cotton (Gossypium hirsutum L) seedlings.	6920
An attempt to extend the longevity of the burrowing nem tode, Radopholus similis, with citrus root exudate.	a- 7098

ROOT ROT (ALFALFA) Phytophthora root rot of alfalfa in Minnesota.	6751
ROOT ROT (AVOCADOS) Biological control of Phytophthora root rot of avocado alfalfa meal.	with 6978
ROOT ROT (BEANS)	
Chitin-lignin amendments for control of bean root rot.	6807
ROOT ROT (CORN) Effect of crop rotation on yields, stalk rot, and root of corn.	rot 6964
ROOT ROT (COTTON)	
Recognition of Phymatotrichum root rot of cotton and alfalfa in an aerial survey.	6858
ROOT ROT (PSEUDOTSUGA MENZIESII) Poria weirii root rot.	6722
Phytophthora cinnamomi root rot of Douglas-fir.	6875
ROOTS	
Symposium on root diseases of forest trees. invitational papers presented august 27, 1962, at the f fourth annual meeting of the American Phytopathological Society at Corvallis, Oregon.	
Vancomycin prevents crown gall.	6711
Summation.	6766
Control of downy mildew of opium poppy by root applicat of fungicides.	ion 6788
Phytopathological notes. inducing infection of pear rootlets by Phytophthora cactorum in pot tests.	6810
Ceratocystis fagacearum in roots of infected bur oaks a the recurrence and spread of oak wilt.	nd 6831
Relation of decomposing plant residues to root growth o alfalfa.	f 6840
Reproduction of Pratylenchus penetrans on corn roots cu tured on warious nutrient media.	1 <del>-</del> 6896
Influence of root exudates of cacao and other plants on spore development of Phytophthora palmivora.	6947
Control of the woolly apple aphid on roots of apple nur stock.	sery 7011
Control of root maggots in swede turnips in Newfoundlan with heptachlor and aldrin and the effect on parasites overwintering pupae.	
The histological relationship of resistance to the citr nematode in certain citrus rootstocks.	us 7114
Production of 3-methyl-6-methoxy-8-hydroxy-3,4-dihydroi coumarin by carrot root tissue.	so- 7736
Purification of the selective toxin of Periconia circin	ata. 7755
ROSA Vancomycin prevents crown gall.	6711
	0,11
Hairy root (Agrobacterium rhizogenes) of field roses.	6829
Hostiparasite interaction in blackspot disease of roses caused by Diplocarpon rosae Wolf.	6886
ROT Varietal resistance to clover rot in white clover.	6694
ROT (GINGER) Fusarium yellows and rhizome rot of common ginger.	6945
ROT (PEACHES)	
Effects of 2,6-dichloro-4-nitroaniline on Rhizopus spec and its comparison with other fungicides on control of Rhizopus rot of peaches.	ies 6838

c	3 1	ITA	TT	ON.

		36	AUTIAI
ROT (TOMATORS) The role of Drosophila melanogaster in the piphytology	of	Wilt-incitant Pusarium oxysporum f. carthami present in seed from infected safflower.	n 6785
Geotrichum, Rhizopus, and other fruit rots of tomato.	6716	Stemphyllium leafspot of safflower.	6870
ROTENONE Resistance of Boophilus microplus to organo-phosphorus secticides.	in- 7503	SALIVARY GLANDS (INSECTS) Cytological and autoradiographic studies on Sciara copr phila salivary gland chromosomes.	ro- 6671
ROTYLENCHULUS A plant-parasitic nematode of the genus Rotylenchulus : in california.	found 7102	Recovery of aster yellows from excised organs of insect tors.	t vec- 6770
ROUGHAGE		SALMONELLA Salmonellosis in the dog.	7221
The influence of physical form of roughages and antibic administration on performance, carcass characteristics, health, of the rumen epithelium, rumen volatile fatty a	,	Salmonellosis in turtles in rhode island.	7486
and liver abscesses of steers fed all-concentrate ratio		Mortality and morbidity in calwes with salmonellosis.	7489
ROUS SARCOMA VIRUS Rous sarcoma virus infection of chicken buffy coat mac		Concurrent Salmonella typhimurium and Bimeria necatrix fections in chicks.	in- 7518
phage. ROYAL JELLY	7472	New investigations on cold-blooded animals as Salmonell sources.	la 7546
The influence of environmental and nutritional factors growth and caste determination of female honey bees.	on 6519	Effect of methyl bromide salmonella pullorum.	7700
RUELENE Further experiences with the systemic insecticides Etro and Ruelene in 1960-61.	olene 7600	SALMONELLA BACTERINS Hog cholera Breaks influenced by bacterial infection.	7219
Field trials comparing the anthelmintic effect of Ruele (4-tert-butyl-2-chlorophenylmethyl methylphosphoramidat with that of phenothiazine.		SALMONELLA ENTERITIDIS Inhibition of enzymes by the anthocyanin malvidin-3-mon coside.	noglu- 7730
Toxicity of organic phosphorus insecticides to horses.	7694	SALMONELLOSIS Salmonella problem receives primary attention at AVMA of cil meeting.	<b>coun-</b> 7170
RUMEN An analysis of the bloat complex and progress towards i		Salmonellosis in the dog.	7221
prevention. The influence of physical form of roughages and antibic	7236 otic	Three cases of Salmonella dublin in adult cattle on the same farm.	e 7227
administration on performance, carcass characteristics bealth, of the rumen epithelium, rumen volatile fatty a and liver abscesses of steers fed all-concentrate ratio	acids ons.	Salmonella and the U.S. meat industry action and react	tion. 7331
RUMINANTS Public health aspects of cesium-137 in ruminants.	7347	An outbreak of Salmonella pullorum infection in turkey poults.	7364
RUSSET SCAB (POTATOES)	/ 501	Salmonellosis in slaughterhouses in Israel.	7375
Growth and survival of the pathogen causing russet scal potatoes.	b on 6709	The control of an outbreak of Salmonella dublin in calv	ves. 7401
RUST (BEANS)		Salmonella pullorum infections in turkeys.	7412
Changes in multiple molecular enzymes in rusted bean le	6923	Salmonella resistance increases.	7424
Heat therapy of bean rust.	6974	Salmonellosis A serious outbreak in a dairy herd.	7438
ROST (GRAIN)		Salmonellosis in animals threatens man.	7467
Infection inhibition and germ-tube lysis of three cerea rusts by Bacillus pumilus.	al 6827	Salmonellosis in turtles in rhode island.	7486
RUST (MENTEA PIPERITA) Field disease cycle of peppermint rust.	6773	Mortality and morbidity in calves with salmonellosis.	7489
RUST (OATS) Photosynthetic phosphorylation by chloroplasts isolated	d from	Salmonellosis, a pet-implicated zoonosis.	7527
rust-infected oats.	6972	New investigations on cold-blooded animals as Salmonell sources.	la 7546
RUST (SUNFLOWER) Use of rust (Puccinia helianthi) races to discover new pools for rust resistance in sunflower (Helianthus annu		Salmonellosis in turtles in minnesota.	7553
SACBROOD The incidence of virus diseases in honey bees.	6448	SAMPLING (STATISTICS) A sampling technique for estimating populations of smal arthropods in soil and vegetation.	11 6455
SACCHARICOCCUS SACCHARI		Estimating immature populations of rice weewils in whea using subsamples.	at by 6460
The reproductive system of the pink sugarcane mealybug, Saccharicoccus sacchari Cockerell (Homoptera, Pseudococidae.	6665	A study of mealybug populations (Dysmicoccus brewipes (Ckl.)) in an ant-free field.	6994
SAFFLOWER Studies on levels of reducing sugars and hydrolytic en in relation to Botrytis head rot on safflower.	zymes 6703	SANITATION Salmonella and the U.S. meat industry action and react	tion. 7331

## SANITATION CONTROL (PESTS)

SANITATION CONTROL (PESTS)	
SANITATION CONTROL (PESTS) Hairy root (Agrobacterium rhizogenes) of field roses.	6829
SAPONINS Injected saponins as abortifacients.	7203
SAPROPHYTES Saprophytism and persistence in soil by Phytophthora cinnamomi.	6979
SARCOMA Osteogenic sarcoma of the oesophagus in a dog.	7262
The differential diagnosis of bone tumours in the dog.	7450
SARCOPTOFORMES A study of the life history of the pigeon feather mite, Falculifer rostratus (Buchholz), 1869, in vivo and in vitro.	6493
SAWDUST The microbial hydrolysis of cellulose and some factors a fecting the production of cellulase in a submerged cultu of Alternaria sp.	uf- ure 7718
SCAB (APPLES) Chemotherapy of the apple scab disease with butyric acid derivatives.	l 6801
SCAB (POTATOES) Streptomycin resistance a technique for the direct as	sav
of potato scab organisms from scil.	6953
SCAB (WHEAT) Factors affecting resistance of wheat to scab caused by Ghibberella zeae.	6893
SCABLES Psoroptic cattle scables eradication activities for 1962	7193
SCAPTOMYZA Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley.	6466
SCARABAHIDAE Adelina sericethis n. sp., a new coccidian parasite of scarabaeid larvae.	6474
SCELIPHRON CAEMENTARIUM The venom of the mud-dauber wasp Sceliphron caementarium	6620
SCHISTOCEBCA Motile streptococci from the desert locust, schistocerca gregaria.	6641
An infection of the desert locust, Schistocerca gregaria Forskal with a nonchromogenic strain of Serratia marcescens Bizio.	6642
The normal bacterial flora of the alimentary canal of la atory stocks of the desert locust, Schistocerca gregaria Forskal.	
Epizootiology of a disease of the desert locust, Schistocerca gregaria (Forskal), caused by nonchromogeni strains of Serratia marcescens Bizio.	.c 6644
Oral infection of second-instar nymphs of Schistocerca gregaria by Metarrhizium anisopliae.	6651
Correlation between sperm redundancy and chiasma frequer	су. 6669
SCHISTOCEBCA GREGARIA	
An infection of the desert locust, Schistocerca gregaria Forskal with a nonchromogenic strain of Serratia marcescens Bizio.	6642
Effect of mineral oil solvent on the toxicity and speed action of malathion.	of 7686
SCIABA COPBOPHILA Cytological and autoradiographic studies on Sciara copro phila salivary gland chromosomes.	- 6671

SCLEBOPHTHORA Oospore characters in the classification of Sclerophthor and Sclerospora species.	a 6883
SCLEROSPORA Sporangial germination of Sclerospora graminicola and inoculation of Pennisetum glaucum.	6882
Oospore characters in the classification of Sclerophthor and Sclerospora species.	a 6883
SCLEROTINIA	
Influence of temperature on rate of growth of five fungu pathogens of turfgrass and on rate of disease spread.	6745
SCLEROTINIA FRUCTIGENA Antifungal phenolic acids in apple fruits after infectio with Sclerotinia fructigena.	n 6746
SCLEROTINIA TRIFOLIORUM Varietal resistance to clover rot in white clover.	6694
SCLEROTIUM Variation in susceptibity to Sclerotium rolfsii among pe nut varieties.	a- 6755
Effect of fungicides on the respiration of three species soil fungi.	of 6941
SCLEROTIUM BATATICOLA	
Varietal response in groundnut to Sclerotium bataticola.	6806
SCOLYTIDAE The biological impact of the checkered beetles (Coleopte	ra0
Cleridae) on populations of Ips bark beetles (Coleoptera	0 6565
SCRAPIE The spread of scrapie by contact between affected and he thy sheep, goats or mice.	al- 7456
SCURVY Suspected skeletal scurvy in the dog.	7360
Suspected skeletal scurvy in the dog.	7372
Suspected skeletal scurvy in the dog.	7464
Suspected skeletal scurvy in a dog.	7490
SCUTIGERELLA	
Infection of the garden symphylan, Scutigerella immacula	ta 6645
SD-3562 The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat.	7027
SD-4402	
	7006
SEASOMAL SWINE DISEASE ISU veterinarians suspect two weeds as cause of seasonal	
swine disease.	7157
SEC-BUTYLAMINE Control of Penicillium decay of oranges with certain volatile aliphatic amines.	6741
SEDIMENTATION Sedimentation properties of two stone fruit viruses.	6940
SEDUM Stemphylium leafspot of Echeveria, Kalanchoe, and Sedum.	
	6916
SEED GERMINATION BHC translocation from treated soil and the effect on growth of red clover.	6686
Effect of SMDC on germination, plant growth, and fusariu wilt incidence of cumin (Cuminum cyminum).	т 6805
Improving emergence of pelleted vegetable seeds with por coatings.	ous 6917
The effect of phorate applied to seed on the growth,	

development and insects attacking grain sorghum.	7005	Studies on the passage of Prunus ringspot virus complex through plum seed.
The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat.	7027	Green-seeded downy mildew-resistant Pordhook lima beans
Factors affecting invasion of grains and seeds by Aspe lus flavus and effects of the fungus on germination of seeds.		The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum.
Germination of cereal, sorghum, and small legume seeds fumigation with hydrogen phosphide.	s after 7645	Effect of feeding various levels Crotalaria spectabilis seed on the performance of chicks, turkeys, and pullets
Effect of methyl bromide and hydrocyanic acid fumigati the germination of flax seeds.	ion on 7650	Pathologic changes associated with feeding various leve of Crotalaria spectabilis seed to poultry.
Isolation and characterization of a germination inhibition from sugar beet fruit.	itor 7721	Factors affecting invasion of grains and seeds by Asper- lus flavus and effects of the fungus on germination of
SEED FLANTING Control of Pythium damping-off of melons by simultaned seeding and soil fumigation with chloropicrin.	ous 6961	seeds. Effects of relative humidity and temperature on the deg
SEED TREATMENT Moisture sensitivity, mechanical injury and gibberell: treatment of Beta vulgaris seeds.	in 6721	tion of peanut sugar and oil by Aspergillus flavus. SELENIUM White muscle disease, a selenium-responsive myopathy.
Disinfection of tomato seed infested with Xanthomonas		
catoria. Improving emergence of pelleted vegetable seeds with p	6797 porous	SEMINAL VESICLES Seminal vesticulitis in bulls associated with infection Actinobacillus actinoides.
coatings. The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat.	6917 7027	SERODIAGNOSIS A preliminary report on the occurence of infectious lar tracheitis of poultry in India.
SEED-BORNE PLANT DISEASES Seed transmission of white clover mosaic and clover ye mosaic viruses in red clover.	ellow 6760	SEBOLOGICAL TESTS Bentonite flocculation a rapid, sensitive serological for the detection of plant virus antigens.
Wilt-incitant Fusarium oxysporum f. carthami present i seed from infected safflower.	in 6785	Identification of the viruses affecting commercial vari- of pepper (Capsicum annum) in New Jersey.
Studies on the passage of Prunus ringspot virus complethrough plum seed.	ex 6942	Combined serologic tests most accurate for identifying brucellosis reactors.
Relation of seed-borne fungi to boll rots of cotton.	6960	Infectious bronchitis virus typesIncidence in the Uni-
SEEDLINGS Infection of spruce seedlings by Cylindrocladium scope	arium. 6715	States. Rapid plant virus assay combines density-gradient centrifugation and Ouchterlony agar diffusion serologic:
Infection of seedling cotton hypocotyl by an isolate Rhizoctonia solani.	6781	tests.
Infecting seven-day-old alfalfa seedlings with wilt be through wounded Cotyledons.	acteria 6789	Complement-fixation test for detecting Japanese encephalitis virus.
Multiplication of Xanthomonas vesicatoria on tomato se lings.	eed- 6796	Pregnancy hormones and brucellacidal activity in bovine serum.
Identification of three physiologic races of Rhizocton solani isolated from seedling cotton.	nia 6905	SEX Effects of geographic isolation and host association on evolution of sexuality in Helminthosporium.
Influence of plant age on the survival of alfalfa vari differing in resistance to the spotted alfalfa aphid.	ieties 7018	The incidence of spontaneous pathologic changes in aort; growing turkeys.
Toxicity of BEC to loblolly pine seedlings.	7068	SEX ATTRACTANTS Evidence of sex attractant in female Dysdercus cingulat
Biology and control of the apple seed chalcid in North		Fabr.
Carolina.	7072	SEX DETERMINATION Karyological studies on the Indian spiders. VI. chromo-
Translocation of C14-labeled compounds in cotton and o	7708	some number and sex-determining mechanism in the family Araneidae).
Bioassay methods for 4-amino-3,5,6-trichloropicolinic	acid. 7742	SHEEP Ovine abortion virus in ewes and fetuses.
SEEDS Internally infected seed as a source of inoculum for a primary cycle of bacterial blight of cotton.	the 6712	Three methods for controlling grass tetany in cattle and sheep.
Fungi attacking seeds in dry seed-beds.	6759	Rift valley fever in lambs and sheep.
Wilt-incitant Fusarium oxysporum f. carthami present : seed from infected safflower.	in 6785	Blood loss caused by Haemonchus contortus in sheep.
Disinfection of tomato seed infested with Xanthomonas	vesi-	Chronologic evaluation of tetratogenicity in sheep fed Veratrum californicum.
catoria.	6797	Vitamin D3 and ovine ring womb .

een-seeded downy mildew-resistant Fordhook lima beans. 6958 e effect of phorate applied to seed on the growth, evelopment and insects attacking grain sorghum. 7005 fect of feeding various levels Crotalaria spectabilis fect of feeding various levels clothaters and pullets. red on the performance of chicks, turkeys, and pullets. 7342 thologic changes associated with feeding various levels Crotalaria spectabilis seed to poultry. 7508 ctors affecting invasion of grains and seeds by Aspergil-is flavus and effects of the fungus on germination of the 7644 eds. fects of relative humidity and temperature on the degrada-on of peanut sugar and oil by Aspergillus flavus. 7714 NIUR ite muscle disease, a selenium-responsive myopathy. 7443 NAL VESICLES NAL VESICLES minal vesticulitis in bulls associated with infection by 7384 DIAGNOSIS preliminary report on the occurence of infectious laryngo-acheitis of poultry in India. 7510 LOGICAL TESTS ntonite flocculation a rapid, sensitive serological test or the detection of plant virus antigens. 689 6897 entification of the viruses affecting commercial varities pepper (Capsicum annum) in New Jersey. 6925 mbined serologic tests most accurate for identifying 7183 ucellosis reactors. fectious bronchitis virus types--Incidence in the United 7356 ates. pid plant virus assay combines density-gradient pid plant virus assay compines density yikutour ntrifugation and Ouchterlony agar diffusion serological 7712 omplement-fixation test for detecting Japanese acephalitis virus. 7198 egnancy hormones and brucellacidal activity in bovine 7213 rum. fects of geographic isolation and host association on the rolution of sexuality in Helminthosporium. 6835 ne incidence of spontaneous pathologic changes in aortas of cowing turkeys. 7138 ATTRACTANTS idence of sex attractant in female Dysdercus cingulatus 6604 br. DETERMINATION ryological studies on the Indian spiders. VI. chrom me number and sex-determining mechanism in the family 6675 aneidae). ine abortion virus in ewes and fetuses. 7195 ree methods for controlling grass tetany in cattle and 7202 ft valley fever in lambs and sheep. 7206 ood loss caused by Haemonchus contortus in sheep. 7216

ronologic evaluation of tetratogenicity in sheep fed ratrum californicum. 7249 7257 tamin D3 and ovine ring womb.

PAGE 151

SHEEP

6942

COPPAC	
SHEETS Acorn poisoning in a cow and a sheep.	7308
Newer knowledge of ovine vibriosis.	7310
The effect of staphylococcal toxins on ruminant eryth	
treated with diffusable substances formed by coryneba	
The control of Nematodirus fillicollis infection by s gic anthelmintic medication.	trate- 7321
The assessment of the value of topical applications f treatment of contagious foot-rot in sheep, with parti reference to Dichlorophen.	or the cular 7346
Foot-rot in feeding sheep.	7404
The spread of scrapie by contact between affected and thy sheep, goats or mice.	heal <del>-</del> 7456
The occurrence of gaseous lymphadenitis and Morel s d in a sheep flock in Kenya.	isease 7505
Incomplete dilation of the owine cervix.	7515
Sulphur poisoning in ewes.	7547
Intestinal herniation in the ewe.	7548
Thiabendazole as an anthelmintic in cattle and sheep.	7588
Further studies on toxoplasmosis and ovine abortion is Yorkshire.	n 7596
Ovine abortion and toxoplasmosis in the East Midlands	7597
Infection of goats with Eimeria spp. of sheep origin.	7610
Bacillary hemoglobinuria (redwater disease) in florid	a. 7617
A simple method for the culture and recovery of larva intestinal nematodes of sheep.	e of 7636
The anthelmintic activity of methyridine by intraperi injection in sheep and cattle.	toneal 7640
Studies on the distribution of the sheep tick (Irodes nus L.) and the occurrence of enzootic staphylococcal fection of lambs in North-West Yorkshire and North-Eas	in- st
Lancashire.	7641
The role of selected management systems in the contro sheep parasites.	1 of 7642
Acute toxic effects upon livestock and meat and milk residues of dieldrin.	7677
The search for veterinary insecticides. iI. carbamate active against sheep blowfly.	s 7691
SHEETS Toxicity of cellulose acetate sheeting to leguminous	plants. 7026
SHELL SD 3562 Selective toxicity and animal systemic effectiveness several organophosphates.	of 7563
SHEPHERDIA ARGENTEA Control of Cylindrosporium leaf spot disease of Rhus lobath and Shepherdia argentea seedlings.	tri- 6855
SHIPPING FRVER	
Studies on an experimental vaccine for prophylaxis of shipping fever.	7314
Studies on myxovirus parainfluenza-3 vaccine for prev of shipping fever in cattle.	7395
Tick transmission of bovine pasteurellosis.	7621
SHRUBS The effect of Criconemoides curvatum and Pratylenchus penetrans on woody ornamentals.	7099

SILICON Silicon content of intact nuclear polyhydra from the c earworm, Heliothis zea.	orn 6525
Silicon content of the paraspora crystal of several crytalliferous bacteria.	6527
SIMAZINE An evaluation of atrazine, simazine, monuron and diuro ten Hawaiian sugar cane plantations.	n on 7132
The mechanism of the interaction between soil organic and herbicide toxicity and the influence of pH on herb phytotoxicity.	
SIMULIIDAE The black flies (Diptera0 Simuliidae) of western Massa chusetts.	- 6457
SINALBIN Studies on the decomposition of sinalbin. iI. the comp tion products of sinalbin and their degradation pathwa	
SINUSITIS The treatment of infectious sinusitis of turkeys with zolidone.	Fura- 7511
SIPHONAPTERA Fleas (Siphonaptera) of Alabama and their host relatio ship.	n- 6467
A systemic insecticide and bait for flea and rat contr	ol. 7561
SITOPHILUS Estimating immature populations of rice weevils in whe using subsamples.	at by 6460
Effect of ronnel upon the adult rice weevil, Sitophilu oryza.	s 7012
The effect of grain moisture upon development of the r weevil in green corn.	ice 7049
Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn.	7055
tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II	
tetrachloride against three pests of stored corn. Development of granary weewils and storage fungi in co	lumns
tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon	lumns 7643
<ul> <li>tetrachloride against three pests of stored corn.</li> <li>Development of granary weevils and storage fungi in co of wheat- II</li> <li>SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn.</li> <li>SKIN DISEASES</li> </ul>	lumns 7643 7055
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUNKS</pre>	lumns 7643 7055 7281
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUMKS Fluorescent antibody studies for rabies in wildlife.</pre>	lumns 7643 7055 7281 7163
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUMKS Fluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa.</pre>	lumns 7643 7055 7281 7163 7172 7180
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUNKS Fluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa. Wildlife rabies increases.</pre>	lumns 7643 7055 7281 7163 7172 7180 s.
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUWKS Fluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa. Wildlife rabies increases. Effect of rabies virus inoculated into foxes and skunk SLAUGHTERHOUSES</pre>	lumns 7055 7281 7163 7172 7180 \$ 7207 7375
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUWKS Pluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa. Wildlife rabies increases. Effect of rabies virus inoculated into foxes and skunk SLAUGENTERHOUSES Salmonellosis in slaughterhouses in Israel. SMDC Effect of SMDC on germination, plant growth, and fusar</pre>	lumns 7643 7055 7281 7163 7172 7180 \$ 7207 7375 ium
<pre>tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUWKS Pluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa. Wildlife rabies increases. Effect of rabies virus inoculated into foxes and skunk SLAUGENTERHOUSES Salmonellosis in slaughterhouses in Israel. SMDC Effect of SMDC on germination, plant growth, and fusar wilt incidence of cumin (Cuminum cyminum).</pre>	lumns 7055 7281 7163 7172 7180 5 7207 7375 ium 6805 6819
tetrachloride against three pests of stored corn. Development of granary weevils and storage fungi in co of wheat- II SITOTROGA Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. SKIN DISEASES Labrador plague . SKUNKS Fluorescent antibody studies for rabies in wildlife. Skunks and cows are rabies threat in Iowa. Wildlife rabies increases. Effect of rabies virus inoculated into foxes and skunk SLAUGENTERHOUSES Salmonellosis in slaughterhouses in Israel. SMDC Effect of SMDC on germination, plant growth, and fusar wilt incidence of cumin (Cuminum cyminum). SMOG Ozone injury to the foliage of Pinus ponderosa. SMUT (ONIONS)	lumns 7055 7281 7163 7172 7180 5.7207 7375 ium 6805 6819 .7725

SOCIETIES Abstracts of papers accepted for presentation at the fif fifth annual meeting of the American Phytopathological		SOIL EXT Plant compet
Society, Amherst, Mass., August 26, 27, 28, 29, 1963.	6690	alfalf
SODIUM	:	SOIL FAU Pestic DDT in
Decomposition of sodium N-methyldithiocarbamate in soil.	7748	SOIL FUM
SODIUM CYANIDE The effect of insecticides on transamination in th ameri cockroach.		Contro soil f
SODIUM FLUORIDE		Fertil in sou
Effects of sodium fluoride on growth of some pathogenic fungi.	6943	Contro seedin
Effect of fluorides in cattle.	7365	Increa
SODIUM FLUOSILICATE Salt-marsh caterpillar control on cotton in Arizona.	7118	of lar
SODIUM HYFOCHLORITE Hairy root (Agrobacterium rhizogenes) of field roses.		Popula todes
SODIUM MONOFLUOROACETATE	6829	SOIL FUN Trichl ing so
Control of thar (Hemitragus jemlahicus), evaluation of a poisoning technique.	7689	Effect
SODIUM N-METHYLDITHIOCARBAMATE	,,	111000
Decomposition of sodium N-methyldithiocarbamate in soil.	7748	Mechan
SODIUM ORTHOARSENATE		Fungit microf
The effect of insecticides on transamination in th ameri cockroach.	can 6587	Effect soil f
SODIUM CETHOPHENYLPHENATE Effect of ingested disinfectants on chicks.	7247	The mo phenyl
SODIUM SULFITE A simple test for deprivation of colostrum in piglets.	7292	SOIL LEA The ef linuro
SODIUM THIOSULFATE Arsenical poisoning of racehorses.	7279	soil.
SOIL AERATION Growth inhibition of Phytophthora cinnamomi by soil		SOIL MIC Mechan
diffusates on agar medium.	6946	SOIL MOI Postin
Some factors that influence the deactivation of atrazine soil.	in 7654	contro Influe
SOIL AMENDMENTS	1054	Loxost
Pusarium wilt (race2) of tomato0 effect of lime and micr nutrient soil amendments on disease development.	6 <b>77</b> 5	Some f soil.
SOIL BACTERIA Fungistatic effects of a soil bacterium on conidia and		SOIL ORG The me
hyphae of Helminthosporium sativum.	6842	and he phytot
Decomposition of 2,4-D and related phenoxyacetic acids b an Arthrobacter species.		SOIL SER Effect
SOIL CATION EXCHANGE The mechanism of the interaction between soil organic ma	tter	on pea
and herbicide toxicity and the influence of pH on herbic phytotoxicity.	ide	SOIL STE
SOIL CHEMISTRY The influence of colocted nonatede species and number of		Fungit microf
The influence of selected nematode species and number of consecutive plantings of corn and sorghum on forage prod tion, soil, and water use efficiency.		Additi biolog
SOIL CONTAMINATION Scme factors that influence the deactivation of atrazine		SOIL TZM Pseudo
soil.	7654	temper
Pesticides and the soil fanna. I. effects of aldrin and DDT in an arable field.	7656	Influe parsle
Dipyridylium residues in an aquatic environment.	7662	Some f soil.

TRACTS extracts, residues, and soil minerals in relation to tition of guackgrass (Agropyron repens) with oats and fa. 7128 UNA cides and the soil fauna. I. effects of aldrin and n an arable field. 7656 MIGATION ol of the charcoal root disease of white fir by fall fumigation. 6 6913 lizer and soil-fumigation effects on Pythium splendens uth Florida. ol of Pythium damping-off of melons by simultaneons 6961 ng and soil fumigation with chloropicrin. ase of European corn borers following soil application rge amonnts of dieldrin. 7028 ation dynamics and fumigation studies of certain nemaassociated with roots of wheat in Nebraska. 7101 NGI NGI lorobenzene as a soil toxicant against four wood-decay-6735 t of the soil carbon nitrogen ratio on soil fungi. 6778 nism of soil fungistasis. 6787 toxicity of sterilized soil inoculated with soil flora. 6799 of fungicides on the respiration of three species of 6941 fungi. ode of action of diphenamid (N, N-dimethyl 2, 2-di-lacetamide) in plants. 7126 CHING ffect of oils on herbicidal activity of atrazine and on and of waxes and oils on the movement of BPTC in 7657 CROORGANISMS nism of soil fungistasis. 6787 TSTURE nfection development of wheat bunt in relation to olled soil moisture. 6860 ence of soil and moisture on the beet webworm, tege sticticalis, and its parasites. 7112 factors that influence the deactivation of atrazine in 7654 GANIC MATTER echanism of the interaction between soil organic matter erbicide toxicity and the inflnence of pH on herbicide 7698 toxicity. RIES HIES ts of Meloidogyne spp. and Tylenchorhynchus claytoni a wilt incited by Pusarium oxysporium f. pisi race 1. 6732 ERILIZATION toxicity of sterilized soil inoculated with soil flora. 6799 ion of fungal cell-wall components to soil for gical disease control. 6822 PERATURE omonas caryophylli in carnation. I. Relation of soil rature to symptom expression. 6 6734 ence of soil temperature on a crown rot disease of ey caused by Phytophthora parasitica. 6769 factors that influence the deactivation of atrazine in soil. 7654

SOIL-BORNE PLANT DISEASES	
SOIL-BORNE PLANT DISEASES Addition of fungal cell-wall components to soil for biological disease control.	6822
A soil-borne virus disease of pepper in california.	6852
SOILS A sampling technique for estimating populations of smal arthropods in soil and vegetation.	1 6455
BHC translocation from treated soil and the effect on growth of red clover.	6686
Influence of host and nonhost plants upon populations o Thielaviopsis basicola in soil.	£ 6704
Fungi attacking seeds in dry seed-beds.	6759
Bffect of the soil carbon nitrogen ratio on soil fungi	6778
Persistence of Corynebacterium insidiosum in soil.	6833
Inoculum potential and effective fungicide dosage in so	il. 6869
A method for evaluating soil fungicides.	6939
Streptomycin resistance a technique for the direct a of potato scab organisms from soil.	ssay 6953
Saprophytism and persistence in soil by Phytophthora cinnamomi.	6979
Soil injection as a means of applying systemic acaricid fruit trees.	es to 6997
The fate of phorate in soils.	7008
Bffect of lime applications to soil on Japanese beetle larval populations.	7048
Bffects of soil insecticides on apple trees and resulti effect on mite nutrition.	ng 7053
Bffects of soil insecticides and absorbents on plant su and resulting effect on mite nutrition.	gars 7054
Soil treatments in lieu of spraying for plum curculio control in peach orchards.	7063
Influence of soil and moisture on the beet webworm, Loxostege sticticalis, and its parasites.	7112
Persistence of DDT, aldrin, and lindane in some midwest soils.	ern 7672
Epoxidation of aldrin and heptachlor in soils as influe by autoclaving, moisture, and soil types.	nced 7673
Spore germinability in soil as an inherent character of Cochliobolus sativus.	7706
Influence of oat and alfalfa residues on soil respirati fungistasis, and survival of Verticillium albo-atrum.	on, 7723
Bioassay methods for 4-amino-3,5,6-trichloropicolinic a	cid. 7742
Release of methylisothiocyanate from soils treated with Mylone (3,5-dimethyl-tetrahydro-1,3,5,2H thiadiazine-2- thione).	7744
Decomposition of sodium N-methyldithiocarbamate in soil	7748
SOLANUM Detection of the tobacco veinal necrosis strain of pota virus Y in Solanum cardenasii and S. andigenum introduc into the United States.	
Release of ribonucleic and amino acids by Phytophthora.	7745
SOLANUM NIGRUM An evaluation of Solanum nigrum and Physalis minima as suscepts of Xanthomonas vesicatoria.	6792
PAGE 154	

SOLENOPSIS DEENOPSIS Insecticidal baits for control of the imported fire ant, 7571 Solenopsis saevissima richteri. SOLUBILIZATION FECNIQUE DDT-DEHYDROCHLORINASE iii. Solubilization of insecticides by lipoprotein. 6579 SOLVENTS DEVENTS The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana (Linn) 6639 SOPHOPHORA Drosophilid survey of India. iII. the Drosophilida of Kashmir Valley. 6466 SORGHUM Screening sorghum varieties for resistance to the covered kernel smut fungus in Iraq. 6 6936 The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum. 7005 The influence of selected nematode species and number of consecutive plantings of corn and sorghum on forage produc-tion, soil, and water use efficiency. 708 7087 Influence of tillage, row spacing, and atrazine on sorghum and weed yields from nonirrigated sorghum across Nebraska. 7120 Response of selected and random plantings of Johnsongrass 7124 (Sorghum halepense) to dalapon. Germination of cereal, sorghum, and small legume seeds after fumigation with hydrogen phosphide. 7645 SOUTH DAKOTA The in vivo activity of several systemic insecticides against cattle grubs in South Dakota. 7582 SOUTH FLORIDA Brief history of aphid control on potatoes in south Florida, 1946-59. 7079 SOUTHWESTERN COTTON RUST Environmental and other factors influencing development of southwestern cotton rust (Puccinia stakmanii). 6708 SOYBEANS Variability in pathogenicity in the bacterial blight patho-6731 gen of soybeans. Induced susceptibility in soybean plants genetically resistant to Phytophthora sojae. 678 6782 Resistance of soybeans to three Phytophthora species due to the production of a phytoalexin. Nature of resistance of soybeans to three Phytophthora 6784 species. Movement of tobacco necrosis virus in systemically infected soybeans. 6867 Interaction of the soybean mosaic and bean pod mottle virus-6873 es infecting soybeans. 7051 Observations on soybean insects in maryland. Effects of soil insecticides and absorbents on plant sugars and resulting effect on mite nutrition. 7054 Survival of encysted eggs and larvae of the soybean cyst nematode, Heterodera glycines, ingested by swine. 7632 Some factors that influence the deactivation of atrazine in 7654 soil. Sevin residues on soybeans following its use for armyworm 7669 SPANISH GYPSY MOTHS

Laboratory method for screening compounds as attractants to gypsy moth males. 649 6494

STEM ROT (P)	SANUTS)	1
--------------	---------	---

SPERMATOGENESIS Correlation between sperm redundancy and chiasma frequency. 6669	Screening tests with synthetic compounds as synergists for house fly sprays. 6682
SPERMATOZOA The spiral thread. 6563	First and second year effects on Cytospora canker disease of Italian prune trees sprayed with four concentrations of cycloheximide thiosemicarbazone. 6764
SPHACELOTHECA REILIANA Suppression of corn head smut by in-furrow applications of pentachloronitrobenzene. 6747	Bffects of an aerial DDT spray on aquatic insects in Connecticut. 7010
SPHACELOTHECA SORGHI Screening sorghum varieties for resistance to the covered kernel smut fungus in Irag. 6936	Soil treatments in lieu of spraying for plum curculio control in peach orchards. 706
SPIDER VENOM Bffect of Latrodectus mactans tredecinguttatus venom on the	Organophosphate systemics as sprays and feed additives for cattle grub control. 757
crayfish stretch receptor neurone. 7692 SPIDERS	Studies on the metabolism and residues of P32-labeled Delnav in a Hereford steer. 7670
Loxosceles reclusa in southern California. 6472	Residue studies of livestock sprays containing Sevin. 7678
SPINACH       6738         Beet ring mottle disease.       6738         Nicotine residues in field-treated cauliflower, celery, green beans, kale, mustard greens and spinach.       7661	SPRAYING EQUIPMENT Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equip- ment. 688
SPINDLE TOBER (POTATOES) Symptomless hosts of the potato spindle tuber virus (PSTV). * 6837	SPRING BLACK STEM (ALFALFA) Behavior of Phoma herbarum var. medicaginis on resistant and susceptible species of medicago. 670;
An improved technique for inducing diagnostic symptoms in tomato infected by potato spindle tuber virus. 6959	Spring black stem of alfalfa in relation to temperature, moisture, wounding, and nutrients and some observations on pathogen dissemination. 6866
SPIRAL THREAD The spiral thread. 6563	SQUIRRELS Red squirrel disease. 729
SPIRAMYCIN Chronic rhinitis in cats. 7275	STALK ROT (CORN) Bffect of crop rotation on yields, stalk rot, and root rot
SPIROCHETOSIS Ticks in the united states serve as vectors of disease. 7187 SPODOPTERA	of corn. 696 STALK SHREDDING Stalk shredding and plowing as methods for controlling the pink bollworm, Pectinophora gossypiella. 708
The beet armyworm, Spodoptera exigua, an economic pest of citrus in California. ó982	STAPHYLOCOCCUS Phage typing of Staphylococcus aureus. 716
SPORE GERMINATION Inhibition of germination of spores of Alternaria porri f. sp. solani. 6874	Procaine as an antibiotic and antifungal agent. 718
Sporangial germination of Sclerospora graminicola and inoculation of Pennisetum glaucum. 6882	Detection of antibodies to staphylococcus aureus in cattle. 720
Respiratory activity and enzymes for glucose catabolism in fungus spores. 7704	Evaluation of bacterins for control of swine abscesses. 7276
Spore germinability in soil as an inherent character of Cochliobolus sativus. 7706	Identification and persistence of phage types of Staphylo- coccus aureus in dairy herds in florida. 7291
Spore germination and carbon metabolism in Pusarium solani. i. requirements for spore germination. 7709	The effect of 2 hepta-5-methylbenzimidazole and hydrochloric acid on the growth of microflora found on poultry carcasses. 7652
In vitro sporidial germination of Cronartium fusiforme. 7716	STAPHYLOCOCCUS AUREUS Inhibition of enzymes by the anthocyanin malvidin-3-monoglu- coside. 7730
SPORES         The mode of action of 2,6 dichloro-4-nitroaniline in         Bhizopus arrhizus spores.       7729	STATISTICAL DISTRIBUTIONS The shallot aphid in the pacific northwest. 6452
SPORULATION Effect of biotin on growth and sporulation of Verticillium albo-atrum. 6777	STATISTICS Measuring the surface area of apples for expression of pesticide residues. 7666
Pactors affecting growth, sporulation, pathogenicity, and dissemination of Leptosphaerulina briosiana. 6804	STEM CANKER (BIRDSFOOT TREFOIL) Host-parasite relations of Stemphylium leafspot and stem canker of birdsfoot trefoil (Lotus corniculatus). 6737
Autumn and winter sporulation by basidiocarps of Fomes annosus. 6871	STEM PITTING (APPLES) The effect of dapple apple and stem pitting on apple tree
SPOTTED WILT (TOMATOES) Multiplication of Xanthomonas vesicatoria on tomato seed- lings. 6796	growth and yields in New Hampshire over a fourteen-year period. 6866
SPEATING The biological evaluation of spray additives and solvents with Blattella germanica (Linn) and Periplaneta americana (Linn.). 6639	STEM ROT (PEANUTS) Variation in susceptibity to Sclerotium rolfsii among pea- nut varieties. 6755

	SUBJECI
STEN RUST (WHEAT)	
STEM RUST (WHEAT) Inheritance of stem rust resistance in two wheat warie Marquis and Kota.	ties, 6706
Genetic model for physiologic studies of mechanisms governing development of infection type in wheat stem	rust. 6876
STEMPHYLIUM Host-parasite relations of Stemphylium leafspot and st canker of birdsfoot trefoil (Lotus corniculatus).	em 6737
Stemphylium leafspot of Echeveria, Kalanchoe, and Sedu	<b>6916</b>
STEMPHYLLIUM Stemphyllium leafspot of safflower.	6870
STERS Short-stem condition in Lambert cherries.	6693
STEPHANITIS Systemic insecticides for control of scales, leaf mine and lace bugs.	rs, 7059
STEPHANDROS DENTATOS Swine kidney worm persistent and resistant.	7590
STERILITY Suspected synthetic cestrogen poisoning in mink.	7369
Abortion and infertility in sows in Ireland apparently to infection by Lertospira canicola.	
STERILIZATION Use of insects for their own destruction.	6672
STINKING SMOT (WHEAT)	
Postinfection development of wheat bunt in relation to controlled soil moisture.	6860
Time of year of infection of winter wheat by the dwarf fungus.	bunt 6862
A method of using mycelial, monosporidial isolates of Tilletia controversa in pedigreed hybrid crosses.	6908
STOMACE Surgical interference in torsion of the canine stomach	7366
STOMOPTERYX NERTERIA Two new species of parasites reared from Stomopteryx n nerteria (Meyrick) (Lepidoptera, Gelechidae).	erte 6615
STOMOXYS Development of a synthetic medium for aseptic rearing larvae of Stomoxys calcitrans (L.).	of 7567
Use of an animal membrane in the evaluation of chemica repellents against the stable fly.	.1 7568
STORAGE Effect of methyl bromide and hydrocyanic acid fumigati the germination of flax seeds.	on on 7650
STORAGE DISEASES The relation between storage molds and damage in high- ture rice in aerated storage.	mois- 6894
Orange stain, a storage disease of rice caused by Peni lium puberulum.	.cil- 6895
Biphenyl-resistant citrus green mold reported in Plori	.da. 6914
STORED FRODUCTS Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn.	7055
Stored-grain insects and their control in New Jersey.	7647
Preliminary evidence of resistance of high-amylose con the Angoumois grain moth.	n to 7648
STRAWBERRIES A new crown rot of strawberry plants caused by Colleto chum fragariae.	otri- 6772
D1C7 154	

Starvation tests with larvae of the cinnabar moth. 7043
STRBAK (PEAS) Purification, morphology, and biochemical characterization of the Wisconsin pea streak virus. 6872
A new pea streak virus related to red clover vein mosaic virus (RCVMV)
STREAK MOSAIC (WHEAT) Relation of Agropyron repens mosaic and wheat streak mosaic virus. 6922
STREAMS Oxygen balance in a stream receiving domestic and oil refin- ery effluents. 765
STRELITZIA Bacterial wilt of bird-of-paradise caused by Pseudomonas solanacearum. 6863
STREPTOCOCCUS Evaluation of bacterins for control of swine abscesses. 7276
Mastitis control proves its worth in New York. 7481
Mastitis control programs effective in Connecticut. 7516
STREPTOMYCES Antibiotic production by Streptomyces sp. in corn rhizosphere. 6864
Streptomycin resistance a technique for the direct assay of potato scab organisms from soil. 6953
STREPTOMYCIN Streptomycin resistance a technique for the direct assay of potato scab organisms from soil. 6953
Studies on the dietary requirement and interaction of mag- nesium with antibiotics in turkeys to 4 weeks of age.
7141
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na-
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7405
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7409
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7405 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7409 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE ROST (WHEAT) Three distinct pathogenic types of stripe rust in the
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7400 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE RUST (WHEAT)
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7409 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE RUST (WHEAT) Three distinct pathogenic types of stripe rust in the western states. 6867 Overwintering of stripe rust in winter wheat in Montana.
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7400 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE RUST (WHEAT) Three distinct pathogenic types of stripe rust in the western states. 6867 Overwintering of stripe rust in winter wheat in Montana. 6900 STRONGYLOIDES Thiabendazole as an anthelmintic in research monkeys.
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7400 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE RUST (WHEAT) Three distinct pathogenic types of stripe rust in the western states. 6867 Overwintering of stripe rust in winter wheat in Montana. 6900 STRONGYLOIDES Thiabendazole as an anthelmintic in research monkeys. 5TRONGYLUIDES
7141         Salmonella resistance increases.       7424         STREPTOTRICHOSIS       0bservations on the effects of flies and humidity on the natural lesions of streptothricosis.       7405         Streptothricosis in cattle.       7480         Bovine streptothricosis Production of lesions by the bites of the tick Amblyonma variegatum.       7620         The effects of ectoparasites and humidity on natural lesions of streptothricosis.       7622         STRIPE RUST (WHEAT)       7620         Three distinct pathogenic types of stripe rust in the western states.       6867         Overwintering of stripe rust in winter wheat in Montana.       6904         STRONGYLOIDES       7606         Theatment of Strongyles in horses.       7525         STOWT (CITEANGE)       7525         Dodder transmission of citrange stunt virus 'a virus asso-
7141 Salmonella resistance increases. 7424 STREPTOTRICHOSIS Observations on the effects of flies and humidity on the na- tural lesions of streptothricosis. 7400 Streptothricosis in cattle. 7480 Bovine streptothricosis Production of lesions by the bites of the tick Amblyomma variegatum. 7620 The effects of ectoparasites and humidity on natural lesions of streptothricosis. 7622 STRIPE RUST (WHEAT) Three distinct pathogenic types of stripe rust in the western states. 6867 Overwintering of stripe rust in winter wheat in Montana. 6900 STRONGYLOIDES Thiabendazole as an anthelmintic in research monkeys. 7606 STRONGYLOIDES Treatment of Strongyles in horses. 7525 STOWT (CITEANGE) Dodder transmission of citrange stunt virus 'a virus asso- ciated with tatter leaf of citrus. 6952 STOWT (COWPEAS) Dodder transmission of citrange stunt virus, a virus asso-

	I	

SUCCINOXIDASE Succinoxidase activity in two species of Bracon (Hymenop tera, Braconidae).	6595
SUCCINVICHOLINE CHLORIDB Suspected myasthenia gravis in a dog.	SW 1 7336
	611
SUCROSE Translocation of C14-labeled compounds in cotton and oak	SWI 7708 V
SUGAR Studies on levels of reducing sugars and hydrolytic enzy in relation to Botrytis head rot on safflower.	mes SWI 6703 I
SUGAR BEETS Field experiments on sugar-beet downy mildew (Peronospor farinosa).	swi a H 6717 e
Beet ring mottle disease.	6738 1
Experiments on control of the sugar-beet wireworm in southern California bean fields.	7111 SWI
Darkness and the activity of diquat and paraguat on toma broad bean and sugar beet.	7119
Isolation and characterization of a germination inhibito from sugar beet fruit.	7721
SUGARCANE	1
The reproductive system of the pink sugarcane mealybug, Saccharicoccus sacchari Cockerell (Homoptera, Pseudococidae.	6665 G
Effect of heat treatment of sugarcane for control of rat stunting disease (RSD) on spread of mosaic.	6981
An evaluation of atrazine, simazine, monuron and diuron ten Hawaiian sugar cane plantations.	on 7132
SUGARS Effects of soil insecticides and absorbents on plant sug and resulting effect on mite nutrition.	jars 7054 H
Effects of relative humidity and temperature on the degr	ada- 1
tion of peanut sugar and oil by Aspergillus flavus. SULFAMETHAZINE	7714 G
An outbreak of malignant catarrh among the Pere David deer.	7499 1
SULFAQUINOXALINE A mixture of diaveridine and sulfaquinoxaline as a cocci stat for poultry. I. Preliminary studies on efficiency against Eimeria tenella and E. necatrix infections, and	
toxicity in poultry.	7270
A mixture of diaveridine and sulphaquinoxaline as a cocc ostat for poultry.	idi- 7604
SULFUR	]
Sulphur poisoning in ewes.	7547
Evaluation of chemicals for control of a spider mite com on cherry and peach.	7003 0
SUMPLOWERS Predisposition to powdery mildew.	6975 f
SURGERY Surgical treatment of chronic otitis in a Poodle.	7373
SURVEYS A limnological investigation of the Aufwuchs community i two mainstem Missouri River reservoirs.	
The black flies (Diptera0 Simuliidae) of western Massa- chusetts.	6457 i
Surveys for nosema disease of honey bees in California.	7021
A three-year overwintering study of the spotted alfalfa	
aphid.	7061 3

SWAINSONIA Characteristics and control of swainsonpea.	7130
SWAYBACK A condition in the goat resembling swayback in lambs.	7237
SWEDE TURNIPS Control of root maggots in swede turnips in Newfoundlan with heptachlor and aldrin and the effect on parasites overwintering pupae.	a
SWEETCLOVER Pollination of red clover in Minnesota.	6611
SWEETCORN Hyperodes humilis, a new pest of sweet corn in the everglades, and its control.	7013
A comparison of the toxicity of insecticides for the co of corn earworm on sweet corn.	
SWEETPOTATOES	
Note on the biology of Acraea bonasia Fabricius from ea ern Nigeria (Lepidoptera, Nymphalidae.	6561
Anatomical aspects of resistance in sweetpotato to Fusa wilt.	rium 6956
Sweetpotato varietal reaction to species and races of root-knot nematodes.	7089
SWINE Common problems in the pig.	7144
Hog cholera is on the way out.	7145
Isolation of enteroviruses from intestinal tract of swi	ne. 7155
ISU veterinarians suspect two weeds as cause of seasona swine disease.	1 7157
Polyserositis-arthritis complex in swine.	7182
Rift valley fever in calves, goats and pigs.	7194
Complement-fixation test for detecting Japanese encephalitis virus.	7198
Purification of swine enteroviruses and swinepox viruse	s. 7218
Candidiasis in pigs in northwest Wisconsin.	7235
Pig diseases in the Rhodesias.	7241
Porcine gastric ulcers in the United States0 a review.	7263
Evaluation of bacterins for control of swine abscesses.	7276
Polyarthritis and epiphyseolysis of pigs in England.	7290
Prenatal hog cholera infection a potential source of h cholera.	og 7297
Cerebellar hypoplasia, hypomyelinogenesis, and congenit tremors of pigs, associated with prenatal hog cholera v nation of sows.	al acci- 7298
The use of Thiofuradene as a growth stimulant and anthe mintic in the production of pork in the Bahamas.	1 <del>-</del> 7302
Toxoplasmosis in pigs. I. The influence of age on the pathogenicity of Toxoplasma gondii for pigs.	7304
Toxoplasmosis in pigs. II Experiments on the pathogen ity of Toxoplasma gondii for pigs infected by different routes.	
Conferences appraise hog cholera eradication efforts.	7319
The enteropathogenic effect of Escherichia coli in rabb and pigs.	its 7324
Unusual cerebellar conditions in pigs. Part II. Cerebel lar Bypoplasia in pigs.	7325

## SWINE DYSENTERY

	Unusual cerebellar conditions in pigs. Part 1. Cerebella herniation associated with vitamin A deficiency.	r 7326
	Lactogenic immunity to transmissible gastroenteritis of swine.	7335
	Status of inactivated vaccines for hog cholera.	7352
	Hepatitis cysticercsa causing sudden death in a pig.	7405
	A swine brucellosis epizootic.	7407
	An outbreak of Aujeszky disease in pigs in Lincolnshire.	7410
	The characterization of a causitive agent of virus pig p monia.	neu- 7413
	Radiostrontium toxicity in miniature swine.	7420
	Abortion and infertility in sows in Ireland apparently d to infection by Leptospira canicola.	ue 7422
	Abortion in the sow due to infection by Leptospira canic - A preliminary report.	ola 7428
	Iron deficiency anemia as a cause of stillbirths in swim	e. 7437
	Comparison of pathogenicity of various isolates of Borde tella bronchiseptica in young pigs.	- 7488
	Clinical appraisal of an avirulent oral erysipelas vacci	ne. 7492
	Breakdowns in swine-fever vaccinated herds.	7496
	Observations on pathogenicity and immunogenicity of a cell-culture-modified foot-and-mouth disease virus.	7498
	Mastitis, metritis and diarrhea in swine.	7514
	The pathogenesis of gastro-enteritis associated with Esc richia coli.	he- 7526
	Transmission and characterization of edema disease of $swine$ .	7535
	Influence of porcine transmissible gastroenteritis on chlortetracycline blood values.	7540
	Toxaphene residues in hogs.	75 <b>7</b> 8
	Swine ascarids infect cattle.	7589
	Swine kidney worm persistent and resistant.	7590
	Trichinosis declines.	7625
	Survival of encysted eggs and larvae of the soybean cyst nematode, Heterodera glycines, ingested by swine.	7632
ST	NINE DYSENTERY Studies on the pathogenesis of Vibrio coli infection in swine.	7541
SI	INE HOUSES House fly control in pig parlors.	7566
sı	INEPOX Purification of swine enteroviruses and swinepox viruses	7218
51	MBIOSIS Symbiontic interrelationships between microbes and ambro beetles. iI. the organs of microbial transport and perp uation in Trypodendron betule and T. retusum (Coleopters Scolytidae).	osia Det-
	On the in-vitro culture of intracellular symbiotes of corroaches.	ock- 6497
SI	(MPOSIA Symposium on requirements and interpretations of biometeorological observations.	
	invitational papers presented at the fifty-fourth annual meeting of the Maerican Phytopathological Society. corvallis, oregon, august 26-29, 1962.	6691

Symposium on root diseases of forest trees. invitational papers presented august 27, 1962, at the f fourth annual meeting of the American Phytopathological Society at Corvallis, Oregon.	ifty- 6692
Summation.	6766
SINANTHEDON PICTIPES Thiodan, a promising chemical for control of the lesser peach tree borer.	7038
SINAPSES	1038
Action of DDT at an insect synapse. SYRPHIDAE	6633
A preliminary study of the Syrphidae of Oklahoma (Dip- tera0 Syrphidae.	6469
T, 2,4,5- Characteristics and control of swainsonpea.	7130
TABANIDAE Dispersal of viable algae and protozoa by horse flies as mosquitoes (Diptera, Tabanidae, Culicidae).	nd 6616
TABATREX Use of an animal membrane in the evaluation of chemical repellents against the stable fly.	7568
TABATREY Face fly control.	7564
TAENIASIS A taenacide for dogs and cats.	7639
TAGETES Starvation tests with larvae of the cinnabar moth.	7043
An inexpensive, versatile oxygen electrode.	7756
TAGETES BRECTA Effect of root extract of Asparagus racemosus and Tagete	es
erecta on hatching of eggs of Meloidogyne javanica and Meloidogyne arenaria.	7113
TANNIC ACIDS Antidote for tannic acid poisoning in rabbits.	7191
Antidote for tannic acid poisoning in rabbits.	7208
TANYDERIDAE Mouthparts of the biting and blood-sucking type in Tanyderidae and Chironomidae (Diptera).	6521
TATTER-LEAF (CITRUS) Dodder transmission of citrange stunt virus, a virus as ciated with tatter leaf of citrus.	so- 6952
TAXONOMY Effect of urediospore concentration on determination of	
races of rust fungi.	6733
Physiological races of Albugo candida.	7731
TBA, 2,3,6- Characteristics and control of swainsonpea.	7130
TDE Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to adult house flies.	6485
TEATS Ulceration of cow s teats caused by a virus.	7415
TELIOSPORES Field disease cycle of peppermint rnst.	6 <b>77</b> 3
The haploid behavior of Urocystis colchici teliospores.	7725
TEMPERATURE Effect of temperature on the susceptibility of grubs of Trogoderma granarium Everts to pyrethrins.	6534
The response to temperature of cabbage virus A infection	
Nicotiana glutinosa.	6758

Spring black stem of alfalfa in relation to temperature, moisture, wounding, and nutrients and some observations on

		THIABE	ENDAZOL
pathogen dissemination.	6866	TETRANYCHUS	
Effects of rapid cooling to subzero temperatures on Mel dogyne hapla and M. incognita.	loi- 6887	Selection response and genetics of parathion resistance the Pacific spider mite, Tetranychus pacificus.	in 6667
Bffects of various diurnal temperature profiles on host parasite reaction of wheat varieties and Puccinia	t-	Vectors of alfalfa and bean yellow mosaic viruses in Lad white clover.	lino 6803
striiformis.	6903	Soil injection as a means of applying systemic acaricide fruit trees.	es to 6997
Inhibition of fungi by culture media previously exposed light.	d to 6954	Bvaluation of chemicals for control of a spider mite com on cherry and peach.	plex 7003
Release of inhibited tobacco mosaic virus (TMV) infect: by ultraviolet irradation as affected by time and temperature after inoculation.	ion 6971		7051
Effects of low temperature on the survival of the alfa	lfa	Effects of soil insecticides and absorbents on plant sug and resulting effect on mite nutrition.	jars 7054
weevil from Alberta and Utah. Bffect of temperature and humidity on the fecundity and		Control of the two-spotted spider mite on beans with systemic insecticides applied in the soil.	7076
velopment of Cadra cautella Wlk. in wheat. A study of factors influencing the effectiveness of did	7071 quat	TETRANYCHUS TELARIUS Structure and pesticidal activities of derivatives of di	.ni-
(101 -ethylene-202 -dipyridylium dibromide) for potato killing.	vine 7127	trophenols. iII. structure and acaricidal activity of c tain carbonates of 2-alky1-5-methy1-4,6-dinitrophenols a	er-
Factors affecting invasion of grains and seeds by Aspen lus flavus and effects of the fungus on germination of seeds.		TETRANYCHUS URTICAE Genetic variation in a two-spotted spider mite, Tetranyc urticae, population plateaued by directed selection (Aca	
Influence of grain moisture and storage temperature on effectiveness of malathion as a grain protectant.	the 7649		6673
Bffects of relative humidity and temperature on the de tion of peanut sugar and oil by Aspergillus flavus.	grada- 7714	Evidence of the oversummering of the greenbug in the Tex	as 6516
TENEBRIO		THAB	
The suitability of tobaccos for the growth of the cigan beetle, Lasioderma serricorne.	rette 7081	Control of thar (Hemitragus jemlahicus), evaluation of a poisoning technique.	768 <b>9</b>
TENSION Water tensions in plants, an entomological approach.	7037	THEILERIASIS Further attempts to infect animals with Theileria parva.	7598
TENTHREDINIDAE A substance in some commercial preparations of Bacillus thuringiensis var. thuringiensis toxic to sawfly larvad		THELAZIASIS Experience with an anthelmintic.	7613
TEREPETEALIC ACID Potentiation of chlortetracycline in laying chickens.	7140	THERIOAPHIS Vectors of alfalfa and bean yellow mosaic viruses in Lad white clover.	lino 6803
TERIOAPHIS A biotype of the spotted alfalfa aphid on alfalfa.	7046	Influence of plant age on the survival of alfalfa variet differing in resistance to the spotted alfalfa aphid.	ies 7018
TERMITES Pathogenicity of externally occurring fungi to Reticuli mes flavipes.	iter- 6634	Spotted alfalfa aphid resistance in mature growth of alf varieties.	alfa 7019
Fumigation of buildings to control the dry-wood termits		A three-year overwintering study of the spotted alfalfa aphid.	7061
Cryptotermes brevis. TERT-BUTYLAMINE	7040	THESES The biological evaluation of spray additives and solvent	
Control of Penicillium decay of oranges with certain volatile aliphatic amines.	6741	with Blattella germanica (Linn) and Periplaneta american	
TETRACYCLINE Salmonella resistance increases.	7424	Effects of X-rays, tryptophan metabolites, and eye color mutants on the tumor-suppressor system in Drosophila mel ogaster.	
TETRADIFON Evaluation of chemicals for control of a spider mite co on cherry and peach.	omplex 7003	Some factors that influence the deactivation of atrazine soil.	in 7654
Citrus red mites resistant to demeton and ovex and their response to Tedion and Kelthane.	ir 7040	The toxicology of thiodan in several fish and aquatic in tebrates.	ver- 7697
TETRAHYMENA Tetrahymena sp. parasitic in the larvae of Chilo zonell		THIABENDAZOLE Thiabendazole and trichinae.	7166
(Swinhoe) - TETRALOPHA	6636	Thiabendazole as an anthelmintic in cattle and sheep.	7588
The biology of the pine webworm, Tetralopha robustella, Wisconsin.	, in 7116	Thiabendazole as an anthelmintic in research monkeys.	7606
TETRANYCHIDAE A viruslike transovarian factor affecting morphology in der mites.	n spi- 6449	Efficacy of thiabendazole against Cooperia spp. and	7631
Laboratory studies on the effectiveness of Chipman R-67 against some cotton pests.	199 7070		

THIACETARSAMIDE
THIACETARSAMIDE Two-day treatment with Thiacetarsamide for canine heartworm disease. 7378
THIELAVIOPSIS Influence of host and nonhost plants upon populations of Thielaviopsis basicola in soil. 6704
Inversion phenomenon induced by nabam derivatives. 6728
Comparison of various isolation media for the enumeration of Thielaviopsis basicola in soil dilution plates. 7727
TEIOATE Toxicity of organic phosphorus insecticides to horses. 7694
THIOCARBANATES Control of downy mildew of opium poppy by root application of fungicides. 6788
Effect of SMDC on germination, plant growth, and fusarium wilt incidence of cumin (Cuminum cyminum). 6805
Chemical control of bacterial blights of dry field beans in Michigan by foliage sprays applied by ground and air equip- ment. 6881
The effect of oils on herbicidal activity of atrazine and linuron and of waxes and oils on the movement of EPTC in soil. 7657
THIOURACIL Potentiation of diethylstilbestrol induced aortic ruptures of turkeys with thiouracil. 7509
THIRAM Inversion phenomenon induced by nabam derivatives. 6728
Control of Botrytis neck rot of onions by fungicidal dusts and desiccant chemicals. 6779
Inoculum potential and effective fungicide dosage in soil. 6869
The effect of phorate applied to seed on the growth, development and insects attacking grain sorghum. 7005
THOROUGHBRED HORSES Cervical and uterine infection in thoroughbred mares. 7348
THRIPS Observations on soybean insects in maryland. 7051
Control of the two-spotted spider mite on beans with systemic insecticides applied in the soil. 7076
THRIPS TABACI Studies on the host preference of the onion thrips, Thrips tabaci Lindeman to the varieties of onion. 7073
THUJA Pathogenicity of Phacidium abietis. 6911
THURICIDE A substance in some commercial preparations of Bacillus thuringiensis var. thuringiensis toxic to sawfly larvae. 6631
THYROID GLAND Thyroid dysplasia in the budgeriar. 7242
Toxicity of nitrate nitrogen to cattle. 7423
Effect of melatonin on thyroid hormone secretion rate and feed consumption of female rats. 7444
TICK PARALYSIS Ticks in the united states serve as vectors of disease. 7187
TILLAGE Influence of tillage, row spacing, and atrazine on sorghum and weed yields from nonirrigated sorghum across Nebraska. 7120

TILLETIA A method of using mycelial, monosporidial isolates of Tilletia controversa in pedigreed hybrid crosses. 6908 TIME Release of inhibited tobacco mosaic virus (TMV) infection by ultraviolet irradation as affected by time and temperature after inoculation. 6971 TIPULIDAE Histological observations on the development of crystalline inclusions of the rickettsial disease of Tipula paludosa Meigen. 6550 TISSUE CULTURE Establishment of an insect cell strain persistently infected with an insect virus. 6592 The growth of rabies virus in tissue culture and its use as a living attenuated vaccine for domestic animals. 722 7224 TISSUES SSUES Uptake of Helminthosporium victoriae toxin by oat tissue. 6889 Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone composition 7137 The macerating enzyme of Rhizoctonia solani. 7701 Production of 3-methyl-6-methoxy-8-hydroxy-3,4-dihydroisocoumarin by carrot root tissue. 7736 TOBACCO Synthesis of tobacco mosaic virus forms in nucleus and 6700 cytoplasm. A simple method of measuring rate of plant virus movement from inoculated tobacco leaves to.stem tips. 6 6750 An apparent strain of tobacco rattle virus associated with a yellow spotting of lettuce. 6757 Detection of the tobacco veinal necrosis strain of potato virus Y in Solanum cardenasii and S. andigenum introduced into the United States. 6776 Response of plants to air pollutants. II. Effects of ozone concentration and leaf maturity on injury to Nicotiana 6815 tabacum. Calcium nutrition in relation to the black shank disease of 6825 tobacco. Studies on tobacco mosaic virus ( tmv) infection of suspen-6830 ded callus cells. Electron microscopy of tobacco rattle type viruses. allen jr, t l. 6844 Reappraisal of transmission of tobacco mosaic virus by in-6845 sects. Pree amino acid and amide content of tobacco and oats infec ted by wildfire and halo blight bacteria. 685 6851 Movement of tobacco necrosis virus in systemically infected 6867 soybeans. Effects of ultraviolet preinoculation treatment of leaves on subsequent infection by tobacco mosaic virus and TMV. ribonucleic acid. 6899 Inhibition of indoleacetic acid oxidase in tobacco plants 6900 infected by Pseudomonas solanacearum. The nature of stain uptake in ultrathin sections of tobacco 6901 Tobacco mosaic virus activity and growth of inoculated tobacco secondary single-cell clones. 6907 Effects of some cytokinins on tobacco and their relation to tobacco mosaic virus infection. 6915

An electron microscope study of THV lesions in Nicotiana glutinosa. 6955

Heat activation of different strains of tobacco mosaic virus

Northeast.

TOXAPHENE

6970

temperature after inoculation.	6971	A seasonal study of diapause, reproductive activity and seasonal tolerance to insecticides in the boll weevil.	
Inter-relationship between whitefly (Bemisia tabaci G population and the incidence of leaf curl in bidi tob	acco		6496
(nicotiana tabacum L) in relation to different planti dates.	ng 7044	Boll weevil susceptibility to toxaphene, endrin, and gu in five Alabama localities.	6505
The suitability of tobaccos for the growth of the cig beetle, Lasioderma serricorne.	arette 7081	The effect of insecticides on transamination in th amer cockroach.	ican 6587
DHATOES Vancomycin prevents crown gall.	6711	Some effects of age, preimaginal habitat, and adult foo susceptibility of boll weevil to certain insecticides.	
The role of Drosophila melanogaster in th epiphytolog Geotrichum, Rhizopus, and other fruit rots of tomato.		The effectiveness of chlorinated hydrocarbon insecticid	6983 .e
Semeiography of Fusarium wilt of tomato.	6716 6719	mixtures for control of resistant and susceptible boll weevils.	6986
Pusarium wilt (race2) of tomato0 effect of lime and m nutrient soil amendments on disease development.		The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006
Multiplication of Xanthomonas vesicatoria on tomato s lings.		Increased tolerance of the boll weevil and cotton fleah to some chlorinated hydrocarbon insecticides in Central Texas in 1958.	
Disinfection of tomato seed infested with Xanthomonas catoria.	vesi- 6797	Effects of Dylox and other insecticides on entomophagou insects attacking field crop pests in California.	s 7065
Symptomless hosts of the potato spindle tuber virus (	PSTV). * 6837	Field tests with various insecticides for the control o Lygus bugs and the corn earworm on lima beans.	f 7066
Survival of Xanthomonas vesicatoria in soil and disea tomato plants.	sed 6854	Brief history of aphid control on potatoes in south Florida, 1946-59.	7079
The nature of stain uptake in ultrathin sections of t mosaic virus.	obacco 6901	Salt-marsh caterpillar control on cotton in Arizona.	7118
Studies on the aggregation of tobacco mosaic virus in ground cytoplasm and chloroplasts of tomato.	the 6902	Chlorinated hydrocarbon insecticides as soil treatments against the eye gnat Bippelates collusor (Townsend) in laboratory.	
The effect of growth substances on Verticillium wilt tomato plants.	6909	Toxaphene residues in hogs.	7578
Stemphylium leafspot of Echeveria, Kalanchoe, and Sed		TOXICOLOGY Syntheses of the aliphatic deuterium analogs of DDT and TDE and their toxicity and degradation when applied to adult house flies.	6485
An improved technique for inducing diagnostic symptom tomato infected by potato spindle tuber virus.	s in 6959	Stability, toxicity, and reaction mechanism with estera of certain carbamate insecticides.	
Effectiveness of insecticides against the European co borer and green peach aphid on peppers.	7017	Relationship between metabolism and differential toxici	
Drosophila breeding in refuse from tomato canneries.	7031	insects and mice of Diazinon, dimethoate, parathion, acethion.	6570
Reaction of Drosophila to different varieties of toma	toes. 7032	Experiments on prolongation of the life of mosquito lar by underfeeding.	vae 6581
Observations on the utilization of the herose monopho pathway in nematode-infected roots of tomato.	sphate 7088	Testing of pesticides against cabbage aphid, Brevicoryn brassicae Linn.	e 6622
Helicotylenchus thornei n sp (Nematoda, Hoplolaiminae from a tomato plant field in Ludhiana, Punjab.	;) 7 09 1	Toxicological action of DDT on three species of mosquit larvae.	0 6658
Darkness and the activity of diguat and paraguat on t broad bean and sugar beet.	omato, 7119	Laboratory studies on the toxicity of various insectici to different stages of the oriental fruit moth.	des 6988
The mode of action of diphenamid (N, N-dimethyl 2, 2- phenylacetamide) in plants.	di- 7126	Toxicity of cellulose acetate sheeting to leguminous pl	ants. 7026
Dissipation of malathion residues on tomato and pea.	7679	0-ethyl S-2(ethylthio)-ethyl alkylphosphonothioates as systemic insecticides.	7035
DNSILS Tonsillar carcinoma in rural dogs.	7471	Toxicity of BHC to loblolly pine seedlings.	7068
ORDON Bioassay methods for 4-amino-3,5,6-trichloropicolinic	acid. 7742	A comparison of the toxicity of insecticides for the co of corn earworm on sweet corn.	ntrol 7084
ORYMUS		Toxicity of copper sulfate in beef cattle.	7199
Biology and control of the annle seed chalcid in Nort	h	The responsibilities of veterinary practitioners as to	the

Selective toxicity and animal systemic effectiveness of

TOUMEYELLA Natural factors control the pine tortoise scale in the

Biology and control of the apple s Carolina. 7072 use of pesticides. Effect of ingested disinfectants on chicks.

infection on varieties of beans (Phaseolus vulgaris).

TOMATOES

TONSTLS

TORDON

TORYMUS

Release of inhibited tobacco mosaic virus (TMV) infection by ultraviolet irradation as affected by time and temperature after inoculation.

PAGE 161

7229

7247

TOXICOLOGY

7034

	00000001
TOXINS	
several organophosphates.	7563
Methods for the evaluation of stable fly toxicants and repellents.	7579
Toxicity to house fly larvae of droppings from chickens insecticide-treated rations.	fed 7584
Effect of mineral oil solvent on the toxicity and speed action of malathion.	of 7686
Relationships between structure and insecticidal activit some organotin compounds.	ty of 7688
Pyrethrins and related compounds. iX. alkenbenzyl and benzylbenzyl chrysanthemates.	7690
The search for veterinary insecticides. iI. carbamates active against sheep blowfly.	7691
Effect of latrodectus mactans tredecimguttatus venom on crayfish stretch receptor neurone.	the 7692
Toxicity of organic phosphorus insecticides to horses.	7694
The effectiveness of EDTA as a fish preservative.	7695
Structure and pesticidal activities of derivatives of d	
trophenols. iII. structure and acaricidal activity of a tain carbonates of 2-alkyl-5-methyl-4,6-dinitrophenols a	
related compounds.	7696
The toxicology of thiodan in several fish and aguatic in tebrates.	7697
Toxicological aspects of 2,2-dichlorovinyl dimethyl phosphate (DDVP) in cows, horses, and white rats.	7699
Toxic chemicals.	7734
Toxic chemicals.	7735
Toxicity of organic fluorine compounds.	7739
Purification of the selective toxin of Periconia circina	
	7755
TOXINS Uptake of Helminthosporium victoriae toxin by oat tissue	6889
The effect of staphylococcal toxins on ruminant erythrod	
treated with diffusable substances formed by corynebact	7312
Purification of the selective toxin of Periconia circina	ata. 7755
TOXOCARA The prenatal migration of Toxocara canis larvae and the relationship to infection in purs.	ir 7397
TOXOPLASMOSIS	
Toxoplasmosis in pigs. I. The influence of age on the pathogenicity of Toxoplasma gondii for pigs.	7304
Toxoplasmosis in pigs. II Experiments on the pathogen: ity of Toxoplasma gondii for pigs infected by different routes.	ic- 7305
Toxoplasmosis in mink.	7544
Further studies on toxoplasmosis and ovine abortion in	
Yorkshire. Ovine abortion and toxoplasmosis in the East Midlands.	7596
TOIOPTERA	7597
Long-range aerial transport of the harlequin bug and the greenbug into Minnesota.	e 6456
Evidence of the oversummering of the greenbug in the Tex panhandle.	tas 6516
Greenbug dispersal and distribution of barley yellow dwa virus in Wisconsin.	arf 6812

TRANSAMINATION	
The effect of insecticides on transamination in th american cockroach. 658	
TRAPAEOLON MAJUS Interaction of growth regulators in the senescence of nasturtium leaf disks. 770	12
TREE DISEASES Summation. 676	6
TREES Symposium on root diseases of forest trees. invitational papers presented august 27, 1962, at the fifty fourth annual meeting of the American Phytopathological Society at Corvallis, Oregon. 669	
TREMATODA Bacillary hemoglobinuria (redwater disease) in florida. 761	17
TRIATONA Natural immunity of the bug Triatoma infestans to the pro- tozoan Trypanosoma rangeli. 666	
TRIBOLIUM Effectiveness of mixtures of acrylonitrile and carbon tetrachloride against three pests of stored corn. 705	5
The suitability of tobaccos for the growth of the cigarette beetle, Lasioderma serricorne. 708	
Dosimetry for studies on the radiobiology of Tribolium castaneum using the Wan de Graaff electron accelerator. 775	4
TRICHINAE Thiabendazole and trichinae. 716	6
TRICHINELLA Incidence of infection with Trichinella spiralis in dogs. 761	
Trichinosis declines. 762	25
TRICHIMOSIS Trichimosis declines. 762	:5
TRICHLORFON Potential use of Dylox and other insecticides in a control program for field crop pests in California. 668	7
Effects of Dylox and other insecticides on entomophagous insects attacking field crop pests in California. 706	5
Control of the northern fowl mite, Ornithonissus sylviarum (C. + F.), with ronnel, Bayer 113/59, and Bayer 21/199. 757	
Toxicity to house fly larvae of droppings from chickens fed insecticide-treated rations. 758	
Toxicity of organic phosphorus insecticides to horses. 769	
TRICELORION A comparison of the toxicity of insecticides for the contro	
of corn earworm on sweet corn. 708	4
TRICHLOROBENZENE	
Trichlorobenzene as a soil toxicant against four wood-decay ing soil fungi. 673	
TRICHLORONITROMETHANE Population dynamics and fumigation studies of certain nema- todes associated with roots of wheat in Nebraska. 710	
TRICHODERNA VIRIDE The mode of action of diphenamid (N, N-dimethyl 2, 2-di- phenylacetamide) in plants. 712	6

TURTLES

TRICHOPLUSIA Spicaria rileyi (Farlow) Charles and Aspergillus flavus Link, entomogenous fungi of the cabbage looper, Trichoplu- sia ni (Hubner), in Indiana and Wisconsin. 648	7
Pathology of a nuclear polyhedrosis virus of the cabbage looper, Trichoplusia ni (Hubner). 652	2
A new nuclear polyhedrosis of the cabbage looper, Tricho- plusia ni. 654	4
Microbial control of two cabbage insects. 658	8
Thermal inhibition of certain polyhedrosis virus diseases. 664	9
TRICHOPLUSIA NI Bionomics and control of certain Plusiinae and studies of an associated nuclear polyhedrosis virus. 699	2
TRICHOPTERA           Membracidae attracted to black light.         659	0
TRICHOSTRONGYLOSIS Field trials comparing the anthelmintic effect of Ruelene (4-tert-butyl-2-chlorophenylmethyl methylphosphoramidate) with that of phenothiazine. 760	1
TRICHOSTRONGYLUS Thiabendazole as an anthelmintic in cattle and sheep. 758	8
TRICHURUS Thiabendazole as an anthelmintic in research monkeys. 760	6
TRIETHYL CHLOBIDE Relationships between structure and insecticidal activity o some organotin compounds. 768	
TRIBIDAD Serological relationship between bean pod mottle virus and cowpea mosaic viruses from Arkansas and Trinidad. 690	6
TRIPHENVLITETRAZOLIUM CHLORIDE Succinoxidase activity in two species of Bracon (Hymenop- tera, Braconidae). 659	5
TROGODEENA GRANABIUM Effect of temperature on the susceptibility of grubs of Trogoderma granarium Everts to pyrethrins. 653	4
TRYPANOSOMA RHODESIENSE Infectivity of Trypanosoma rhodesiense to tsetse flies fed through animal membranes. 668	1
TRYPANOSOMIASIS Prophylaxis against trypanosomiasis in Zebu cattle. IV. A field trial of metamidium and Isometamidium. 748	2
Experimental Trypanosoma congolense infection in a horse. 751	9
Prophylactic activity of Berenil against trypanosomes in treated cattle. 753	7
Prophylaxis against trypanosomiasis in Zebu cattle. III. Potentiation trials and a trial of R.D. 2902 in an area of medium trypanosome risk. 763	0
TRIPETIDAE Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iII. Development of a synthetic medium for D cucurbitae lar- vae. 651	3
TRIPODENDRON BETULAE Symbiontic interrelationships between microbes and ambrosia beetles. iI. the organs of microbial transport and perpet- uation in Trypodendron betule and T. retusum (Coleoptera, Scolytidae). 647	
<b>TRYPODENDEON RETUSUM</b> Symbiontic interrelationships between microbes and ambrosia beetles. iI. the organs of microbial transport and perpet- uation in Trypodendron betule and T. retusum (Coleoptera, Scolytidae). 647	

TRYPTOPHAN Bffects of X-rays, tryptophan metabolites, and eye col mutants on the tumor-suppressor system in Drosophila m ogaster.	
RUBERCULIN Mycobacterium fortuitum as a cause of bovine mastitis Tuberculin sensitivity following experimental infectio	ns. 7459
TUBERCULOSIS The use of chemotherapeutic agents in animal tuberculo	
Tuberculosis in deer.	7421
TULARE MOSAIC (APPLES) Approach graft transmission of Tulare apple mosaic vir between apple and Gomphrena globosa.	us 6753
Properties of tulare apple mosaic virus.	6821
TULAREMIA Ticks in the united states serve as vectors of disease	7187
TULIPA Purification of tulip breaking virus.	6973
TUNG OIL TREE Relation of Cercospora infection to oil application on dorsal or ventral side of tung leaves.	the 6948
TURF	
Influence of temperature on rate of growth of five fun pathogens of turfgrass and on rate of disease spread.	gus 6745
TUBKEY EGGS Calcium requirements of turkey breeder hens.	7135
TUBKEYS Calcium requirements of turkey breeder hens.	7135
The incidence of spontaneous pathologic changes in aor growing turkeys.	tas of 7138
Studies on the dietary requirement and interaction of nesium with antibiotics in turkeys to 4 weeks of age.	mag- 7141
Experimental ornithosis in calves.	7147
Effects of paromomycin sulfate on blackhead in turkeys	7159
Effect of feeding various levels Crotalaria spectabili seed on the performance of chicks, turkeys, and pullet	
Salmonella pullorum infections in turkeys.	7412
Identification of Nycoplasma gallisepticum in lesion t by immunofluorescence.	issue 7445
Potentiation of diethylstilbestrol induced aortic rupt of turkeys with thiouracil.	ures 7509
The treatment of infectious sinusitis of turkeys with zolidone.	Fura- 7511
Dimetridazole part II. Therapeutic activity and toxic in the treatment of experimental histomoniasis in turk	
TUBNIPS Resistance in Matthiola incana to the turnip mosaic vi	rus. 6884
The effect of soil treatments of chlordane or heptachl the flavor of turnips, parsnips, and carrots.	or on 7671
TURTLES Salmonellosis in turtles in rhode island.	7486
New investigations on cold-blooded animals as Salmonel sources.	la 7546
Salmonellosis in turtles in minnesota.	7553

TYLENCHIDAE		
TYLENCHIDAE		URO
Biological studies of a new species of Anguina (Nematoda Tylenchidae) parasitic on Plantago aristata Michx.	10 7115	URC
TYLENCHORHYNCHUS		B
On two plant parasitic nematodes from a cauliflower fiel the Punjab.	Ld in 7092	UST
TYLENCHORBYNCHUS CLAYTONI		E
Effects of Meloidogyne spp. and Tylenchorhynchus claytor	ni	
on pea wilt incited by Fusarium o ysporium f. pisi race	1. 6732	UTA C
TYLENCHUS		E
On two plant parasitic nematodes from a cauliflower fiel the Punjab.	Ld in 7092	W
TYRIA		UTE V
Starvation tests with larvae of the cinnabar moth.	7043	c
ULCERS		
Perforation of the omasum and ulceration of the abomasum a cow.	7244	A
Porcine gastric ulcers in the United States0 a review.		Т
Repression of con a toota concod by a minut	7263	i
Ulceration of cow s teats caused by a virus.	7415	U
ULTRAVIOLET RAYS		I
Effects of ultraviolet preinoculation treatment of leave	es on	
subsequent infection by tobacco mosaic virus and THV. ribonucleic acid.	6899	VAC H c
The role of the coat protein in the inactivation of toba	acco	
mosaic virus by ultraviolet light. Release of inhibited tobacco mosaic virus (THV) infectio	6931	V V A G
by ultraviolet irradation as affected by time and	л	P
temperature after inoculation.	6971	t
UNITED STATES	-	VAN
Detection of the tobacco veinal necrosis strain of potat virus Y in Solanum cardenasii and S. andigenum introduce into the United States.	ed 6776	D
Infectious bronchitis virus typesIncidence in the Unit	- A	
States.	7356	V A N
OREA		
Translocation of C14-labeled compounds in cotton and oa	7708	VA P D
UREDINALES		
Effect of urediospore concentration on determination of races of rust fungi.	6733	VA P A
UREDIOSPORE		
Effect of urediospore concentration on determination of races of rust fungi.	6733	VAP H C
UREDOSPORES		
Cold-induced dormancy and its reversal in uredospores of Puccinia graminis tritici.	6713	VAR O C
URENIA		
Peritoneal dialysis as an adjunct to Leptospirosis thera in a dog.	ару 7473	VEA I
URIDINE		
Incorporation of radioactive Uridine into the RNA of the lepidopteran Barathra brassicae.	6599	VEG
URINARY CALCULI		c
Experimental production and control of urolithiasis.	7349	B a
Urethral calculi in a steer.	7363	F
A case of retention pyonephrosis in a Corgi bitch.	7419	r V
Amino-acid excretion in canine cystine-stone disease.		VEG
UROCISTIS	7530	A a
The haploid behavior of Urocystis colchici teliospores.		VEI
	7725	R

UROLITHIASIS Experimental production and control of urolithiasis.	7349
UROMYCES Heat therapy of bean rust.	6974
70777 100	
USTILAGO Effects of Ustilago avenae on growth of two oat varietic	es. 6832
UTAE Control of western X-disease virus in Utah orchards.	6951
Effects of low temperature on the survival of the alfal: weevil from Alberta and Utah.	fa 7047
UTERUS	2057
Vitamin D3 and ovine ring womb.	7257
Cervical and uterine infection in thoroughbred mares.	7348
A case of traumatic uterine rupture in a heifer.	7399
To veterinary surgeons in equine practice Survey of uto ine infections.	er- 7430
Oterine infections in mares1964 survey.	7432
Incomplete dilation of the ovine cervix.	7515
VACCINES	
Husk in cattle Laboratory and field studies on calves cinated with irradiated with lungworm larvae.	vac- 7605
Vaccination of calves against rinderpest.	7634
VAGOTOMY	
Physiological and pharmacological factors which influen- the incidence of acute pulmonary alterations following tomy in the domestic cock.	
VAN DE GRAAFF GENERATORS	
Dosimetry for studies on the radiobiology of Tribolium castaneum using the Van de Graaff electron accelerator.	7754
VANCOMYCIN Vancomycin prevents crown gall.	6711
VAPAM	
Decomposition of sodium N-methyldithiocarbamate in soil	7748
VAPORIZER	
A fumigant vaporizer unit for use in laboratory experime	
	7758
VAPORS Herbicidal activity of vapors of 4-amino-3,5,6-trichlor	opic-
olinic acid.	7123
VARROA JACOBSONI	
Occurrence of mite Varroa jacobsoni Oudemans in brood cells of honey bee, Apis indicaF.	6612
VEAL	
Intensive veal production and a hitherto untried mitrof A preliminary trial.	17329
VEGETABLES	
Improving emergence of pelleted vegetable seeds with por coatings.	cous 6917
Bionomics and control of certain Plusiinae and studies o an associated nuclear polyhedrosis virus.	of 6992
Field evaluation of Sevin as an insecticide for pests o vegetables in New Jersey.	e 7010
VEGETATION	
A sampling technique for estimating populations of small arthropods in soil and vegetation.	1 6455
VEICULAR STOMATITIS Response of rabbits and guinea migs to vesicular stomati	itis

VELCULAR STOBATITIS Response of rabbits and guinea pigs to vesicular stomatitis virus. 7217

.

<pre>VEIN MOSAIC (REE CLOVER) A new pea streak virus related to red clover vein mosaic virus (RCVMV)</pre>	; 6977
VENONS The venom of the mud-dauber wasp Sceliphron caementarium	
	6620
VENTILATION The relation between storage molds and damage in high-mo ture rice in aerated storage.	ois- 6894
VENTURIA Chemotherapy of the apple scab disease with butyric acid derivatives.	1 6801
Venturia inaequalis (Cke.) Wint. xvi. amino acids in relation to pathogenicity of two wild-type lines to two apple varietics.	6962
VERATROM Chronologic evaluation of tetratogenicity in sheep fed Veratrum californicum.	7249
VERMINOUS BRONCHITIS Limitations of lungworm vaccine.	7 153
Immunization experiments with lungworm larvae.	7592
and the second has a second the second	
Husk in cattle Laboratory and field studies on calves cinated with irradiated with lungworm larvae.	7605
Lungworm infection in cattle-Control and treatment.	7627
VERTICILLIUM Influence of Pratylenchus penetrans alone and in	
combination with Verticillium albo-atrum on growth of peppermint.	6707
Inversion phenomenon induced by nabam derivatives.	6728
Effect of biotin on growth and sporulation of Verticill: albo-atrum.	ium 6777
Theoretical relationships between inoculum potential and	1
disease severity based on a study of the variation in v lence among isolates of Verticillium albo-atrum.	
The inactivation of Verticillium albo-atrum in apricot trees.	6938
Inhibition of fungi by culture media previously exposed light.	to 6954
Influence of oat and alfalfa residues on soil respiration fungistasis, and survival of Verticillium albo-atrum.	
	7723
VERTICILLIUM ALBO-ATRUM The effect of growth substances on Verticillium wilt of tomato plants.	6909
VESICULAR STONATITIS VIRUS	
Effects of cortisol and adrenalectomy on induction of in feron by endotoxin.	1ter- 7468
VETCH A physiogenic leaf and stem spot of some forage legumes.	6790
Mortality factors for the wetch bruchid, Bruchus brachialis.	7000
Paraquat for selective control of range weeds.	7125
Evidence for a difference in toxicity between common and	
hairy vetch seeds for chicks.	7687
The responsibilities of veterinary practitioners as to use of pesticides.	the 7229
The search for veterinary insecticides. iI. carbamates active against sheep blowfly.	7691
VIBRIO Changes in endometrium of vibrio fetus-infected and noninfected heifers.	7190
Newer knowledge of ovine vibriosis.	7310

Fluorescent antibody detects carriers of Vibrios.	7426
VIBRIO COLI Studies on the pathogenesis of Vibrio coli infection i swine.	n 7541
VIBRIOS Ineffectivity of furazolidine in ovine vibriosis.	7167
VIBRIOSIS Dihydrostreptomycin therapy of bovine vibriosis.	7161
Newer knowledge of ovine vibriosis.	7310
VIBAL VACCINES Foot-and-mouth disease vaccine-production of antigen i culture.	n 7177
The growth of rabies virus in tissue culture and its u a living attenuated vaccine for domestic animals.	se as 7224
VIREMIA Rift valley fever in calves, goats and pigs.	7194
VIROLOGY Comparisons of pea enation mosaic virus isolates.	6878
VIRUCIDES The control of an outbreak of pneumonia in broiler cal with Virugon, a synthetic, oral anti-viral agent.	ves 7301
VIRUS A (CABBAGE) The response to temperature of cabbage virus A infecti Nicotiana glutinosa.	on in 6758
Resistance in Matthiola incana to the turnip mosaic vi	rus. 6884
VIRUS & (CITRUS) Transmission of the stubborn and psorosis & viruses citrus to an herbaceous host.	of 6928
VIRUS DISEASES A haemolytic coccobacillus recovered from poultry.	7345
VIRUS DISEASES (ANIMALS) Isolation of enteroviruses from intestinal tract of sw	ine. 7155
Foot-and-mouth disease vaccine-production of antigen i culture.	n 7177
Ovine abortion virus in ewes and fetuses.	7195
Effect of rabies virus inoculated into foxes and skunk	s. 7207
Response of rabbits and guinea pigs to vesicular stoma virus.	titis 7217
Infectious bronchitis virus- tissue distribution.	7359
Viral causes of bovine abortion in ohio.	7493
Observations on pathogenicity and immunogenicity of a cell-culture-modified foot-and-mouth disease virus.	7498
Transmission and characterization of edema disease of swine.	7535
VIRUS DISEASES (PLANTS) Some effects of supplying benzylademine to leaves and inoculated with viruses.	plants 6695
The flat apple disease.	6729
Some biochemical changes associated with virus infecti apple.	on in 6820
Studies on a virus causing stem grooving and graft-uni abnormalities in Virginia Crab apple.	on 6843
Effect of rootstock on the incidence of impietratura-d eased grapefruit fruits.	is- 6846
Differentiation of viruses transmitted from Pelargoniu hortorum.	<b>6</b> 865
Comparisons of pea enation mosaic virus isolates.	6878
	PAGE

AGE 165

VIRUS PNEUMONIA

73	LRUS PHEUMONIA	
	Transmissicn of a virus disease of mushrooms by infected spores.	1 6890
	Effect of age of vector and of abdomen punctures on viru transmission.	15 6910
	Identification of the viruses affecting commercial varies of pepper (Capsicum annum) in New Jersey.	ties 6925
	A virus infecting maize in South Dakota.	6927
	The role of the coat protein in the inactivation of toba mosaic virus by ultraviolet light.	acco 6931
	Rough fruit of sweet cherry.	6950
	Dodder transmission of citrange stunt virus, a virus ass ciated with tatter leaf of citrus.	50 <del>-</del> 6952
	The infectious nature of pollen from certain wirus-infections fruit trees.	cted 6963
	Mechanical transmission of a latent lemon virus.	6976
	Water tensions in plants, an entomological approach.	7037
73	TRUS PNEUMONIA Pig diseases in the Rhodesias.	7241
	The control of an outbreak of pneumonia in broiler calve with Virugon, a synthetic, oral anti-viral agent.	es 7301
	The characterization of a causitive agent of virus pig p monia.	рпец- 7413
<b>4</b> 3	ERUS X (CHERRIES) Control of western X-disease virus in Utah orchards.	6951
73	REUS X (PEACHES) Control of western X-disease virus in Utah orchards.	6951
43	<pre>KRUS X (REDPEPPPERS) Identification of the viruses affecting commercial varit of pepper (Carsicum annum) in New Jersey.</pre>	ies 6925
73	[RUS ¥ (REDPBPPERS) Identification of the viruses affecting commercial varit	ties
	of pepper (Carsicum annum) in New Jersey.	6925
	Establishment of an insect cell strain persistently infe with an insect virus.	ected 6592
	A virus-like particle in Avon and Pundy potatoes.	6739
	Bentonite flocculation a rapid, sensitive serological t for the detection of plant virus antigens.	test 6897
	The role of the coat protein in the inactivation of toba mosaic virus by ultraviolet light.	acco 6931
	Olceration of cow s teats caused by a virus.	7415
V 1	ISCERA Recovery of aster yellows from excised organs of insect tors.	vec- 6770
VI	ITABIN A Unusual cerebellar conditions in pigs. Part 1. Cerebella herniatíon associated with vitamin A deficiency.	ar 7326
	Studies on coccidiosis and witamina nutrition of broiler	rs. 7451
VI	ITAMIN C	
	Suspected skeletal scurvy in the dog.	7372
VI	ITAMIN D Influence of dietary zinc, calcium and vitamin D for her on zinc content of tissues and eggs and on bone composit	ns tion. 7137
	Influence of vitamin D on avrious aspects of the reprodutive process in mature hens.	ac- 7142
V:	ITAMIN D3 Vitamin D3 and ovine fing womb.	7257
	166	

1	TAMIN E The effects on house flies of adding wheat germ and corn oils to fly media.	6654
3	TAMINS Studies on the nutritional requirements of the fruit fly Dacus cucurbitae Coquillett (Diptera, Trypetidae). iV. responses of D cucurbitae larvae to vitamin deficient diets.	6512
	Pathogenicity, vitamin nutrition, and cultural character tics of isolates of Phytophthora parasitica from carnati and other hosts in hawaii.	is-
	Vitamin D-induced calcium binding factor in rat intestin mucosa.	al 7388
12	RFARIN Heritable resistance to warfarin in rats.	7693
12	NTER Studies of water conservation in cockroaches.	6653
	Relationship of water content and living cells to spread	of
	Diplodia zeae in corn stalks. Disinfected water suppresses Pseudomonas in mice.	6849 7357
11	TER CONSUMPTIVE USE	7027
	Water tensions in plants, an entomological approach. The influence of selected nematode species and number of	7037
	consecutive plantings of corn and sorghum on forage prod tion, soil, and water use efficiency.	
12	ATER FOLLUTION Oxygen balance in a stream receiving domestic and oil re ery effluents.	fin- 7655
	Dipyridylium residues in an aquatic environment.	7662
12	XES The free fatty acids and neutral lipids of the cuticular of the Mormon cricket, Anabrus simplex, Hald.	wax 6605
11	RATHER Long-range aerial transport of the harlequin bug and the	
	greenbug into Minnesota.	6456
	Time of year of infection of winter wheat by the dwarf b fungus.	unt 6862
	Autumn and winter sporulation by basidiocarps of Pomes annosus.	6871
	The seasonal incidence of canine coccidiomycosis.	7475
	DDT deposits on grapes as affected by growth and weathering.	7682
I	CATHER FLECK (TOBACCO) Response of plants to air pollutants. II. Effects of ozo concentration and leaf maturity on injury to Nicotiana	ne 6815
I	tabacum. 3BD CONTROL	0015
	Influence of tillage, row spacing, and atrazine on sorgh and weed yields from nonirrigated sorghum across Nebrask	u <b>n</b> a. 7120
I	REDS An evaluation of Solanum nigrum and Physalis minima as	
	suscepts of Xanthomonas vesicatoria.	6792 7121
	The fight against weeds. Science and education a new awareness.	7121
		7125
	Weed science - revolution in agricultural technology.	
	Ten materiana energet tra mode of surge of	7131
	ISU veterinarians suspect two weeds as cause of seasonal	7157

PAGE 166

WEIL S DISEASE The clinical approach to abdominal disorders of the dog. 7502

WESTERN UNITED STATES Characteristics and control of swainsonpea. 7130
WHEAT Estimating immature populations of rice weevils in wheat by using subsamples. 6460
Distribution and sorption of liquid fumigants applied to wheat by recirculation. 6688
Inheritance of stem rust resistance in two wheat varieties, Marguis and Kota. 6706
Fungi attacking seeds in dry seed-beds. 6759
Postinfection development of wheat bunt in relation to controlled soil moisture. 6860
Three distinct pathogenic types of stripe rust in the western states. 6861
Time of year of infection of winter wheat by the dwarf bunt fungus.
Genetic model for physiologic studies of mechanisms governing development of infection type in wheat stem rust. 6876
Epidemiology of glume blotch of wheat. 6888
Factors affecting resistance of wheat to scab caused by Ghibberella zeae. 6893
Bffects of various diurnal temperature profiles on host- parasite reaction of wheat varieties and Puccinia
striiformis. 6903
Overwintering of stripe rust in winter wheat in Montana. 6904
A method of using mycelial, monosporidial isolates of Tilletia controversa in pedigreed hybrid crosses. 6908
Relation of Agropyron repens mosaic and wheat streak mosaic virus. 6922
Culture of the dwarf bunt fungus. 6944
Insecticidal control of the Hessian fly. 6987
Effect of ronnel upon the adult rice weevil, Sitophilus oryza. 7012
The effect of seed treatments with phorate and other systemic insecticides on the germination of wheat. 7027
Effect of culm sclidness on the survival of the wheat stem sawfly. 7041
Susceptibility of certain stages of the rice weevil to a methallyl chloride fumigant formulation in wheat of various moistures. 7045
Chloroplast number in leaves of normal wheat plants and those infested with hessian fly or treated with maleic hydrazide. 7052
Bffect of temperature and humidity on the fecundity and de- velopment of Cadra cautella Wlk. in wheat. 7071
The use of phorate to control aphids and the Hessian fly on winter wheat. 7078
Population dynamics and fumigation studies of certain nema- todes associated with roots of wheat in Nebraska. 7101
Development of granary weevils and storage fungi in columns of wheat- II 7643
Pactors affecting invasion of grains and seeds by Aspergil- lus flavus and effects of the fungus on germination of the seeds. 7644
WHEAT GERM The effects on house flies of adding wheat germ and corn oils to fly media. 6654

WHEAT STRAW Effect of the soil carbon nitrogen ratio on soil fungi.	6778
WHITE CLOVER Seed transmission of white clover mosaic and clover yell mosaic viruses in red clover.	Low 6760
WHITE MUSCLE DISEASE White muscle disease, a selenium-responsive myopathy.	7443
WHITE-FINE SHOOT BORER White-pine shoot borer (Eucosma gloriola Heinrich).	7002
WILDFIRE (TOBACCO) Free amino acid and amide content of tobacco and oats in ted by wildfire and halo blight bacteria.	nfec- 6851
WILDLIFE Effects of an aerial DDT spray on aguatic insects in Connecticut.	7016
Isolation of a virus from a condition simulating feline leucopaenia in a leopard.	pan- 7380
Toxic chemicals.	7734
WILDLIPE DISEASES Wildlife rabies increases.	7180
Red squirrel disease.	7293
WILT (COTTON)	
A comparison of Fusarium wilt indices of cotton varietic with root-knot and sting nematodes as predisposing agent	
Prevention of symptom development of Fusarium wilt of co ton by isolates of a Cephalosporium species.	ot- 6877
WILT (CUMINUM CIMINUM) Effect of SMDC on germination, plant growth, and fusariu	1 m
wilt incidence of cumin (Cuminum cyminum).	6805
WILT (PEAS) Effects of Meloidogyne spp. and Tylenchorhynchus claytor on pea wilt incited by Fusarium oxysporium f. pisi race	ni 1. 6732
WILT (QUERCUS) Ceratocystis fagacearum in roots of infected bur oaks an	nd
the recurrence and spread of oak wilt.	6831
Insects associated with wounds on trees that develop oal	
wilt.	6989
<pre>wilt. WILT (SAFFLOWER) Wilt-incitant Pusarium oxysporum f. carthami present in</pre>	6989 6785
<pre>wilt. WILT (SAFFLOWER) Wilt-incitant Fusarium oxysporum f. carthami present in seed from infected safflower. WILT (SWEETPOTATOES) Anatomical aspects of resistance in sweetpotato to Fusar</pre>	6989 6785 cium
<pre>wilt. WILT (SAFFLOWER) Wilt-incitant Fusarium oxysporum f. carthami present in seed from infected safflower. WILT (SWEETPOTATOES) Anatomical aspects of resistance in sweetpotato to Fusar wilt. WILT (TOMATOES)</pre>	6989 6785 cium 6956 6719
<ul> <li>wilt.</li> <li>WILT (SAPPLOWER) <ul> <li>Wilt-incitant Pusarium oxysporum f. carthami present in seed from infected safflower.</li> </ul> </li> <li>WILT (SWEETPOTATOES) <ul> <li>Anatomical aspects of resistance in sweetpotato to Fusarwilt.</li> </ul> </li> <li>WILT (TOMATOES) <ul> <li>Semeiography of Fusarium wilt of tomato.</li> <li>Pusarium wilt (race2) of tomato0 effect of lime and micronutrient soil amendments on disease development.</li> <li>Prevention of symptom development of Pusarium wilt of conton by isolates of a Cephalosporium species.</li> </ul></li></ul>	6989 6785 cium 6956 6719 6775
<ul> <li>wilt.</li> <li>WILT (SAFFLOWER) <ul> <li>Wilt-incitant Fusarium oxysporum f. carthami present in seed from infected safflower.</li> </ul> </li> <li>WILT (SWEETPOTATOES) <ul> <li>Anatomical aspects of resistance in sweetpotato to Fusarwilt.</li> </ul> </li> <li>WILT (TOMATOES) <ul> <li>Semeiography of Fusarium wilt of tomato.</li> <li>Fusarium wilt (race2) of tomato0 effect of lime and micm nutrient soil amendments on disease development.</li> <li>Prevention of symptom development of Fusarium wilt of communication.</li> </ul></li></ul>	6989 6785 cium 6956 6719 6775 6775
<ul> <li>wilt.</li> <li>WILT (SAFFLOWER) <ul> <li>Wilt-incitant Fusarium oxysporum f. carthami present in seed from infected safflower.</li> </ul> </li> <li>WILT (SWEETPOTATOES) <ul> <li>Anatomical aspects of resistance in sweetpotato to Fusariwilt.</li> </ul> </li> <li>WILT (TOMATOES) <ul> <li>Semeiography of Fusarium wilt of tomato.</li> <li>Fusarium wilt (race2) of tomato0 effect of lime and micronutrient soil amendments on disease development.</li> <li>Prevention of symptom development of Fusarium wilt of conton by isolates of a Cephalosporium species.</li> <li>The effect of growth substances on Verticillium wilt of</li> </ul> </li> </ul>	6989 6785 cium 6956 6719 6775 50- 6877 6909
<ul> <li>wilt.</li> <li>WILT (SAPPLOWER) <ul> <li>Wilt-incitant Pusarium oxysporum f. carthami present in seed from infected safflower.</li> </ul> </li> <li>WILT (SWEETPOTATOES) <ul> <li>Anatomical aspects of resistance in sweetpotato to Fusar wilt.</li> </ul> </li> <li>WILT (TOMATOES) <ul> <li>Semeiography of Fusarium wilt of tomato.</li> <li>Fusarium wilt (race2) of tomato0 effect of lime and mich nutrient soil amendments on disease development.</li> <li>Prevention of symptom development of Fusarium wilt of con by isolates of a Cephalosporium species.</li> <li>The effect of growth substances on Verticillium wilt of tomato plants.</li> </ul> </li> </ul>	6989 6785 6956 6719 6775 6775 6877 6909 6462
<ul> <li>wilt.</li> <li>WILT (SAPPLOWER) <ul> <li>Wilt-incitant Pusarium oxysporum f. carthami present in seed from infected safflower.</li> </ul> </li> <li>WILT (SWEETPOTATOES) <ul> <li>Anatomical aspects of resistance in sweetpotato to Fusar wilt.</li> </ul> </li> <li>WILT (TOMATOES) <ul> <li>Semeiography of Fusarium wilt of tomato.</li> <li>Pusarium wilt (race2) of tomato0 effect of lime and mich nutrient soil amendments on disease development.</li> <li>Prevention of symptom development of Pusarium wilt of conton by isolates of a Cephalosporium species.</li> <li>The effect of growth substances on Verticillium wilt of tomato plants.</li> </ul> </li> <li>WINDBREAKS <ul> <li>The horizontal and vertical distribution of flying inseed near artificial windbreaks.</li> <li>Control of Cylindrosporium leaf spot disease of Rhus trip</li> </ul> </li> </ul>	6989 6785 cium 6956 6719 co- 6775 bt- 6877 6909 cts 6462 cts 6855

The biology of the pine webworm, Tetralopha robustella, in Wisconsin. 7116

7539

#### WOOD DESTROYING FUNGI

Wisconsin eradicates brucellosis. 7176 WOOD DESTROYING PUNGI OD DESTRUTING FUNGI Trichlorobenzene as a soil toxicant against four wood-decay-ing soil fungi. 6735 ing soil fungi. The microbial hydrolysis of cellulose and some factors af-fecting the production of cellulase in a submerged culture of Alternaria sp. 77 7718

- WOOD SUGAR Nutritional and biochemical aspects of arabinose and xylose for chicks.
- WOODINESS (GRANADILLA) Two unrelated viruses which cause woodiness disease of passion fruit (Passiflora edulis).
- 6937 ROUND-TUMOR
- Similarities between wound-tumor virus and the humanpathogenic reoviruses. 6932
- X-RAYS Some effects of X-radiation on larvae of Galleria mello-
- 6541 nella.
- Effects of X-rays, tryptophan metabolites, and eye color mutants on the tumor-suppressor system in Drosophila melan-6668 ogaster.
- XANTACMONAS VESICATORIA
- An evaluation of Solanum nigrum and Physalis minima as 6792 suscepts of Xanthomonas vesicatoria.
- X ANTH AMONAS
- Comparative bactericidal properties of N-polyhaloethylthio 7737 hydantoins.
- XANTHIUM Physiological and metabolic changes induced by lethal concentrations of 2,4-D in the cocklebur (Xanthium spp.). 7705
- XANTHOMATOSIS 7391
- Xanthomatosis in laying hens a case report. XANTHOMONAS
- Internally infected seed as a source of inoculum for the primary cycle of bacterial blight of cotton. 6712
- Inheritance of resistance in pepper to bacterial spot. 6725
- Multiplication of Xanthomonas vesicatoria on tomato seedlings. 6796
- Survival of Xanthomonas vesicatoria in soil and diseased 6854 tomato plants.
- Common antigens in Xanthomonas malvacearum and Gossypium hirsutum and their possible relationship to host specificity and disease resistance. 6891
- 6918 Three diseases of guar.
- XTPHT NEMA
- Relationships of viruses associated with ringspot diseases of blueberry. 6798
- XIPHINEMA AMERICANUM A bacterial infection of Xiphenema americanum. 7082
- XIPHINEMA BASIRI
- Studies on two plant nematode species of the genus Xiphi-nema Cobb, 1913. 7 7095
- XIPHINEMA INDICUM Studies on two plant nematode species of the genus Xiphi-nema Cobb, 1913. 7 7095
- XYLEBORUS FERRUGINEUS Diurnal emergence of Xyleborus ferrugineus (Coleoptera, Scolytidae) from cacao trunks in Ecuador and Costa Rica. 7057
- YELLOW DWARF (BARLEY) Effects of barley yellow dwarf virus on yield of oats as influenced by variety, virus strain, and developmental stage of plants at inoculation. 6744

- Greenbug dispersal and distribution of barley yellow dwarf virus in Wisconsin. 6812
- YELLOW DWARF (POTATOES) Effect of age of vector and of abdomen punctures on virus transmission. 6910
- YELLOW MOSAIC (BEANS) Breakdown of mo mo resistance in Pisum sativum by thermal selection within certain strains of the bean yellow mosaic virus (BV2). 6859
- YELLOW MOSAIC (CLOVER) Seed transmission of white clover mosaic and clover yellow mosaic viruses in red clover. 67 6760
- YELLOW SPOTTING (LETTUCE) An apparent strain of tobacco rattle virus associated with yellow spotting of lettuce. 67 6757
- YELLOW STAR THISTLE Nigropallidal encephalomalacia in the horse. 7307
- YELLOWS (CHERRIES) Variability in rates of movement of different strains of the virus responsible for prune dwarf.
- ZEBU CATTLE Prophylaxis against trypanosomiasis in Zebu cattle. IV. A field trial of metamidium and Isometamidium. 7482
- The occurrence of Raillietia auris in Zebu cattle in Ni-7609 geria.
- The anthelmintic efficiency of Haloxon against the adult and immature stages of the gastro-intestinal strongyles of Nigerian Zebu cattle. 76 7614
- Prophylaxis against trypanosomiasis in Zebu cattle. III. Potentiation trials and a trial of R.D. 2902 in an area of medium trypanosome risk. 7630
- ZINC Influence of dietary zinc, calcium and vitamin D for hens on zinc content of tissues and eggs and on bone composition. 7137
- Zinc availability in the chick as affected by phytate, cal-cium and ethylenediaminetetraacetate. 71 7139
- ZINC BACITRACIN Zinc bacitracin and chick growth. 7274
- ZINC SULFATE
- Pusarium wilt (race2) of tomato0 effect of lime and micro-nutrient soil amendments on disease development. 6 6775
- ZINEB The effect of copper compounds on control of citrus rust 7022 mite with zineb.
- ZOOGEOGRAPHY 6458 Acarina associated with Michigan Bombinae. I-II.
- Fleas (Siphonaptera) of Alabama and their host relation-6467 ship.
- ZOOLOGICAL GARDENS OGLOGICAL GARDENS Sixth international symposium on diseases of zoo animals. 7158
- ZOONOSES The zoonosis problem in Chile.
- 7522
- ZOOSPORES Prolonging the motility and virus-transmitting ability of Olpidium zoospores with chemicals. 7 7726
- 1,2-DIBROMO-3-CHLOROPROPANE Decline of grapefruit trees in relation to citrus nematode populations and tree recovery after chemical treatment. 7106
- 2-(2,4,5-TRICHLOROPHENOXY) PROPIONIC ACID Characteristics and control of swainsonpea. 7130

Characteristics and control of swainsonpea.	7130
Translocation of C14-labeled compounds in cotton and oal	ks. 7708
4-TERT-BUTYL-2-CHLOROPHENYL METHYL METHYLPHOSPHORAMIDATE Toxicity of organic phosphorus insecticides to horses.	7694
The bean leaf skeletonizer, Autoplusia egena, and its control on bush snap beans in the everglades.	7006

Ahmed, H University of London	
Queen Elizabeth College	
Department of Hiology Allen, W R	7686
Canada Dept. Of Agriculture, Vineland Station, Ontario	
Research Hranch Research Laboratory	6696
Baldwin Jr, C B National Institutes Of Health	
National Institutes Of Health Banttari, B B	6701
North Central Regional Project	6702
Barnett, S F School Of Veterinary Medicine, Cambridge, England	7239
Hateman, D F	
National Institutes Of Health Herg, L A	6704
West Virginia University, Morgantown	6706
Hlum, M S Louisiana State University	
Dept. Of Entomology	7688
Board, B G School Of Agriculture, Edinburgh, Scotland	
Dept. Of Hacteriology	7651
Brass, C I Hatch 147	6686
Brock, W E	
Fort Dodge Laboratories, Iowa Hurbutis, P P	7258
H. P. Cannon And Son, Inc., Hridgeville, Del.	6990
Caltrider, P G Eli Lilly Company, Indianapolis, Ind.	7704
Casida, J E	1104
University Of Wisconsin, Madison Dept. Of Entomology	6509
Chambers, H L	0.50.5
Oregon State University	6719
Graduate School Chapman, H C	0719
U.S. Dept. Of Agriculture	7647
Agricultural Marketing Service Chessin, M	1041
U.S. Public Health Service	
National Institute Of Allergy And Infectious Diseases	6720
Clor, M A College Of Science, Tripoli, Litya	7708
Daum, R J	,,,,,,
U.S. Dept. Of Agriculture, Heltsville, Md. Biometrical Services	
Plant Industry Station	7666
Dickason, E A Oregon State College, Corvallis	7000
Dobson, E C	1000
Purdue University	7667
Dept. Of Entomology Downes, J A	1001
Canada Department of Agriculture	
	6521
Entomology Research Institute Drake, C R	6521
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg	6521 6737
Entomology Research Institute Drake, C R	
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M E Polish Academy Of Sciences, Cracow Ebrlich, E G	6737 6739
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, E G National Science Foundation Endo, R M	6737
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M H Polish Academy Of Sciences, Cracow Entlich, H G National Science Poundation Endo, R H University Of California, Riverside	6737 6739 7711
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, E G National Science Foundation Endo, R M	6737 6739
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada	6737 6739 7711 6744
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K	6737 6739 7711
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo.	6737 6739 7711 6744
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Fenwick, H S University of Idahc, Moscow	6737 6739 7711 6744 6453 7302
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Fenwick, H S University of Idahc, Moscow Flant Science Department	6737 6739 7711 6744 6453
Entomology Research Institute Drake, C B Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M H Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Penton, B K Agri-Tech, Inc., Kansas City, Mo. Penwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph	6737 6739 7711 6744 6453 7302 6747
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Penwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept.	6737 6739 7711 6744 6453 7302
Entomology Research Institute Drake, C B Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M H Polish Academy Of Sciences, Cracow Bhrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Penwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Gale, C Ohio Agricultural Experiment Station	6737 6739 7711 6744 6453 7302 6747 6529
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Bhrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Penwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Gale, C Ohio Agricultural Experiment Station Veterinary Science Dept.	6737 6739 7711 6744 6453 7302 6747
Entomology Research Institute Drake, C B Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Penwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Gale, C Ohio Agricultural Experiment Station Veterinary Science Dept. Galindo, J Department OF fitopatologia	6737 6739 7711 6744 6453 7302 6747 6529
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Fenwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Gale, C Ohio Agricultural Experiment Station Veterinary Science Dept. Galindo, J Department OF fitopatologia Genung, W G	6737 6739 7711 6744 6453 7302 6747 6529 7314 6752
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Poundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Fenwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Galindo, J Department OF fitopatologia Genung, W G Hercules Powder Company Georgopoulos, S G	6737 6739 7711 6744 6453 7302 6747 6529 7314 6752 7006
Entomology Research Institute Drake, C R Virginia Agricultural Experiment Station, Blacksburg Dwurazna, M M Polish Academy Of Sciences, Cracow Ehrlich, H G National Science Foundation Endo, R M University Of California, Riverside Dept. Of Plant Pathology Evans, W G University Of Alberta, Edmonton, Canada Dept. Of Entomology Fenton, B K Agri-Tech, Inc., Kansas City, Mo. Fenwick, H S University of Idahc, Moscow Plant Science Department Free, J H Ontario Agricultural College, Guelph Agriculture Dept. Gale, C Ohio Agricultural Experiment Station Veterinary Science Dept. Galindo, J Department OF fitopatologia Genung, W G Hercules Powder Company	6737 6739 7711 6744 6453 7302 6747 6529 7314 6752

Getzin, L W Texas Agricultural Experiment Station, Weslaco Cingrich P P	7008
Gingrich, R E U.S. Public Health Service	25/2
National Institutes Of Health Gonzalez, L C	7567
Wisconsin Alumni Research Foundation Granett, P	6758
Union Carbide Chemicals Company At Rutgers Universit	ry 7010
Granett, P Union Carbide Chemicals Company At Rutgers	7568
Grayson, J McD National Pest Control Association	6535
Hamilton, K C	
Dow Chemical Co., Midland, Mich. Hamm, J J	7124
Purdue University, Lafayette, Ind. Agricultural Experiment Station	
Southern Grain Insects Investigation Hampton, R O	6540
U.S. Dept. Of Agriculture, Prosser Vegetables And Ornamentals Research Branch	6761
Harrís, J J Swift And Company	
Agricultural Chemical Division	7570
Heald, P J The University, Reading, England	2054
Dept. Of Physiological Chemistry Helton, A W	7351
University of Idaho, moscow Department of Plant Sciences	6764
Hilu, H M Dept. Of Health, Education And Welfare	
Public Health Service National Institutes Of Health	6767
Ignoffo, C M International Minerals And Chemical Corp., Wasco, Ca	
Hiofern Division	6557
Ignoffo, C M International Minerals And Chemical Corp., Wasco, Ca	
Bioferm Division Jaycox, E R	6559
U.S. Dept. Of Agriculture, Logan, Utah Agricultural Research Service	
Entomology Research Division Kahn, R P	7021
U.S. Plant Introduction Station Kaufman, D D	6776
U.S. Dept. Of Agriculture, Heltsville, Md. Agricultural Research Service	
Crops Research Division Kawakishi, S	6778
Nagoya University Department of Agricultural Chemistry	
Faculty of Agriculture	7741
Kerr, E D University Of Nebraska	
Plant Pathology Department Khadga, B H	7101
Olin Mathieson Chemical Corporation Kienholz, E W	6781
Colorado State University Dept. Of Poultry Science	7137
Kirk, B E American Cyanamid Company	7027
Klarman, W J University Of Maryland, College Park	
Dept. Of Hotany	6782
Knapp, F W Chemagro Corporation, Kansas City, Mo.	7573
Krause, G F U.S. Public Health Service	<i>c</i> 11 <i>c</i> 1
National Institutes Of Health Krstic, M M	6460
Yugoslavia Porest Faculty, Heograd Lichtenstein, E P	6791
Shell Chemical Corporation Lichtenstein, E P	7672
Shell Chemical Corporation Lipa, J L	7673
U.S. Dept. Of Agriculture, FG- PO-112 Lipke, H	6578
Army Chemical Center, Md. Physiology Division	6579
Lockwood, J L	6799
National Science Foundation MacLennan, D H Company Company Conden N d	
Campbell Soup Company, Camden, N.j. Mathur, S B	6801

Matsumura	ı, F
-----------	------

Matsumura, F	
Danish Govt. Inst. of Seed Path. for Develop. Countries	6806
Matsumura, F University Of Western Ontario, London, Canada Dept. Of Zoology	7674
McDonald, B E University Of Illinois	7074
Dept. Of Animal Science Menke, G H	7138
Institut Fur Phytopathologie, Giessen, West Germany Menser, H A	6813
Cigar Manufacturers Association Metcalf, R L H S Dublic Health Service	6815 7035
U.S. Public Health Service Miller, P R Califernia Division Of Forestry	1033
Dept. Of Natural Resources	6819
Hiller, ¥ E East Lansing Michigan Research Center Mitchell, R	6465
National-University Inst. Of Agriculture, Rehovoth, Isr Dept. Of Soil And Water Mohanty, S B	ae <b>1</b> 6822
U.S. Dept. Of Agriculture	
Agricultural Research Service Animal Disease And Parasite Research Division	7434
Morgan, F L U.S. Dept. Of Agriculture, Stoneville, Miss.	
Agricultural Research Service Crops Research Division	6827
Nountey, G J National Institute Of Health	7652
Mulla, M S Coachella Valley Mosquito Abatement District, Riverside	
Munnecke, D E U.S. Fublic Health Service	7576
National Institutes Of Health O Keeffe, L E Iowa State University	6829
Dept. Of Zoology And Entomology Ogawa, J M	7041
The Upjohn Company, Kalamazoo, Mich. Ohman, J H	6838
Lake States Porest Administration Station, Marquette, M Orlob, G B	ich. 7128
National Research Council Of Canada. Panda, B	6845
P. O. Alada, Dist. Balasore, Orissa, India Pappelis, A J	7451
Southern Illinois University, Carbondale Dept. Of Botany Pedersen, J R	6849
Public Health Service National Inst. Of Health, Allergy And Infectious Diseas	es
Peters, D C	7045
Iowa State University, Ames Peterson, λ G	7648
State Of Minnesota Iron Range Resources And Rehabilitation Commission	6611
Peterson, L K Canada Agricultural Research Station, Lethbridge, Alber	ta 7047
Pfadt, R E Shell Chemical Corporation	7104
Powers, K G National Institute Of Arthritis And Infectious Diseases	
Laboratory Of Parasite Chemotherapy Price, C A	7629
National Science Foundation Raun, E S	7129
Dow Chemical Company, Midland, Mich. Renfro, B L	7577 6866
North Central Regional Technical Committee Resconich, E C St. Francis College, Loretto, Pa.	0000
Dept. Of Biology Robblee, A R	6867
Cyanamid Of Canada Roberts, D W	7140
Boyce Thompson Institute For Plant Research, Yonkers, N Roberts, D W	•¥. 6618
Boyce Thompson Institute For Plant Research, Yonkers, N	•¥. 6619
Rogoff, W M Chemagro Corporation San Juan, M O	7582
PAGE 172	

University Of The Philippines, Laguna	
Dept. Of Plant Pathology Sandstedt, R	6884
Public Health Service	
National Institute Of Allergy And Infectious Diseases	
Cebroodon II II	7109
Schroeder, H W U.S. Dept. Of Agriculture	
Agricultural Marketing Service	6893
Seaman, W L	
Canada Dept. Of Agriculture, Ottawa Plant Research Institute	6898
Simpson, C F	0050
U.S. Public Health Service	
National Heart Institute	7508
Singh, S B U.P. Agricultural University, Pantnagar, Nainital, Indi	a
College Of Veterinary Science	7510
Spurr Jr, H W	7750
Rockefeller Foundation Steinhauer, J E	7756
Michigan State University, East Lansing	
Food Science Dept.	7653
Stemp, A R U.S. Public Health Service	
Division Of Environmental Engineering And Food Protecti	on
	7681
Stern, V M U. S. Public Health Service	
National Institutes Of Health	
National Institute Of Allergy And Infectious Diseases	
Sullivan, R L	7065
Dept. Of The Army	
Office Of The Surgeon General	6676
Research And Development Division Tashiro, H	6676
U.S. Dept. Of Agriculture, Riverside, Calif.	6648
Turner, N J Boyce Thompson Institute, Yonkers, N.Y.	7748
Turner, P D	1140
University Of Hong Kong	
Dept. Of Botany	6947
Wallace, L J Michigan State University, East Lansing	
Dept. Of Pathology	7540
Wallesz, D P Histopsin Concernation Dept	
Wisconsin Conservation Dept. Division Of Forestry	7116
Watson, D L	
California Spray Chemical Company, Morristown, N.j. Whitney, W K	6656
Kansas State University, Manhattan	6688
Williams, B J	
Victoria University, Wellington, New Zealand Botany Dept.	6962
Wilson, C L	
National Science Foundation	6966
Wilson, M C American Cyanamid Company	7078
Winstead, N N	
National Science Foundation Winstead, N N	6968
National Science Foundation	7732
Wright, C G	
Wilson Exterminating Company, Winston-salem, N.c. Wynn Jr, W K	6662
Boyce Thompson Institute For Plant Research, Yonkers, N	.Y.
	6972

Corden,	М	Е
---------	---	---

							corden, M.
Abbasi, Q A	6475	Banwart, G J	7653	Brady Jr., U E	7563	Cardenas-Gonzalez, J	7705
6629 Abdel-razig, M El T	6476	Barash, I Bardin, R	6703 6757	Brakke, M Bramley, P S	6922 7734	Cardiff, E A Carlstrom, R C	6819 6728
Abelseth, M K	7224	Barker, R J	6485	Brander, G C	7256	Carnaghan, R B A	7225
Abo-el-Dahab, M K Abrahamson, L P	6743 6477	Barley, E E Barlow, R M	7236 7237	7556 Brass, C L	6686	7264, 7406 Carpenter, J A	7730
Abul-Nasr, S	6445	Barnett, B D	75 18	Bravo, G	7055	Carpenter, J B	6718
Ackerman, A J Adams, J R	7678 6544	Barnett, K C Barnett, S F	7238 7239	Bray, D F 7017	6990	Carpenter, T R Carroll, T W	6858 6901
6556	7000	7595		Brazzel, J R	6496	Carter, G R	7265
Adams, R E Adkisson, P L	7082 7083	Barr, M Barron, N S	7240 7241	6986 Breinig, M K	7468	Carter, W 6994	6993
Afanasiev, M M	6693	Bartram, B G	7255	Brewerton, B V	7663	Cartwright, G E	7251
Agundis, O Ahmed, H	7654 7686	Basile, R Bass, M H	6610 6983	Brian, R C Bricker, J L	7119 6946	Cartwright, J R Carver, R G	7371 6772
Aitken, T H	6683	Bassett, R D	6912	Bridges, C H	7354	Carwardine, P C	7266
Aizawa, K Al-Dabagh, M A	6478 7593	Bateman, D F 6750, 7701	67 04	Bridges, G D Briggs, C A E	7257 7735	Casida, J E Chadwick, J S	6509 6510
Al-Sohaily, I A Aldrich, D T A	6936 6694	Batra, S W T Baughn, C O	6486 7315	Briggs, J D	6607	Chalquest, R R	7267
Aldwinckle, H S	6695	Baumgardner, R K	7655	Brinkerhoff, L A Brinoley, T A	6712 6995	Chambers, H L Chandler, P A	6719 6829
Alexander, B H 6682	6680	Beach, J E	7242	Broadhead, G D	7542	Chao, J	6511
Allan, R E	6861	Beadman, R Beard, R L	7243 6474	Brock, W E Brocklesby, D W	7258 7598	Chapman, H C 7647	6564
Allcroft, R 7264, 7406,	7225 7455	Beards, G W	6984	Brodie, B B	6727	Chapman, R A	7086
7264, 7406, Allen, G E	6479	Beasley, P G Beck, G E	7662 6865	Brogdon, J L Bromfield, K R	7671 6713	Chapman, R K Chaudhari, A Q	7008 7268
Allen, J R	7226	Beesley, W N	7618	Brooks, G T	6668	Chawla, S S	6512
Allen, W R Ammerman, C B	6696 7143	Beevers, L Bega, R V	77 02 67 05	Brooks, M A Broome, A W J	6497 7638	6513 Chen, H B	7053
Amor, O F	7227	Begg, T B	7244	Brown Jr, W M	6714	Chervenick, P A	7251
Amstutz, B E Andersen, L	7228 7707	Behnke, C N Bell, D S	6487 7339	Brown, A W A Brown, C G D	6587 7599	Chessin, M Chetram, R S	6720 6721
Anderson, C R Anderson, E H	6683 7594	Bell, M R	6589 7667	Brown, C M	6744 7600	Chevres-roman, R	7087
Anderson, L D	7084	Belling, T E Ben-Shaked, Y	6488	Brown, F G 7601	7000	Chhabra, B K Chiang, H C	7091 6995
7111, 7661 Anderson, L E	7107	Benjamin, D M Bonnott S F	7116 7669	Brown, H E	6987 7523	Childs, T W	6722
Anderson, N A	6715	Bennett, S E Bennington, E	7561	Brown, J K Brown, R H J	6498	Chinn, S H F Chiu, R H	7706 6723
Anderson, R J Anderson, R K	7229 7407	Benschoter, C A Berg, L A	6985 6706	Brown, V K Brown, W M	7602 6728	Chodroff, S Chopra, N P	7699 6450
Andres, L A	6667	Berger, R D	6823	Browne, L B	6518	Chowdhuri, A N	6996
Angus, T A 6543	6480	Bergeson, G B Bergold, G H	6707 6489	Brownlie, W M Bruce, W N	7664 7564	Christansen, D W Christensen, C M	67 18 6957
Anthony, D W	7230	6490	0405	Bruns, V F	7130	7643	0,57
7483 Apple, J W	6933	Berlinguet, L Berwyn-Jones, M	6631 7245	Brunson, M H 7565	6988	Christensen, J J Christie, G J	6893 7269
Appleton, G S	7231	Bess, H A	7646	Bryans, J T	7286	Chu, B M	6477
Aragaki, M 6769, 6863	6768	Bettini, S Betts, A O	6491 7246	7485 Bryson, H	7273	Claborn, H V 7678	7665
Arakawa, K Y	6539	Beverley, J K A	7544	Buchanan, W D	6989	Claflin, T O	6451
Arant, F S 7571	6505	7596, 7597 Bhattacharya, A	7050	7085 Bucher, G E	6499	Clandinin, D R Clapham, P A	7140 7603
Arbuckle, B	7232 7680	Bickley, W E	7051	6500, 6501,	6502	Clark, G T	7559
Archibald, J Ardre, F	6481	Bierer, B W Bigley, W S	7247 7562	6503, 6504 Buck, W B	7694	Clark, T B 6515, 6564	6514
Arima, K Arnett, R H	7733 7752	7676 Binns, R M	7248	Bugbee, W M Burbutis, P P	6715 6990	Clarke, M L 7604	7270
AFOTA, G I	6482	Binns, W	7248	7675	0330	Clarke, W J	7420
Arscott, G H Arthur, B W	7687 7563	Bird, F T Bird, H R	6492 7138	Burdine, H W	6934 7136	Clegg, F G 7272, 7273	7271
Asare-Nyako, A	6697	Bisht, D S	6612	Burger, R E Burke, N I	7703	Clemetson, C A B	7707
Ashdown, R R Ashford, W A	7384 7505	Bissell, T L Blackmore, J C	7051 7250	Burkhalter, G F Burkhardt, C C	6505 6628	Cleveland, M L Cleverly, L M	6997 7382
Atchley, W R	6446	Blackwood, U B	7652	7061		Clor, M A	7708
Atkins Jr, E L Augustinsson, K B	6982 6509	Blake, D F Blank, L M	6493 6708	Burns, E C Burns, K N	7566 7259	Coates, M E Coats, W A	7274 7556
Avens, A W	7682	Blaxland, J D	7461	7260		Cochran, B J	7083
7683 Ayres, J C	7651	Block, B C Blum, M S	6494 7688	Burnside, O C Burrows, R	7120 7410	Cochrane, J C Cochrane, V W	7709 7709
Ayres, P Babaack H R	7693	Board, R G	7651	Busey, W	7435	Cohen, J	6669
Babcock, W E Babero, B B	7267 7593	Boccacci, M Boggs, D R	6491 7251	Bustad, L K 7501	7420	Coid, C R Colegrave, A J	7390 7275
Bach, S J Backgren, A W	7233 7234	Bohl, E H	7493	Butcher, J W	6991 6716	Colless, D H Combs, G F	6521
Badman, H G	7351	Bohnenblust, K E Bollenbacher, K	67 09 67 10	Butler, E E Byford, W J	6717	Condon, P	7451 7736
Baggett, J R Bagley, H M	6698 7382	Econe, D M	6962	Cadman, L P	7235	Conner, G H	7276
Bailey, L	6447	Booth, E Borg, K	7252 7253	Calavan, E G Callenbach, J A	6718 7041	Converse, J L Converse, R H	7475 6724
6448, 6483, Baker, E D	6484 7235	Boswood, B Bothwell, P W	7254 7255	Caltrider, P G Cameron, R S	7704 7261	6824 Cook, A A	6725
Baker, J R	7362	Bottger, G T	7070	Campbell, D	7121	Cook, E F	6456
Baker, R 6807	6699	Boudreaux, H B Bowen, P D G	6449 7325	Campbell, J R Campbell, R E	7262 7066	Cooke, J R Cooper, R D	6726 7754
Bald, J G	6700	Bowen, R C	6495	Canerday, T D	6536	Cooper, W E	6727
Baldwin Jr, C B Balloun, S L	6701 7135	Bowman, M C Boyle, A M	6657 6711	6992 Cantwell, G E	6506	Coppel; H C Coppock, J B M	6634 7476
Bancroft, J B	6821	Bozicevich, J	6897	6507, 6508		7477	
Bang, F B Banttari, E E	7472 6702	Bracken, G K Bracker Jr, C E	6502 6716	Cappucci, D T Carbrey, E A	7263 7479	Corden, M E 6728, 7748	6719

Corkins, J P

AUTHOR INDEX

COTKINS, J P							
Corkins, J P	6998	Downey, N E	7608	Fischer, P C	6720	Glendinning, S A	7348
Corley, E A	7277	Downs, W G	6683	Fish, A J	7403	Gless, E E	7579
Cornelius, C E	7441	Doyle, T M	7288	Fitzsimmons, W M	7610	Gochnauer, T A	6609
Cornwell, R L	7605	Drake, C R	6737	Fliegel, P	6749	Goheen, A C	6756
Costa, A S	6738	Drake, E L	6522	Floeck, A K	7303	Gold, A H	6757
Cowan Jr, C B	7042	Draudt, H N	7736	Flora, N W	6444	7726	
Cox, P M	7110	Driesens, R J	7492	Floyd, E H	7049	Goldberg, H C	7327
Coyier, D L	6729	Drooz, A T	7002	Flynn, J E	6454	Gonzalez, D E	7669
Crafts, A S	7708	Drummond, R O	7694	Foggie, E	7557	Gonzalez, L C	6758
Craig, G B	7753	Duffus, J E	6738	Foley, F B	7066	Good, F T D	7739
Crane, C S	72 <b>7</b> 8	Duggal, K K	6466	Folkers, C	7304	Good, R A	7403
Cranston, F	6613	Duncan, J R	7488	7305		Goodman, R N	6701
Crawshaw, H A	7279	Dunn, PH	6575	Ford, R E	6750	Gorham, J R	7471
Cressman, A W	7040	Duran, R	7725	6977, 7712		Gotan, S M	6836
Crook, J C	7455	Dutcher, R M	7289	Forsythe, R H	7651	Goth, R W	6977
Cross, J E	6731	Duthie, I F	7290	Forth, D M M	7306	Gottlieb, D	7704
Crowley, J P	7280	Duxbury, R N	7582	Fowler, M E	7307	Gough, F J	6706
Cullum, L E	7606	Dwurazna, M M	6739	7308	6520	Gould, C M	7328
Cunningham, J A	7348	Dye, D W	6740	Fox, P M	6528	Gould, E	7011
Cunningham, M P	7537 6603	Eastburg, PH	7737 6523	Fraenkel, G	7081 7309	Gould, G E	7009 7010
Currie, W E	7313	Eastop, V F	6586	Francis, J Frank R H	7310	Granett, P 7568	7010
Cutting, W Dahm, P A	7670	Ebel, J Ebeling, W	6678	Frank, F W Franklin, B A	6506	Grasso, A	7692
Dalton, P J	7281	Eckert, J W	6741	Franklin, T E	7311	Gray, W V	7329
Dang, K	7023	6742	0,11	Fraser, G	7312	Grayson, J McD	6535
Daniel, N W R	7477	Economides, C V	6846	Fraser, J	7691	Greaves, J H	7693
Daniels, N E	6516	Edds, G T	7291	Frazier, W A	6698	Green, B J	7330
6999		Eddy, G W	7562	Frederick, G H	7318	Greenberg, R A	7331
Daniels, N W R	7476	Edwards, B L	7292	Free, J B	6529	Greenham, L W	7332
Darbyshire, J H	7282	Edwards, C A	7656	Free, N W	6529	Greenwood, D	7691
Darne, A	7607	Edwards, F B	7293	Freeman, A E	7670	Gregory, D W	7333
Darrow, D I	7676	Edwards, J D	7696	Freeman, O A	7122	Griffin, D M	6759
Dast, N P	6889	Eggitt, P W R	7476	French, D W	6816	Griffin, G D	7090
Daum, R J	7666	7477		French, S W	7560	Grinewitsch, C	7265
Dauterman, W C	6570	Ehrlich, H G	77 11	Frolich, E F	6718	Grogan, R	6757
David, J S E	7458	Ehrlich, M A	7711	Frosheiser, F I	6751	Groves, H F	7397
David, W A L	6517	Eichenmuller, J J	7082	Frunival, B F	7351	Grumbles, L C	7311
6670		El Nasri, M	7294	Fukuto, T R	6687	Gudauskas, R T	6536
Davies, E T	7362	El-Hashimi, M	7593	7035		Guernsey, F S	7702
Davies, S F M	7618	El-Helaly, A F	6743	Fulton, N D	6710	Gunther, F A	7661
Davis, R A	6732	Eldefrawi, M E	6679	Fulton, R H	7720	Gupta, J C	7092
Davison, A D	6733	Ellender, R D	7295	Furgala, B	6611	7093, 7094,	7095
Dawson, P S	7282	Ellertson, F E	7003	Furusawa, E	7313	7096, 7097	6527
de Monge, E	6666 7672	Elliott, M	7690 7276	Furusawa, S Gabriel, B P	7313 6530	Gupta, M L	6537 7091
De Pew, L J Dean, D J	7283	Ellis, D E Ellis, H A	7296	Gabrusewycz-garcia,	6671	Gupta, N K 7092, 7093,	7094
Deangelis, C	7468	Ellis, L L	7570	Gale, C	7314	7095, 7096,	7097
DeCamp, C E	7481	Elmer, H S	7004	7395	7314	Gustin, R D	6927
Decker, G C	7564	Emerson, J L	7297	Gale, G O	7315	Gyrisco, G G	6453
7668		7298		Galindo, J	6752	6614, 7020	
Delez, A L	7297	Empson, D W	7656	Gallagher, P	7316	Hadlow, W J	7334
7298		Endo, R M	6744	Gallegly, M E	7724	Haelterman, E O	7335
DeMott, H E	7088	6745		Gallun, R L	7078	Hagedorn, D J	6872
Dennis, E B	7656	Eschle, J L	6532	Gannon, N	7668	6878	
Deshmukh, D R	7284	Eshbaugh, E L	7672	Garcia, C	6559	Hagen, K S	6627
Dethier, V G	6518	Eslyn, W E	6524	Gardiner, B G	7686	Haig, D A	7358
DeVay, T E	6891	Estes, Z E	6525	Gardiner, B O C	6517	Hall, H H	6659
DeViney, G J	7671	6527	74.00	6670	(75)	Hall, I M	6538
DeVolt, H M 7445, 7451	7434	Estrada, M G	7129	Garnsey, S M	6753	6539 <b>,</b> 6640	7226
	7666	Eubank, R Evans, E T R	7299	Garren K H	7317 6754	Hall, L W Hall S M	7336 7337
Dewey, J E DeZoeten, G A	6901	Evans, R K	7416 7272	Garren, K H 6755	0754	Hall, S A Haller, C J	7338
Dhanda, M R	7389	Evans, W C	7300	Gastel-Jansen, A V	7318	Hallan, C R E	7499
Dickason, E A	7000	Evans, W G	6453	Geller, E H	7611	Halpin, F B	7613
Dickey, R S	6734	Evans, W M	7283	Gentner, W A	7123	Hamdy, A H	7314
Dietz, A	6519	Everly, R T	7005	Genung, W G	7006	7339	
Dilbone, R P	7285	Exner, B B	6781	George, B W	7007	Handy, M K	7730
Diller, J D	6735	Eylon, E	7375	Georgopoulos, S G	7713	Hamilton, B R	7606
Dimmock, J R	7710	Faber, J E	7434	7738		Hamilton, K C	7124
Dimopoullos, G T	7295	7445		Gerdemann, J W	6782	Hann, J J	6540
7317		Fahey, J E	7267	6783, 6784		Hammer, R S	7545
Dineen, J P	6638	Fairchild, M L	7670	Gerold, J L	6531	Hampton, R O	6760
Ditman, L P	6990	Faust, R M	6525	Gersdorff, W A	6680	6761	7011
7017, 7675	7667	6526, 6527	6746	6682 Contion 6 T	6600	Hamstead, E O	7011
Dobson, R C Dodd, F H	7667	Fawcett, C H	6746 7523	Gertler, S I	6680	Hanks, R W Hanna P I	7098 7074
Dogra, G S	7256 6520	Fawell, E V Fawi, M T	7523 7268	Getzin, L W Geyer, G H	7008 7319	Hanna, R L Hansens, E J	7074 7569
Doling, D A	6694	Fay, R W	6677	Giamalva, M J	7089	Hanson, E W	6804
Doll, E R	7286	Fedde, M R	7136	Gibson, T E	7320	Harbour, H E	7740
7485	. 200	Feldman, A W	7098	7321, 7612		Harbourne, J F	7340
Dollahite, J W	7354	Fennell, C	7301	Gibson, W W C	7322	Hardin, L J	7669
Done, J T	7410	Fenner, H	7680	7323		Hare, W C D	7341
Donley, D E	7001	Fenster, C R	7120	Gilmore, J E	7040	Harein, P K	7012
Doran, G P	7287	Fenton, B K	7302	Gilpin, G	7075	Harjung, M K	6952
Dorough, H W	7563	Fenwick, H S	6747	Gingrich, R E	6532	Harms, R H	7143
Doucette, C F	6452	Fergason, V	7648	7567		7342, 7508,	7509
Dougherty, E	7498	Fergus, C L	6748	Giordani, G	6533	Harpaz, I	6488
Douglas, M H	7689	Ferguson, W	7609	Girish, G K	6534	Harper, J A	7687
Dowler, W M	6736	Ferron, P	6652	Gitter, M	7259	Harris Jr, E D	7013
Downes, J A	6521	Firfer, H S	7555	7324, 7325,	7326	Harris, J J	7570

Vaia

	Hacauam,	+	
6803			
	6791		

.....

Harricon A I	6762	Holmes, J R	7360	Kais, A G	7716	6790, 6803	
Harrison, A L Harrison, F P	7014	7361, 7362	1200	Kaiser, W J	6777	Krstic, M M	6791
Harrison, G F	7274	Holmes, J W H	7363	Kaley, G S.	7387	Krueger, H R	6570
Harrison, I R	7691	Holmes, R G	7364	Kallfelz, F A	7388	Krugman, S L	6913
Harrison, J	7343	Holtman, D F	7518	Kalra, D S	7389	Kuc, J	6801
Harry, E G	7344	Hoogstratten, H	7365	Kanwar, K C	6562	7736	0001
7345		Hooker, A L	6767	Kanwar, U	6563	Kuhr, R J	7717
Harshbarger, J C	6541	Hopkins, A R	7227	Kaufman, D D	6778	Kuntz, J E	6831
Hart, C H	7346	Hopkins, D L	7366	Kaufman, J	6779	Kwolek, W F	6659
Hart, J A	7614	HOIN, N L	6772	Kaur, S	6623	Laarman, J J	6531
Hartenstein, R C	7015	Horner, C E	6773	6624		LaHrecque, G C	6574
Harvey, A E	6765	Howard, C M	6774	Kawakishi, S	7741	Laigo, F M	6571
Harvey, R W	7347	Howarth, J A	7425	Kay, H L	7125	6572	0571
Harvey, T L	6542	Howat, W P	7367	Kear, J	7343	Lal, R	6622
Hasaimoto, Y	6552	Howe, W L	7018	Kearns, C W	6579	7679	
Haselden, C S	7348	7019		Keeble, S A	7390	Lalich, J J	7138
Hashimoto, Y	6553	Howell, D G	7368	Keeler, R F	7249	Lamont, G H	7399
Hason, E W	6924	Howell, J M	7369	Keeling, H L	6780	Lancaster, M C	7290
Hassett, C C	7753	Howell, J McC	7370	Keeling, M D	7259	Langford, G S	7572
Hatheway, W H	7055	Howland, A F	7076	Kellen, W R	6515	Langlois, H E	7681
Hawkins, J L	6635	Huddleston, E W	7020	6564		Langman, H A	7400
Hawkins, W W	7349	Huff, J W	7311	Kellogg, K K	7391	Langridge, D F	6573
Hawn, E J	6795	Huger, A	6550	Kelsey, L P	7024	Larson, L H	6898
Haxby, D L	7350	Huger, A M	6551	Kenaga, E E	6688	Laub, C A	6792
Hayes, A W	7714	Hugh-Jones, M E	7615	Kerr, A D	7130	Lauder, I M	74 15
Haynes, O L	6991	Hughes, W A	7371	Kerr, E D	7 10 1	Lavigne, R	7680
Hays, S H	7571	Hukuhara, T	6552	Kerr, T W	7025	LaVoipierre, M M J	7609
Hazel, N W	6998	6553		Kerry, J H	7466	Lawson, R H	6793
Heald, C M	7099	Hunt, G C	7372	Kesner, C D	7 1 2 6	Leach, J G	6774
Heald, P J	7351	Hunt, L M	7694	Keyes, M C	7392	Leason, A	7401
Heggestad, H E	6815	Hunter, R E	6712	Keymer, I F	7618	Leasure, J K	7742
Hehn, E B	6904	Husband, R W	6458	Khadga, H H	6781	Leath, K T	6794
Heimbeck, L S	6763	Hutchinson, T C	77 15	Kido, H	7064	Leathers, C R	6708
Heimpel, A M	6543	Hylton, A R	6554	Kieckhefer, R W	7026	Lebeau, J H	6795
6544, 6545,	6546	Iffey, J	7373	Kienholz, E W	7137	Leben, C	6796
Hejl, J M	7352	7374, 7470		Killinger, G H	6870	Lebsock, K L	7041
Helsdon, H L	7553	Ignoffo, C M	6555	Kilpatrick, R	7542	Lee, D C	6447
Helton, A W	6764	6556, 6557,	6558	Kilpatrick, R A	6790	Lehman, W F	7046
6765		6559, 6596,	6597	Kimble, K A	6937	Lehnert, T	6508
Hemsley, L A	7344	Imre, Z	7375	King, A S	7243	Lehr, R	7032
7353		Ingham, H	7275	King, H C	7393	Leigh, T F	6984
Henderson, C F	6455	Inglis, J M	7275	King, J A	7394	Levin, M D	6461
Hendrix Jr, F F	6954	Ipe, I M	6560	King, N H	7395	Levin, R E	7695
Henneberry, T J	7031	Irfan, M	7376	King, W E	6565	Levine, N D	7616
7032		7377		Kingwill, R G	7256	Lewis, G	7455
Henry, J E	6547	Ito, Y	7504	Kinsley, R N		Lewis, G D	6925
Henson, J H	7354	Ivens, V	76 16	Kirk, R	7753	Lewis, T	6462
Hepting, T H	6766	Ivey, M C	7665	Kirk, B E	7027	Libman, G	6797
Hernandez, T P	7089	Jaartsveld, F H J	7536	7078 Viebbe N. N.	7612	Lichtenstein, E P	7672
Herrick, J H	7577	Jabbar Miah, M A	68 80	Kirkby, W W	7613	7673	7046
Hervey, G E L	6588	Jackson, J H	7678	Kirkpatrick, J D	7114	Lieberman, F V	7046
Hervey, G E R	7033	7694	7770	Kirkpatrick, M E	7671 6566	Liles, J N	6575
Heydecker, W	6721	Jackson, R F	7378	Kissam, J H	6782	Lindegren, J E 6564	6515
Hibbitt, K G	7233 6496	Jackson, R W	6659	Klarman, W J	6783	Lindgren, D L	7645
Hightower, H G	7754	James, L F	7249 7690	Klarman, W L 6784	0705	7650	7045
Hilchey, J D Hildebrandt, A C	6865	Janes, N F Jantz, O K	7758	Kleeberg, H H	7396	Lindley, W H	7402
6907, 7756	0005	Jay, S C	6529	Kliener, I O	7258	Lindquist, D A	6986
Hill, T J	7332	Jaycox, E R	7021	Klijiewicz, J M	6703	Lingappa, H T	6799
Hills, G J	6548	Jenkins, W R	6732	Kline, D M	6835	Lipa, J J	6576
6684		7099	0.52	Klisiewicz, J M	6785	6577	
Hilu, H M	6767	Jennings, J R	7246	Kloutz, F R	7397	Lipa, J L	6578
Himeno, M	6567	Jensen, F L	7064	Knapp, F W	7573	Lipke, H	6579
Hindson, J C	7355	Jerath, M L	6561	7574		Lirenman, D S	7403
Hine, R H	6768	Jimenez, F A	6811	Knipling, E F	6672	Liska, H J	7681
6769		Joel, D	7545	Knoke, J K	7057	Lister, R M	6798
Hiroyoshi, T	6676	Johanns, C J	7379	Knorr, L C	6786	Littlejohn, A I	7404
Hirumi, H	6770	Johnsen, R E	7670	Knowles, R C	7393	Liu, L C	7657
Hitchcock, S W	7016	Johnson, J A	7052	Knox, D A	6508	Livingston, C W	7437
Hitchner, S H	7231	Johnson, R H	7022	Ko, W H	6787	Lloyd, T S	7405
Hix, S M	6699	Johnson, R H	7380	Koch, E J	6735	Lockwood, J L	6799
Ho, M	7468	Johnson, W T	7572	Kochan, W J	6764	Loegering, W Q	6876
Hoag, W G		Johnstone, H C	7381	Kohler, P H	7582	Logan, R M	7718
	7357						
Hoare, M	7358	Joly, P	6586	Kolbezen, M J	6741	Lombard, L S	7555
Hodges Jr, C S	7358 6771	Joly, P Jones, A	65 86 72 56	6742		Loos, M A	7555 7658
Hodges Jr, C S Hodges, H F	7358 6771 7078	Joly, P Jones, A 7382	7256	6742 Komano, T	6567	Loos, M A Loosmore, R M	7555 7658 7406
Hodges Jr, C S Hodges, H P Hodson, A C	7358 6771	Joly, P Jones, A 7382 Jones, C M	7256 7579	6742 Komano, T Kommedabl, T		Loos, M A Loosmore, R M Lopez-Frias, L C	7555 7658 7406 7644
Hodges Jr, C S Hodges, H F Hodson, A C 7643	7358 6771 7078 6456	Joly, P Jones, A 7382 Jones, C M Jones, E T	7256 7579 7052	6742 Komano, T Kommedahl, T 7128	6567 6840	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W	7555 7658 7406 7644 6779
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A	7358 6771 7078 6456 7276	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W	7256 7579 7052 7100	6742 Komano, T Kommedahl, T 7128 Konicek, D E	6567 6840 7102	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H	7555 7658 7406 7644 6779 7732
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoekstra, W G	7358 6771 7078 6456 7276 7137	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R	7256 7579 7052 7100 7617	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K	6567 6840 7102 6728	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S	7555 7658 7406 7644 6779 7732 7619
Hodges Jr, C S Hodges, H P Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffman, R A	7358 6771 7078 6456 7276 7137 6549	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, P J	7256 7579 7052 7100 7617 6775	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T	6567 6840 7102 6728 6703	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W	7555 7658 7406 7644 6779 7732 7619 7407
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A	7358 6771 7078 6456 7276 7137 6549 6862	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, P J Jones, R S	7256 7579 7052 7100 7617 6775 7383	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L	6567 6840 7102 6728 6703 6788	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M	7555 7658 7406 7644 6779 7732 7619 7407 7408
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffman, R A Hoffmann, J A Hoffmann, J A	7358 6771 7078 6456 7276 7137 6549 6862 7414	Joly, P Jones, A 7382 Jones, C M Jones, F T Jones, F G W Jones, G R Jones, G R Jones, R S Jones, T H	7256 7579 7052 7100 7617 6775 7383 7384	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A	6567 6840 7102 6728 6703 6788 7651	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M Luckmann, W H	7555 7658 7406 7644 6779 7732 7619 7407 7408 7408 7028
Hodges Jr, C S Hodges, H P Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A Hofkens, C Hofmaster, R N	7358 6771 7078 6456 7276 7137 6549 6862	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, P J Jones, R S Jones, T H Jonesson, G	7256 7579 7052 7100 7617 6775 7383 7384 6509	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P	6567 6840 7102 6728 6703 6788	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lovie, L H Lucas, J M S Luchsinger, D W Lucke, V M Luckman, W H Luke, H H	7555 7658 7406 7644 6779 7732 7619 7407 7408 7028 6832
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A Hofkens, C Hofmaster, R N 7675	7358 6771 7078 6456 7137 6549 6862 7414 7017	Joly, P Jones, A 7382 Jones, C M Jones, F G W Jones, F G W Jones, F J Jones, P J Jones, R S Jones, T H Jonsson, G Jordan, W J	7256 7579 7052 7100 7617 6775 7383 7384 6509 7385	6742 Komano, T Kommedal, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kraft, A A Krafe, J P 6568	6567 6840 7102 6728 6703 6788 7651 6459	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lovie, L H Lucas, J M S Luchsinger, D W Lucke, V M Lucke, V M Luckmann, W H Luke, H H Lukefahr, M J	7555 7658 7406 7644 6779 7732 7619 7407 7407 7408 7028 6832 7029
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffman, R A Hoffmann, J A Hoffmans, C Hofmaster, R N 7675 Hofstad, M S	7358 6771 7078 6456 7276 7137 6549 6862 7414 7017 7359	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, R S Jones, T H Jonsson, G Jordan, W J Josti, L M	7256 7579 7052 7100 7617 6775 7383 7384 6509 7385 6806	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P 6568 Kramer, L L	6567 6840 7102 6728 6703 6788 7651 6459 7398	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M Luckmann, W H Luke, H H Lukefahr, M J Lyda, S D	7555 7658 7406 7644 6779 7732 7619 7407 7407 7408 7028 6832 7029 6838
Hodges Jr, C S Hodges, H P Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A Hoffmas, C Hofmaster, R N 7675 Hofstad, M S Holbrook, F R	7358 6771 7078 6456 7276 7137 6549 6862 7414 7017 7359 6457	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, P J Jones, R S Jones, T H Jonsson, G Jordan, W J Joshin, L M Joshua, J O	72 56 7579 7052 7100 7617 6775 7383 7384 6509 7385 6806 7386	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P 6568 Kramer, L L Krause, G F	6567 6840 7102 6728 6703 6788 7651 6459	Loos, M A Loosmore, R M Lopez-Prias, L C Lorbeer, J W Lovie, L H Lucas, J M S Luchsinger, D W Luckes, V M Lucke, V M Lucke, H H Lukefahr, M J Lyda, S D Lykken, L	7555 7658 7406 7644 6779 7732 7619 7407 7408 7028 6832 7029 6838 7729 6838 7760
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A Hoffmaster, R N 7675 Hoffstad, M S Holbrook, F R Holbrooke, G	7358 6771 7078 6456 7276 7137 6549 6862 7414 7017 7359 6457 7303	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, F G W Jones, R J Jones, R S Jones, T H Jonsson, G Jordan, W J Joshi, L M Joshua, J O Jotwani, M G	7256 7579 7052 7100 7617 6775 7383 7384 6509 7385 6806 7385 6806 7386 7386	6742 Komano, T Kommedall, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P 6568 Kramer, L L Krause, G F 7573	6567 6840 7102 6728 6703 6788 7651 6459 7398 6460	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M Lucke, V M Lucke, H H Lukefahr, M J Lyda, S D Lykken, L Lysenko, O	7555 7658 7406 7644 6779 7732 7619 7407 7407 7408 7028 6832 7029 6838
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoekstra, W G Hoffman, R A Hoffmann, J A Hoffmaster, R N 7675 Hofstad, M S Holbrook, F R Holbrooke, G Holdaway, F G	7358 6771 7078 6456 7276 7137 6549 6862 7414 7017 7359 6457	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, G R Jones, R S Jones, T H Jonsson, G Jordan, W J Joshi, L M Joshua, J O Jotwani, M G Jutila, J W	7256 7579 7052 7100 7617 6775 7383 7384 6509 7385 6806 7385 6806 7386 7386 7023 6547	6742 Komano, T Kommedahl, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P 6568 Kramer, L L Krause, G F 7573 Kreig, A	6567 6840 7102 6728 6703 6788 7651 6459 7398 6460 6569	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M Luckmann, W H Luke, H H Lukefahr, M J Lyda, S D Lykken, L Lysenko, O 6580	7555 7658 7406 7644 6779 7732 7619 7407 7408 7028 6832 7029 6838 7760 6463
Hodges Jr, C S Hodges, H F Hodson, A C 7643 Hoefer, J A Hoefer, J A Hoekstra, W G Hoffmann, R A Hoffmann, J A Hoffmaster, R N 7675 Hoffstad, M S Holbrook, F R Holbrooke, G	7358 6771 7078 6456 7276 7137 6549 6862 7414 7017 7359 6457 7303	Joly, P Jones, A 7382 Jones, C M Jones, E T Jones, F G W Jones, F G W Jones, R J Jones, R S Jones, T H Jonsson, G Jordan, W J Joshi, L M Joshua, J O Jotwani, M G	7256 7579 7052 7100 7617 6775 7383 7384 6509 7385 6806 7385 6806 7386 7386	6742 Komano, T Kommedall, T 7128 Konicek, D E Koolheki, H K Kosuge, T Kothari, K L Kraft, A A Kramer, J P 6568 Kramer, L L Krause, G F 7573	6567 6840 7102 6728 6703 6788 7651 6459 7398 6460	Loos, M A Loosmore, R M Lopez-Frias, L C Lorbeer, J W Lowie, L H Lucas, J M S Luchsinger, D W Lucke, V M Lucke, V M Lucke, H H Lukefahr, M J Lyda, S D Lykken, L Lysenko, O	7555 7658 7406 7644 6779 7732 7619 7407 7408 7028 6832 7029 6838 7729 6838 7760

Macadan, I							
7620, 7621		Mehra, B P	6591	Myers, R F	7103	Patel, B K	7044
Macadan, I MacCarthy, H R	7622 6800	Meiners, J P Meinershagen, W A	6862 7310	Nadakavukaren, M J Naegele, J A	6821 6656	Patel, M Patel, N G	6877 6609
Mackay, R R	7410	Mellick, P W	7426	Naidu, M B	6604	Patel, P N	6851
7597 MacKallar I.C	7623	Mendoza, C	7007 6813	Nair, V M G Nakanishi, T	6831 6841	Patel, V C	7044 7455
MacKellar, J C Mackenzie-Wintle, H	7255	Menke, G H 6814	0015	Namiki, M	7741	Paterson, J S Patil, S S	7455
Maclean, C W	7287	Menser, H A	6815	Narain, A	6832	Pattison, I H	7456
MacLennan, D B Macleod, A J	6801 7461	Menzer, R E Menzies, J D	7675 6953	Narang, G D Narda, R D	7444 6601	Paulus, A O Pavan, C	6852 6610
Macleod, N S M	7411	Mercado, T I	7427	Natalizi, G	6491	Paxton, T	6853
Macomb, M L	6927 7030	Merriam, J R Merrill, W	6674 6816	Neave, F K Neel, W W	7256 7570	Payne, J M Pearson, B C	7457 7690
Madsen, H F Magie, A R	6802	Metcalf, R L	7035	Neiswander, C R	6995	Pearson, C C	7258
6967	7550	Michael, A S	6508	Nelson, E P	7363	Pearson, J K L	7628
Maguire, M F Mahadeva, S	7558 7127	Michel, J F Michna, S W	7624 7428	Nelson, E V Nelson, G A	6602 6833	Peck, E F Pedersen, J R	7633 6460
Mai, W F	6749	Milbrath, J A	6729	Nelson, M R	6834	7045	
Mains, E B Majumdar, N	6464 7050	6793, 6817, Millecan, A A	6818 6836	Nelson, P E Nelson, R R	6734 6835	Pelletier, R L Penny, R H C	6949 7458
Malcolm, H A	7 50 3	Miller, B S	7052	Nichols, C W	6836	Pepin, G A	7320
Malik, L Malone, J C	6562 7346	Miller, D L Miller, E R	7135 7429	Nickerson, W J Nielson, M W	7677 6603	Perry, K T E Pesho, G R	7419 7018
Manglitz, G R	6803	Miller, P R	6819	Nipper, W A	7566	7019, 7046	
Mankau, R	7719 7665	Miller, W C 7431, 7432	7430	Noel, J K	7445 7446	Peters, D C 7648	7007
Mann, H D Mann, T B	7412	7431, 7432 Miller, W E	6465	Noel, P R B Norris, D M	6477	Petersen, D B	6736
Maramorosch, K	6770	Millikan, D F	6820	O Bannon, J B	7106	Peterson Jr, G D	6687
6932 Marcovitch, S	6581	Mills, G D Milstead, J E	7230 6582	O Brien, J D P O Brien, M J	7447 6837	7586 Peterson, A G	6611
Mare, C J	7413	Miner, F D	7036	O Brien, R D	6570	Peterson, G D	6640
Marsboom, R Marsh, J C	7414 7251	Mink, G I Minkin, J L	682 <b>1</b> 7575	O Dell, B L O Keeffe, L E	7139 7041	Peterson, G H Peterson, G W	6854 6855
Martignoni, M E	6582	Mircetich, S M	6979	O Malley, J E	7652	Peterson, K J	7459
Martin, B	7415 7747	Miskus, R Mitchell, E D	6679 7721	O Reilly, H J	6810 7268	Peterson, L C Peterson, L K	6959 7047
Martin, J P Martin, W B	7415	Mitchell, B L	7052	Obeid, H M Ogawa, J M	6838	Pfadt, R E	7104
Martin, W J	7089	Mitchell, J E	7743	7750	6020	Phadke, K G	6612
Martinez, E S Martinez, M I A	6804 7522	Mitchell, R Mitsuhashi, J	6822 6592	Ogawa, T M Ohman, J H	6839 6840	Pianka, M Pickard, E	7696 6635
Martinsen, J S	7498	Mittal, O P	6675	7128		Pickard, J A	7746
Marty, E W Mason, H C	7629 7031	Mittler, T E 7037	6593	Ohno, Y Oku, B	6567 6841	Pickering, C M Pickett, R C	7369 7005
7032		Miura, T	6594	Olander, H J	7448	Pier, A C	7448
Matejka, J C Mathre, J H	6834 6838	Mizianty, T J Mohanty, S B	6595 7434	Old, K M Oliver, D F	6842 7626	7460 Piercy, S E	7461
Mathre, T B	6839	Molello, J A	7435	Olney, C E	7025	7462	
Mathur, B L Mathur, L M L	6805 6583	Moll, T Monroe R L	7436 6776	Omar, A R Omaro De Segueira O	7246 6843	Pierson, R E Pilchard, E I	7463 7616
Mathur, R L	6805	Monroe, R L Montoya, E L	6557	Omaro De Sequeira, O Onodera, K	6567	Pilgrim, B I	7251
Mathur, S B 6585, 6636,	6584 6806	6596, 6597	7071	Orlob, G B	6845 7370	Pimentel, D	6613 6856
6585, 6636, Matson, B A	7416	Mookherjee, P B Moore III, s	7564	Ormrod, A N Orton, R G	7449	Pineda, C R Pinkney, J M	7464
Matsui, C	6973	Moore, B S	6541	Osato, T	7504	7465	7200
Matsumura, F Matz, G	7674 6586	Moore, D H Moore, J D	7038 6823	Osborne, A D Osburn, B I	7384 7441	Pinsent, P J N Piquett, P G	7320 6680
Maurer, C L	6807	Moore, J N	6824	Osmani, Z	6604	6682	
Maurer, F T Mayes, P A	7737 7417	Moore, L D Moore, M B	6825 6879	Ostwald, R Ota, A K	7560 7646	Pirie, B M 7383	7262
Maynard, D E	7054	Moore, R W	7437	Owen, E C	7237	Plapp Jr, F W	7676
McAllan, J W McCaig, J	6587 7418	Moreno, J D Morgan, F L	6826 6827	Owen, L N Paden, J W	7450 6953	Plummer, G Poinar Jr, G O	7466 6614
McCarthy, B J	7419	Morris, O N	6598	Padmore, J M	6605	Polivka, J B	7048
McClellan, R O 7501	7420	6599 Morris, R F	7039	Page, O T Page, Z E	7745 7246	7105 Poole, D B R	7558
McCombs, C L	6808	Morrison, F O	6626	Paggi, P	7692	Porter, F M	6857
6968, 7732 McDaniel, Н A	7479	Mortelmans, J	74 14	Pajni, H R	6606 7446	Porter, J E Postic, B	7467 7468
McDiarmid, A	7255	7637 Morten, D H	7438	Palmer, A C Palotay, J L	7420	Potter, B S	6881
7421	7420	Moseman, J G	6828	Panda, B	7451	Pound, G S 6884, 6965,	6758
McDonald, B E McDonald, W C	7138 6809	Mosier, J E Moss, J P	7439 7440	Papasolomontos, A Papavizas, G C	6846 6847	6884, 6965, 7731	7722
Mcenroe, W D	6673	Most, B	7625	6848	6000	Pounden, W D	7339
McErlean, B A McEwen, F L	7422 6522	Mott, L O Moulton, J E	7230 7441	Pappelis, A J Parencia Jr, C R	6849 7042	Powell, J D Powelson, R L	7049 7723
6588, 7033		Mountney, G J	7652	Parker, H L	7043	Powers Jr, B R	6876
McGahan, M W McGarr, R L	7720 6597	Mshelbwala, A S Mulla, M S	6681 7576	Parker, J Parker, K G	7452 6749	Powers, J J Powers, K G	7730 7629
McGinnis, J	7142	Mullen, P A	7442	Parker, W B	7453	Pratt Jr, J J	7688
McGrath, H J W McIlwain, P K	7663 7423	Muller, A S Munger, F	6870 7040	7627 Parkhurst, R T	7454	Pratt, R M Price, C A	6858 7129
McIntosh, D L	6810	Munnecke, D E	6829	Parmeter Jr, J R	6819	Price, R M	6711
McIntyre, T McKay, K A	7034 7424	6869, 7744 Murakishi, H B	6830	6850 Parrish W B	6607	Pringle, R B 7755	6889
McKercher, D G	7424	Muramatsu, K	7741	Parrish, W B Parrott, D M	7100	Proudfoot, R	7237
McLaughlin, R E McNelly, L B	6589 7030	Murphy, M A	7280 6600	Parshad, R	6466 6487	Prout, T Provvidenti, R	6667 6859
McVey, D V	6811	Murray, E D Mussman, H C	7052	Paschke, J D 6571, 6572,	6608	Pugh, L P	7469
Medler, J T 6812, 7026	6590	Muth, O H Myers, D D	7443 76 16	Pass, B C Pate, T L	6528 6479	Purdy, L H 6861, 6862	6860
PAGE 176					0115		
PAGE 1/6							

Swa	<b>i1</b>	es,	G	E
-----	-----------	-----	---	---

							Swailes, G
Purkayastha, B K	7050	Ross, E	7584	Seymour, C P	6916	Smythe, R V	6634
Quigley, P J Quinon, V L	7470 6863	Ross, G J S Ross, J P	7100 6873	Shaikh, M U Shalla, T A	6626 6901	Snapp, O I 7063	7062
Radeleff, R D	7578	Ross, R F	7488	6902	0301	Snow, G F	6858
7677	7400	Rotem, J	6874	Shand, A	7455	Snow, W E	6635
Ragan, H A Ragetli, H W J	7420 6955	Roth, A R Roth, L F	7562 6875	Shannon, R O Sharma, A K	7501 6615	Soans, L C Sobers, E K	6915 6916
Ragland, W L	7471	Rothenbacher, H	7489	Sharma, G C	7071	Solberg, R A	6720
Rai, B K	6534 7313	Rowell, J B	6876	Sharma, R D	7113	Somers, E	7746
Ramanathan, S Rangan, S R S	7472	Roy, I Rubin, R	6877 7631	Sharma, S P 6630	6625	Sooter, C A Sowell Jr, G	6917 6918
Rangaswami, G	6864	Ruppel, E G	6878	Sharp, E L	6903	Spaeth, J	7709
Raniere, L C Rankin, J E F	6798 7628	Ruppel, R F Rusk, H W	7055 7670	6904 Sharp, N C C	7502	Spalding, D H Sparrow, W B	6919 7346
Rao, B R S	6584	Russell, F E	6472	Shatla, M N	6905	Spence, J B	7246
6585, 6615,	6636	Russell, G E	6523	Shaw, C G	6882	Spence, L	6683
Rao, R R Hatcliffe, R H	7354 7051	Russell, J D Ruzicka, J H A	7381 7684	6883 Shaw, F	7680	Spencer, D M Spencer, E Y	6746 6600
Raulston, G L	7473	Saari, E E	6879	Shaw, R D	7503	Spencer, J A	6920
Raun, E S	7007	Sackston, W E	6880	Shaw, W C	7131	Spurr Jr, H W	7756
7577, 7585 Ravenscroft, A V	6823	Sadek, S E Saettler, A W	7490 6881	Sheets, L W Shepherd, A M	7118 7110	Srivastava, G P Srivastava, P D	6921 7134
Rawson, J W	6983	Safeeulla, K M	6882	Shepherd, R J	6906	Srivastava, R P	6584
Raymer, W B	6837 7474	6883 Safford, J W	7491	Sherman, I Sherman, M	7283 7584	6585, 6636 St. John, S	7517
Rea, G B Redmond, H E	7437	Sallold, 5 W Sah, B N	6591	Shimanuki, H	6617	St. Julian, G	6659
Reed, H	7448	Sampson, G R	7492	Shimizu, J T	6627	Stadelman, W J	7681
Reed, J P Reed, R E	7010 7475	Samsinakova, A San Juan, M O	6621 6884	Shiratori, O Shirck, F H	7504 7060	Stafford, E M Stahmann, M A	7064 6923
Reinert, R A	6865	Sanders, D A	7291	Shirlaw, J F	7505	Stair, E L	7535
Renfro, B L	6866	Sanders, R D	65 15	Shomrony, A	7375	Stall, R E	6725
Resconich, E C Revill, D L	6867 6616	Sandstedt, R Sanford, L G	7109 6467	Short, R V Shorter, D A	7506 6469	6792 Stanley, W W	7669
Reynolds, H T	6687	Saplala, V L	7056	Shortino, T J	6507	Staples, R	6922
7065, 7084	7406	Sarup, P	6622	Shupe, J L	7249	Staples, R C	6923
Reynolds, H W Rhyne, C	7106 7029	Sasser, J N Satija, R C	6885 6623	Sievert, R C Sigel, E M	6907 6748	Starr, M P Stavely, J R	6829 6924
Rich, A E	6868	6624, 6625	0010	6890		Stearns, L A	7024
Richards, K	6497	Sattar, S A	7493	Sigh, A	6806	Steepy, T L	6925
Richards, W P C Richardson, L T	7308 6869	Saunders, J L Saunders, P J W	7057 6886	Sill Jr, W H Silvernagel, M J	6723 6908	Steinhauer, J E Steinhaus, E A	7653 6577
Richmond, D V	7746	Sauter, R A	7492	Simesen, 🖁 G	7507	6637, 6638	
Richmond, J W	7476	Savage, J E	7139	Simon, F G Simpson C R	7709 7342	Steinkraus, K H	6648 7681
7477 Riedel, S M	6617	Saxena, P N Sayre, R M	7023 6887	Simpson, C F 7508, 7509	1 342	Stemp, A R Stepens, J F	7518
Riehl, L A	7580	Sbur, D E	7649	Simpson, R G	6628	Stephen, L E	7519
7581 Riker, A J	6907	Schaefer, K F Schalm, O W	6468 7494	7061 Simpson, W R	6747	Stephens, J H 6503	6501
7756	0.507	Scharen, A L	6888	Sinclair, J B	6781	Sterling, P D	6639
Risher, C F	7247	Scharpf, R F	6850	Sinden, J W	6748	Stern, D	7680
Rivers, C F Roan, C C	6684 7574	Scheffer, R P 7755	68 89	6890 Singh, C M	7510	Stern, V M 6687, 7065	6640
Robbins, W E	6507	Schipper, I A	7423	Singh, D S	6622	Stevens, A J	7548
Robblee, A R Roberts, D A	7140 6870	Schisler, L C 6890	6748	Singh, D V Singh G P	7444 7510	Stevenson, J P 6642, 6643,	6641 6644
Roberts, D H	7478	Schlichting, H E	6616	Singh, G R Singh, P	7679	6642, 6643, Stewart, K W	6616
Roberts, D W	6618	Schlinger, E I	7058	Singh, S B	7510	Stewart, V R	6862
6619 Roberts, E D	7479	Schmidt, C H 6658	6657	Singh, Y 6629	6475	Stockdale, H J Stoddard, H	7585 7633
Roberts, H E	7480	Schmitthenner, A F	6964	Singla, C L	6630	Stone, M W	7066
Roberts, J E	7107	Schnathorst, W C	6756	Singleton, T E	7511	7111	60.26
Roberts, R H 7579, 7678	7578	6891, 6892 Schneider, I R	6969	Sinha, A K Sinha, R B P	6909 6612	Stoner, W N 6927	6926
Roberts, S J	7481	Schoettger, R A	7697	Sinha, R C	6910	Storm, L W	6928
Roberts, W C Robertson, J M	6602 7237	Schread, J C Schroeder, H W	7059 6893	Slama, K Sleesman, J P	6580 7672	Stouffer, R F Stover, R H	6929 6930
Robinson, E A	7425	6894, 6895	66.90	Smart Jr, G C	7632	Straiton, E C	7520
Robinson, R J	7052	Schroeder, P H	6896	Smart, A M	7464	Stratton, J	7521
Robocker, W C Robson, J	7130 7482	Schroeder, W T Schulz, K R	6859 7673	Smerlis, E Smirnoff, W A	6911 6631	Street, O E Streeter, D G	6815 6931
7630		Schuster, M L	7109	6632		Streets, R B	6928
Roby, T O	7483	Scothorn, M W	7397	Smith Jr, T	6633	Streissle, G	6932
Rodrigues, C Rodriguez, J G	7595 7053	Scott, D H Scott, G R	6824 7495	Smith Jr, W L Smith Jr, W T	6912 7053	Strickland, K L Strong, F E	7634 6933
7054		Scott, H A	6897	7054		7067	
Rodriguez, J L 7581	7580	Scott, H G	7575 7496	Smith, C N Smith, C T	6518 7680	Strong, R G 7649, 7650	7645
Roebuck, D E	7247	Scott, W A Scott, W N	7498	Smith, F G	6849	Studic, D	7522
Rogers, T D	6871	Scrivner, L H	7310	Smith, G F	7512	Sullivan, R L	6676
Rogoff, W M Rohde, R A	7582 7108	Seaman, W L Seibold, H R	6898 7498	Smith, G S Smith, H C	7513 7514	Sullivan, T W Summers, T E	7141 6934
Roistacher, C N	6718	Selman, F L	7698	Smith, J S	7515	Sund, K A	7132
Rollinson, D H L	7484	Selman, I W	66 95	Smith, J V	7516	Sunde, M L	7137
Romero, S Rooney, J R	7724 7485	Semal, T Semeniuk, G	6899 6833	Smith, K M 6684	6548	Sundheim, L Sutcher, V	6935 6679
Rose, J H	7618	Sengbusch, H G	7583	Smith, P W	6590	Sutcliffe, N H	7476
Rosenbrook, W Rosencranz, E E	6620 6872	Senior, M Senturk, M	7499 7493	6812 Smith, R N	7243	7477 Suter, J	6489
Rosenstein, B J	7486	Sequeira, L	6900	Smith, R S	6913	Sutherland, G N	7523
Ross, D B	7487	Serth, G W	7500	Smoot, J J	6914	Swailes, G E	7112

Swarup, G							
Swarup, G Sweat, R I	7113 7398	Vats, L K Vaughan, E K	6482 6733	Whitney, E D Whitney, W K	6959 6688	Zuber, Zummo,	764 698
Sweeney, S A	7719	Vaughn, L C	7538	7758			
Sweet, H A	6608	Veal, S D	6589	Wicks, G A	7120		
Swenson, K G	6645	Veen, K H	6651	Wight, P A L	7351		
Swindle, B C	7617	6652		Wilcox, J	7076		
Switzer, W P	7413	Vercruysse, J	7414	Wilcoxson, R D	6702		
7488	7725	Verma, A C	6788	6866 Fildman S.C	6900		
Tachibana, H Takahashi, N	7725 77 <b>3</b> 3	Verma, S K Vidler, B O	7073 7598	Wildman, S G 6970, 6971	6899		
Tamimi, S A	6936	Vidyasekaran, P	6864	Wiles, A B	6960		
Tamura, G	7733	Vincent, M M	6897	Wilford, B H	7077		
Tanada, Y	6646	Viswanathan, M A	6949	Wilhelm, S	6961		
6647		Vogt, G	7420	Wilkes, L H	7083		
Taschenberg, E F	7682	von Brand, T	7427	Wilkins, L M	7492		
7683		von Lustig-Lendva, E	7223	Wilkinson, G T	7550		
Tashiro, H	6648	Wada, E M	7425	7551	3550		
Tatton, J O	7684	Wadhwa, S	6622 6950	Willers, E H	7552 7553		
Taylor, A M Taylor, A N	7524 7388	Wadley, B N 6951	0,20	Williams Jr, L P Williams, B J	6962		
Taylor, E L	7635	Wagh, P V	7539	Williams, E B	6801		
Taylor, 0 C	6819	Wagnon, A K	6942	Williams, H E	6942		
Taylor, R H	6937	Wagnon, H K	6963	6963			
Taylor, T B	6938	Waldhalm, D G	7310	Williams, K R	7554		
Teakle, D S	7726	Waldron, W G	6472	Williams, L E	6778		
Terhaar, C J	7574	Waldroup, P W	7143	6964	(70)		
Terranova, A C	6654	7342, 7508	7074	Williams, N D	6706		
Thatcher, R C	7068 6939	Walker Jr, J K Walker, J C	6813	Williams, P H 7722, 7731	6965		
Thayer, P I Theis, J B	7525	6851	0015	Williamson, A R H	7255		
Theodorides, J	6470	Walker, J L	6898	Williamson, W M	7555		
Theodorides, V J	7636	Walker, R G	7246	Wills, W H	6825		
Thienpont, D	7637	7336		Wilson, C D	7556		
Thomas Jr, W D	7737	Wall, B J	6653	Wilson, C L	6966		
Thomason, I J	6852	Wallace, L J	7540	Wilson, E E	6802		
Thomlinson, J R	7526	Wallesz, D P	7116	6967	(03)		
Thompson, C C	6649	Walley, J K	7640	Wilson, F D	6934		
Thomsen, L R Thorpe, E	7527 7638	Wallin, J R Ward, J K	7757 7334	Wilson, H G Wilson, J C	6574 7557		
Throneberry, G 0	7667	Ware, G W	6654	Wilson, M C	7027		
Thurber, H E	7586	6655, 6686		7078			
Thurston, J R	7460	Warner, S D	7541	Wilson, R	6835		
Thurston, R	6528	Wasserman, R H	7388	Wilson, R K	7558		
Till, D H	7296	Watanabe, H	7741	Winstead, N N	6808		
Tilton, J E	7528	Watson, C R	7501	6968, 7732	60.4 H		
Tinline, R D	7706	Watson, D L	6656	Winston, J R	6914		
Todd, J R Tolin, S A	7529 6940	Watson, W A 7543, 7544,	7542 7596	Winterfield, R W Wintrobe, M M	7231 7251		
Tomlinson Jr, W E	7069	7641	1550	Wistreich, G A	6511		
Tong, E H	7499	Weathers, L B	6852	Wolfenbarger, D 0	7079		
Torgeson, D C	6941	Weathers, L G	6952	Wolfsberg, M F	6661		
Tracy, R L	7699	Webb, F E	7117	Woltz, S S	6775		
Trapp, A I	7314	Webb, J L	7607	WOO, Y K	7313		
Traylor, J A	6942	Webb, R E	6797	Wood, F A	7745		
6963	7520	Weber, A F	7545	Wood, RKS	6909		
Treacher, R J	7530 6943	Weber, D F Weber, D J	6953	Woodcock, J G	7699 7685		
Treshow, M Trione, E J	6944	7729, 7750	6838	Woodford, M Woodside, A M	7080		
Trujillo, E E	6945	Wehlberg, C	6939	Worley, J F	6969		
Tsao, C H	7070	Weidhaas, D E	66 57	Wright, A I	7458		
Tsao, P H	6946	6658		Wright, C G	6662		
7727, 7747		Weigel, C A	7075	Wu, J H	6970		
Tucker, H	7124	Weil, J	6586	Wu, J-h	6971		
Tuli, S Turk J L	7071 7142	Weinberger, J H Weinburgh H B	6942 6677	Wu, T H Hypp Jr H K	6899 6972		
Turk, J L Turner, C W	7444	Weinburgh, H B Weiner, B A	6677 6659	Wynn Jr, W K Xeros, N	6663		
Turner, N J	7748	Weinhold, A R	6954	6664			
Turner, P D	6947	Weintraub, M	6739	Yadava, R L	6665		
Turner, T	7531	6955		Yamaguchi, A	6973		
7532, 7533,	7639	Weipers, W L	7262	Yamaguchi, S	7708		
Turnipseed, G F	7072	Weiser, J	6473	Yamamoto, R	7559		
Tuttle, D M	7118	6474, 6660	75.24	Yamamoto, R T Yamanaka H	7081		
Tutton, E A Tweedy, B G	7406 7749	Welch, L C Wells, D F	7534 7691	Yamanaka, W Yang, C Y	7560 7743		
Underdahl, N R	7534	Wells, D F Wells, J M	6956	Yang, C Y Yarwood, C E	6974		
7535	/ 554	Wells, K	6933	6975, 6976	0,7,4		
Vago, C	6650	Wells, R W	7677	Yohe, J M	7139		
6660		Welty, R E	6957	Young, G A	7398		
Vair, C A	7463	Wene, G P	7118	7534, 7535			
Vallely, T F	7480	Wenke, M	6699	Young, R G E	7399		
Van Den Bosch, R	7065	Werring, D F	7407	Young, W R	7023		
Van Der Schaaf, A	7536	Wesselinoff, W	7546	Yu, J Zaiman H	7733 7611		
Van Der Zwet, T Van Gundy, S D	6948 7114	Wester, R E Westgarth, D R	6958 7256	Zaiman, H Zaumeyer, W J	6977		
Van Hoeve, K	7537	Westlake, W E	7678	Zeitoun, F M	6743		
Van Tassell, E R	6471	Wheeler, O R	7730	Zeledon, R	6666		
VanDenburgh, R	6990	White, J B	7547	Zentmyer, G A	6752		
Vargus-gonzales, O F	7115	7548		6978, 6979			
Varney, E H	6798	Whiteford, R B	7549	Zettler, F N	6980		
6925		Whitehair, C K	7540	Zimmerman, W J	7642		
PAGE 178							

PAGE 178

Swarup, G

7648 6981

	URGAI
Agricultural Inst., Dublin, Ireland	
Animal Nutrition And Biochemistry Dept.	7558
Agricultural Inst., Dunsinea, Castleknock, Co. Dublin 7608	
Agricultural Institute, Dublin, Ireland	
Animal Froduction Division	7280
Agricultural Marketing Service, Beltsville, Md. Agricultural Research Council Institute, Berkshire, Engla	6912 pd
Research On Animal Diseases	7457
Research On Animal Diseases Agricultural Research Council, Berkshire, England	
Institute For Research On Animal Diseases	7610
Agricultural Research Council, Herkshire, England Institute For Research On Animal Diseases.	7358
Agricultural Research Council, Cambridge, England	/330
Unit Of Insect Physiology 6517	6670
Agricultural Research Council, Cambridge, England	
Virus Research Unit 6548 6663 6664 Alabama Polytechnic Institute, Aubnrn	6684 7563
Albert Einstein College Of Medicine, Bronx, N.Y.	1505
Animal Institute	
Dept. Of Preventive And Environmental Medicine	7611
Dept. Of Pathology Alexandria Universtiy, Alexandria, U. A.R.	7611
Faculty Of Agriculture	
Plant Pathology Dept.	6743
American Cyanamid Co., Princeton, N.J.	7745
Agricultnral Division Animal Health Research Centre, Uganda, Africa	7315 7484
Animal Health Trust, Essex, England	,,,,,,
Farm Livestock Research Centre	7487
Animal Health Trust, Snffolk, England	74.20
Equine Research Station 7430 Annamalai University, Annamalainagar, Madras, India	7432
Dept. Of Agriculture	
Microbiology Laboratory	6864
Apicultural Research Unit, Ferntree Gully, Australia	(672)
Dept. Of Agriculture Arizona Agricultural Experiment Station, Tucson	6573 7124
Army Chemical Center, Md. U.S. Army Chemical Warfare Laboratories	
Physiology Division	7753
Auburn University646769927662Auburn University	7714
Agricultural Experiment Station	
Dept. Of Botany And Plant Pathology	6536
Aubnrn University	
Agricultural Experiment Station Dept. Of Zoology 6983	7571
Aubnrn University	
Agricultural Experiment Station	
Dept. Of Zoology-entomology Battelle Hemorial Institute, Richland, Wash.	65 05
Pacific Northwest Laboratory	
Biology Department	7501
Beecham Res. Labs. Ltd., Brentford, England Product Research Division	7700
Beecham Research Laboratories, Ltd.	7382 7256
Benger Laboratories Ltd., Cheshire, England	7242
Biologicky Ustav CSAV, pathologie Hmyzn, Praha, Czech.	
6474 Blue Cross Animal Respital London England	7/1 20
Blue Cross Animal Hospital, London, England Blne Cross Animals Hospital, London, Eng.	7429 7470
Boots Pure Drug Co. Ltd., Nottinghamshire, England	
Veterinary Science Division	
Research Dept.	7664
Boyce Thompson Institute, Yonkers, N.Y. 6770 6941 7749	6932
Bristol Health Dept., England	7255
Bristol University, England	
Dept. Of Veterinary Anatomy Bristol University, England	7243
Dept. Of Veterinary Medicine 7362	7380
Hristol University, England	
School Of Veterinary Science	
Dept. Of Veterinary Medicine And Surgery Bntler Company Mushroom Farm, Inc., West Winfield, Pa.	7458
6890	
Bnxted Chicken Co. Ltd., Sussex, England C. Brewer And Co., Ltd., Hilo, Hawaii	7353
C. Brewer And Co., Ltd., Hilo, Hawaii	7132
California Chemical Company, Richmond California Dept. Of Agriculture, Riverside	7737 6858
California Dept. Of Agriculture, Sacramento 6836	6942
6963 7021 7102	
Canada Agriculture Research Station, Lethbridge, Alberta	
7112 Canada Agriculture Research Station, Lethbridge, Alberta	
Plant Pathology Section	6795
Canada Agriculture, Vancouver, B.C.	
Research Station Canada Department of Forestry and Enral Develop., Sillery	6955
sended sopurement of foresery and final bevelops, Sillery	

Forest Research Laboratory	6911	
Canada Dept. Of Agriculture, Belleville, Ont. Entomology Research Institute For Biological Control		
Research Branch	6504	
Canada Dept. Of Agriculture, Belleville, Ontario Entomology Institute For Biological Control		
	6601	
Research Branch Canada Dept. Of Agricnltnre, Belleville, Ontario	6501	
Entomology Research Institute For Biological Control.		
Research Branch	6503	
Canada Dept. Of Agricnltnre, Belleville, Ontario Entomology Research Institute Of Biological Control		
Research Branch	6499	
Canada Dept. Of Agriculture, Belleville, Ontario, Canada		
Research Institute Research Branch	6502	
Canada Dept. Of Agriculture, Bellville, Ontario, Canada	0502	
Research Institute	6500	
Canada Dept. Of Agriculture, Fredericton, New Brunswick Research Station	7745	
Canada Dept. Of Agriculture, Harrow, Ontario	1145	
Research Station	6887	
Canada Dept. Of Agriculture, Hull, Quebec		
Animal Diseases Research Institnte Animal Pathology Laboratories		
Health Of Animals Division	7265	
Canada Dept. Of Agriculture, Saskatoon, Saskatchewan		
Research Station University Sub Post Office	7706	
Canada Dept. Of Agriculture, Summerland, B.C.		
Research Station	6810	
Canada Dept. Of Agriculture, Vancouver, B.C. Research Station		
Entomology Section	6800	
Canada Dept. Of Agricultnre, Winnipeg, Manitoba		
Research Station	6809	
Catholic University of America Central Veterinary Laboratories, Weybridge, England	6471 7288	
Central Veterinary Laboratory, Weybridge, Eng.	7264	
Central Veterinary Laboratory, Weybridge, Eng. Central Veterinary Laboratory, Weybridge, Eng.	7225	
7259 7320 7321 7478 7556 7612 Central Veterinary Laboratory, Weybridge, England	7618	
Dept. Of Virology	7282	
Chas. Pfizer And Co., Inc., Terre Hante, Ind.	7636	
Clemson Agricultural College, Columbia, S.C.	7247	
Clemson College Ponltry Science Dept.	7518	
Clemson University 6565	6566	
Colarado State University, Fort Collins	7463	
College Of Veterinary Medicine Colorado State University 7277	7697	
Colorado State University		
College Of Veterinary Medicine	7426	
Dept. Of Pathology And Microbiology Colorado State University, Fort Collins 6699	7435 6807	
Columbia University	6671	
Cooper Technical Bureau, Berkhamsted, Eng.	7346	
Cooper Technical Bureau, Berkhamsted, England 7740	7503	
Cornell University 6453 6917 7020	7658	
Cornell University		
Dept. Of Plant Pathology Cornell University, Ithaca, N.Y. 6613 6959	6749 6980	
Cornell University, Ithaca, N.Y.	0,000	
Dept. Of Agronomy	6822	
Cornell University, Ithaca, N.y. Dept. Of Entomology 6656	7666	
Cornell University, Ithaca, N.Y.	/000	
Dept. Of Plant Pathology 6696 6704 6734	7701	
Corvel Inc., Omaha, Nebraska	7492	
Cranberry Experiment Station Dept. Of Entomology And Plant Pathology	7069	
Crops Research Division, Beltsville, Md. 6730	6797	
6888 Cyprus Ministry of Agriculture and Nat. Resources, Nicos.		
	ia 6846	
Agricnltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia		
Ågrichtural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology		
Agrichltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Thstitute Of Biology	6846	
Agrichtural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology	6846 6621 6473	
Agrichltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark	6846 6621 6473 7024	
Agrichltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal	6846 6621 6473 7024 6781	
Agrichtural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Deot. Of Agriculture, Mauritus, U.K.	6846 6621 6473 7024	
Agrichltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Mauritius, U.K. Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Salem, Ore.	6846 6621 6473 7024 6781 7607 7302	
Agrichtural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Massan, Bahamas Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Salem, Ore. Veterinary Division	6846 6621 6473 7024 6781 7607	
Agrichltural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Mauritius, U.K. Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Salem, Ore.	6846 6621 6473 7024 6781 7607 7302	
Agrichtural Research Institute Czechoslovak Academy Of Sciences, Pragne, Czechoslovakia Institute Of Entomology Czechoslovakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Salem, Ore. Veterinary Division Dept. Of Forestry Of Canada, Quebec, Canada	6846 6621 6473 7024 6781 7607 7302 7474	
Agrichltural Research Institute Czechoslowak Academy Of Sciences, Pragne, Czechoslowakia Institute Of Entomology Czechoslowakian Academy Of Sciences, Prague Institute Of Biology Laboratory Of Insect Pathology Delaware Agricultural Experiment Station, Newark Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Katmandn, Nepal Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Nassan, Bahamas Dept. Of Agriculture, Salem, Ore. Veterinary Division Dept. Of Forestry Of Canada, Quebec, Canada Forest Research Laboratory Dow Agrochemicals Ltd., King,s Lynn, Norfolk, Eng.	6846 6621 6473 7024 6781 7607 7302 7474 6631	179

6190

	7600 7742
Dr. C. Janssen Research Laboratorium, Beerse, Belgium	1142
7414 Duquesne University, Pittsburgh, Pa.	
Dept. Of Biology	7711
East African Trypanosomiasis Research Organization, Ugand 7537	a
	7598
East African Veterinary Research Organization, Kikuyu, Ke	nya
7495 Edinburgh School Of Agriculture, Scotland	7411
Edinburgh University, Scotland	
Eli Lilly + Co., Indianapolis, Ind.	7557 7314
	7431
Experimental Farm, St. John s West, Newfoundland Faculte Des Sciences, Strasbourg, France	7039
Laboratoire De Biologie Generale	6586
	7268 7409
Federal Dept. Of Veterinary Research, Nigeria	7622
Federal Dept. Of Veterinary Research, Nigeria, Africa 7614	
Federal Dept. Of Veterinary Research, Vom, Nigeria	7620
7621 Federal Experiment Station	
U.S. Dept. Of Agriculture, Mayaguez, Puerto Rico	
	6811 7022
Florida Agricultural Experiment Station	1022
Dept. Of Poultry Science Florida Agricultural Experiment Station, Gainesville	7143
	6792
Florida Agriculture Experiment Stations, Bradenton	6775
Florida Dept. Of Agriculture, Gainesville	0775
Division Of Plant Industry	6916
Florida Dept. Of Agriculture, Tallahassee Division Of Animal Industry	
	7617 7013
	7079
Food Machinery And Chemical Corporation, Middleport, N.y.	
Niagara Chemical Division Research And Development Dept.	7038
Forest Biology Laboratory, Fredericton, New Brunswick	
7117 Forest Research Laboratory, Quebec, Canada	
Dept. Of Forestry Of Canada	6632
Forest Research Laboratory, Victoria, B.C. Dept. Of Forestry Of Canada	6598
Forest Research Laboratory, Victoria, B.C., Canada	6599 6713
Fort Detrick, Frederick, Md. Fort Sam Houston, Tex.	0715
Brooke Army Medical Center U.S. Army Surgical Research Unit	7477
George Washington University, D.C.	7473
	6969 7107
Ghana Academy Of Sciences, Africa	/10/
Entomological And Parasitological Research Unit	7377 7368
	7390
Hawaii Agricultural Experiment Station	7584
	6488
Hitchner, S B Winterfield, R W	
	7356
Hoechst Pharmaceuticals Ltd., London, England	7303
	7344 7345
Huntingdon Research Centre, Eng.	7440
Idaho Agricultural Experiment Station, Moscow	7446 6764
	6459
	7600
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568	7668 7028
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng.	7028
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng.	7028
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng. Pharmaceuticals Division Imperial Chemical Industries, Ltd., Macclesfield, England Pharmaceuticals Division	7028
Illinois Natural History Survey7564Illinois Natural History Survey, Urbana6568Imperial Chemical Industries Ltd., Cheshire, Eng.Pharmaceuticals DivisionImperial Chemical Industries, Ltd., Macclesfield, EnglandPharmaceuticals DivisionIndia Department of Agriculture, Rajasthan, JaipurPlant Pathology Laboratory	7028 7638
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng. Pharmaceuticals Division Imperial Chemical Industries, Ltd., Macclesfield, England Pharmaceuticals Division India Department of Agriculture, Bajasthan, Jaipur Plant Pathology Laboratory Indian Agricultural Research Institute, New Delbi	7028 7638 7640 6805
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng. Pharmaceuticals Division Imperial Chemical Industries, Ltd., Macclesfield, England Pharmaceuticals Division India Department of Agriculture, Rajasthan, Jaipur Plant Pathology Laboratory Indian Agricultural Research Institute, New Delhi Division of Mycology and Plant Pathology Indian Agricultural Research Institute, New Delhi, India	7028 7638 7640 6805 6806
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng. Pharmaceuticals Division Imperial Chemical Industries, Ltd., Macclesfield, England Pharmaceuticals Division India Department of Agriculture, Bajasthan, Jaipur Plant Pathology Laboratory Indian Agricultural Research Institute, New Delhi Division of Mycology and Plant Pathology Indian Agricultural Research Institute, New Delhi, India Division of Entomology	7028 7638 7640 6805
Illinois Natural History Survey 7564 Illinois Natural History Survey, Urbana 6568 Imperial Chemical Industries Ltd., Cheshire, Eng. Pharmaceuticals Division Imperial Chemical Industries, Ltd., Macclesfield, England Pharmaceuticals Division India Department of Agriculture, Rajasthan, Jaipur Plant Pathology Laboratory Indian Agricultural Research Institute, New Delhi Division of Mycology and Plant Pathology Indian Agricultural Research Institute, New Delhi, India	7028 7638 7640 6805 6806

Insect Pathology Research Institute, Sault St. Marie, On	t.
6480 6490 6492 6543 Institute For Research On Animal Diseases, Berkshire	7456
Institute Of Biology, CSAV, prague, Czechoslovakia	7450
Laboratory Of Insect Pathology And Entomology Laborato	ry
6580 Institute Of Pieless Presue Createslevekis	
Institute Of Biology, Prague, Czechoslovakia Laboratory Of Insect Pathology	6463
Institute Of Biology, Praha, Czechoslovakia	0405
Laboratory Of Insect Pathology Institute Of Plant Protection, Poznan, Poland	6660
Institute Of Plant Protection, Poznan, Poland	
Laboratory Of Biological Control 6576	6578
International Minerals And Chemical Corp., Wasco, Calif. Bioferm Division	6555
International Minerals And Chemicals Corp., Wasco, Calif	
Bioferm Division	6558
Iowa State University	
College Of Veterinary Medicine Dept. Of Veterinary Pathology	7479
Iowa State University	
College Of Veterinary Science	7398
Iowa State University	
Dept. Of Dairy And Food Industry Iowa State University Of Science And Technology, Ames	7651
College Of Veterinary Medicine	
Veterinary Medical Research Institute	7642
Iowa State University, Ames 7007 7135 7577	7585
Iowa State University, Ames	6849
Dept. Of Botany And Plant Pathology Iowa State University, Ames	0043
Dept. Of Zoology And Entomology	7670
Iowa State University, Ames School Of Veterinary Medicine	
School Of Veterinary Medicine	7379 6533
Istituto Nazionale Di Apicoltura, Bologna, Italy Istituto Superiore Di Sanita, Rome, Italy	0533
Dept. Of Parasitology	6491
Kansas Agricultural Experiment Station, Hays	
Fort Hays Branch	6542 7045
Kansas State University7012Kansas State University, Manhattan662866287061	7573
Kansas State University, Manhattan	
Dept. Of Botany And Plant Pathology 6723	6827
Kansas State University, Manbattan	7226
Dept. Of Dairy And Poultry Science Kansas State University, Manhattan	7236
Dept. Of Flour And Feed Milling Industries	7052
Kansas State University, Manhattan	
	~ ~ ~ ~ ~
Dept. Of Statistics	6460
Kansas State University, Manhattan	6460 7439
	7439
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School	
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington	7439 7574
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.	7439
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington	7439 7574
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry	7439 7574
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md.	7439 7574 7485 6567
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Besearch Laboratories, Inc., Berlin, Md. Manufacturing And Research Division	7439 7574 7485
Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md.	7439 7574 7485 6567
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> </ul>	7439 7574 7485 6567 7231 6651
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratorie d Evolution Des Etres Organises, Paris, Fran</li> </ul>	7439 7574 7485 6567 7231 6651 ce
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratoire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris</li> <li>Louisian Agricultural Experiment Station, Baton Rouge</li> </ul>	7439 7574 7485 6567 7231 6651
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049</li></ul>	7439 7574 7485 6567 7231 6651 ce
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratorie d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge 7049</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge</li> </ul>	7439 7574 7485 6567 7231 6651 Ce 6470
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratoire d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge 7049</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge Depts. Of Plant Pathology And Horticulture</li> </ul>	7439 7574 7485 6567 7231 6651 6651 66470 7089
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratorie d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge 7049</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge</li> </ul>	7439 7574 7485 6567 7231 6651 Ce 6470
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine</li> <li>Kansas State University, Manhattan Graduate School</li> <li>Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology.</li> <li>Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry</li> <li>L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division</li> <li>La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652</li> <li>Laboratoire d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris</li> <li>Louisiana Agricultural Experiment Station, Baton Rouge 7049</li> <li>Louisiana State University, Baton Rouge 6449 6905</li> <li>Louisiana State University, Baton Rouge</li> </ul>	7439 7574 7485 6567 7231 6651 6651 66470 7089
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratorie d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station</li></ul>	7439 7574 7485 6567 7231 6651 Ce 6470 7089 6772
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratorire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. Of Plant Pathology And Horticulture Agricultural Experiment Station Dept. Of Plant Pathology And Borticulture Agricultural Experiment Station Dept. Of Plant Pathology And Borticulture Agricultural Experiment Station Dept. Of Plant Pathology And Borticulture Agricultural Experiment Station Dept. Of Plant Pathology And Borticulture Agricultural Experiment Station Dept. Of Plant Pathology And Borticulture Agricultural Experiment Station Dept. Of Plant Pathology Agricultural Experiment Station Dept. Of Plan</li></ul>	7439 7574 7485 6567 7231 6651 6651 66470 7089
<ul> <li>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratorie d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station</li></ul>	7439 7574 7485 6567 7231 6651 Ce 6470 7089 6772
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratorire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. of Endmensity, Baton Rouge Agricultural Experiment Station Dept. Of Biotensity, Baton Rouge M.A.A.F., leeds, England Veterinary Investigation Centre Bay And Baker Ltd., Essex, England</pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6459 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. Of Entomology A.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Essex, England</pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station</pre>	7439 7574 7485 6567 7231 6651 6651 6651 66470 7089 6772 7566 7544
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. of Entomology M.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Essex, England Veterinary Research Division McGill University, Canada Macdonald College</pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And B Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station</pre>	7439 7574 7485 6567 7231 6651 6651 7089 6772 7566 7544 7275 7619 6949
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. of Agricultural Chemistry Laboratory Of Biochemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. of Endomology M.A.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Susser, England Macdonald College McGill University, Quebec, Canada Macdonald College 626 </pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And B Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station</pre>	7439 7574 7485 6567 7231 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880 7721
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. Of Entomology M.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Sussex, England Veterinary Research Division Macdonald College McGill University, Quebec, Canada Macdonald College McGill University 6458 6787 7126 Hichigan State University Dept. of Entomology </pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880 7721 6991
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. Of Entomology M.A.A.F., Leeds, England Veterinary Investigation Centre May And Baker Ltd., Essex, England Veterinary Research Division McGill University, Canada Macdonald College McGill University, Guebec, Canada Macdonald College McGill University 6458 6787 7126 Michigan State University, East Lansing 6830</pre>	7439 7574 7485 6567 7231 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880 7721
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratoire d Evolution Des Etres Organises, Paris, Fran Paculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge 6905 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. Of Entomology M.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Sussex, England Veterinary Research Division Macdonald College McGill University, Quebec, Canada Macdonald College McGill University 6458 6787 7126 Hichigan State University Dept. of Entomology </pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880 7721 6991
<pre>Kansas State University, Manhattan Dept. Of Surgery And Medicine Kansas State University, Manhattan Graduate School Kentucky Agricultural Experiment Station, Lexington Dept. Of Animal Pathology. Kyoto University, Kyoto, Japan Dept. Of Agricultural Chemistry Laboratory Of Biochemistry L And M Research Laboratories, Inc., Berlin, Md. Manufacturing And Research Division La Miniere Par Versailles, France Biological Control And Biocenosis Research Station 6652 Laboratorire d Evolution Des Etres Organises, Paris, Fran Faculte Des Sciences De Paris Louisiana Agricultural Experiment Station, Baton Rouge 7049 Louisiana State University, Baton Rouge Agricultural Experiment Station Dept. of Entomology M.A.A.F., leeds, England Veterinary Investigation Centre May And Baker Ltd., Sussex, England Mazdonald College McGill University, Guebcc, Canada Macdonald College Michigan State University Fast Lansing 6830 7000</pre>	7439 7574 7485 6567 7231 6651 6651 66470 7089 6772 7566 7544 7275 7619 6949 6880 7721 6991

	ORGAN
Michigan State University, East Lansing	
Dept. Of Pathology Michigan State University, East Lansing	7489
Dept. Of Surgery And Medicine	7276
Mid-Cclumbian Branch Experiment Station, Hood River, Ore. 7003	
Milk Marketing Board, Gloucester, England	7384
Milk Marketing Board, Surrey, England	7512
Ministry Of Agriculture, Pisheries And Food, Leeds Veterinary Investigation Centre 7543	7641
Ministry Of Agriculture, Pisheries And Food, Weybridge	-
Central Veterinary Laboratory Ministry Of Agriculture, Pisheries And Wood, Worcester, H	7404
Veterinary Investigation Centre	7292
Ministry Of Agriculture, Leeds, Eng. Fisheries And Food	
Veterinary Investigation Centre	7340
Ministry Of Agriculture, Stormont, Belfast, Ireland Veterinary Research Division	7628
Ministry Cf Animal And Forest Resources, Kano, N. Nigeria	L
Veterinary Division Ministry Of Animal And Forest Resources, Northern Nigeria	7634
Veterinary Investigation And Training Centre	7609
Ministry Of Forest And Animal Resources, Kaduna, N. Niger Tsetse And Trypanosomiasis Unit	76 13
Ministry Of Nat. Resources And Local Govt., Zomba Nyasala	nd
Dept. Of Veterinary Services Mississippi State University	7433
Dept. Of Zoology And Entomology Mississippi State University, State College	7570
Mississippi State University, State College Dept. Of Entomology	6479
Montana Livestock Sanitary Board, Helena	7491
Montana State College, Boseman Montana State College, Bozeman	6903 6693
Montana State College, Bozeman Montana State College, Bozeman	
Dept. Of Botany And Bacteriology Montana State University	6904 6605
Montana State University, Missoula	
Dept. Of Botany Montana State Universityy	6720 6620
Montana Veterinary Research Laboratory, Bozeman	
Agricultural Experiment Station Moredun Institute, Edinburgh, Scotland	7349 7237
Nagoya University, Anjo, Aichi-ken, Japan	
Faculty Of Agriculture	
Plant Pathology Laboratory	6973
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa	6973 dor
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826	dor
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.K 7274	dor
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.K 7274 National Research Council Of Canada	dor 6739
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874	dor 6739
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln	dor 6739
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.F 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Aricultural Experiment Station	dor 6739 7101 7667
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico Agricultural Experiment Station New York State University New Mexico Agricultural Experiment Station	dor 6739 7101
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station, Geneva 6522 6588 6859 7033 7682	dor 6739 7101 7667
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station, Geneva 6522 6588 6859 7033 7682	dor 6739 7101 7667
Plant Pathology Laboratory National Institute For Agricultural Research, Quito, Equa 6826 National Institute For Research In Dairying, Reading, U.F 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico State University New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany	dor 6739 7101 7667 7683 7387
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Agricultural Experiment Station New York State Agricultural Experiment Station, Geneva 6522 6588 6859 7033 7682 New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research	dor 6739 7101 7667 7683 7387 7283
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.B 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico State University New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y	dor 6739 7101 7667 7683 7387 7283 6661
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station 6522 6588 6859 7033 7682 New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Nord Essential Oil And Chemical Co., Inc., New York, N.Y 7699	dor 6739 7101 7667 7683 7387 7283 6661
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Gricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology	dor 6739 7101 7667 7683 7387 7283 6661
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station 6522 6588 6859 7033 7682 New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina Agricultural Experiment Station, Raleigh	dor 6739 7101 7667 7683 7387 7283 6661 -
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Gricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina Agricultural Experiment Station, Raleigh 6968 7072 North Carolina State College, Raleigh 6662	dor 6739 7101 7667 7683 7387 7283 6661 -
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Fesearch Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York University Nord Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina Agricultural Experiment Station, Raleigh 6968 7072 North Carolina State College, Raleigh 6662 6835 6857 6873 6885	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698	dor 6739 7101 7667 7683 7387 7283 6661 • 7732
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Fesearch Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina Agricultural Experiment Station, Raleigh 6968 7072 North Carolina State College, Raleigh 6662 6835 6857 6873 6855 North Carolina State University, Raleigh 6454 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7037 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural College, Pargo	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791 7047
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.B 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New York State Agricultural Experiment Station New York State Agricultural Experiment Station State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6955 North Carolina State University, Raleigh 6454 6726 6920 7087 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota Agricultural College, Nango North Dakota Agricultural Experiment Station North Dakota Agricultural College, Nango	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791 7047 7041 7423
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico State University New Mexico State University New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6965 6857 6873 6885 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh Department of Plant Pathology North Carolina State University, Raleigh Department of Plant Pathology North Carolina State University, Raleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota State University, Pare Northe Bakota State University, Pare North Bakota State University, Pare	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791 7047 7041
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Fesearch Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota Agricultural College, Nargo North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural College, Nargo North Dakota State University, Pargo North Dakota State University, Pargo Northeastern Porest Experiment Station, Upper Darby, Pa. 6735	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791 7047 7041 7423 6706
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.R 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico State University New Mexico Gricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6925 North Carolina State University, Raleigh 6726 North Carolina State University, Raleigh 6726 North Carolina State University, Raleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota Agricultural Experiment Station North Dakota Agricultural College, Pargo North Dakota State University, Pare Northeastern Forest Experiment Station, Upper Darby, Pa.	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6791 7047 7041 7423
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Fesearch Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota State University, Fargo Northerimary Science Northern Regional Besearch Laboratory, Peoria, Ill. Oak Ridge National Laboratory, Oak Ridge, Tenn. Biology Division	dor 6739 7101 7667 7683 7387 7283 6661 7732 6808 6594 6791 7047 7041 7423 6706 6659 6610
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.S 7274 National Research Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico State University New Mexico State University New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York State Dept. Of Health, Albany Division Of Laboratories And Research New York Oniversity Norda Essential Oil And Chemical Co., Inc., New York, N.Y 7699 North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Raleigh 6726 6920 7087 7115 7347 7698 North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota Agricultural College, Fargo North Carolina State University, Baleigh Department of Plant Pathology North Dakota Agricultural Experiment Station North Dakota Agricultural College, Fargo North Dakota Agricultural Experiment Station North Dakota State University, Fargo North Dakota State University, Fargo North Dakota State University, Fargo North Dakota State University, Fargo North Dakota State University, Pargo North Dakota State University, Pargo Northearen Porest Experiment Station, Upper Darby, Pa. 6735 Northern Regional Research Laboratory, Peoria, Ill. Oak Eidge National Laboratory, Oak Eidge, Tenn. Biology Division Ohio Agricultural Experiment Station 7048 7105 7395 7652	dor 6739 7101 7667 7683 7387 7283 6661 • 7732 6808 6594 6594 6791 7047 7041 7423 6706 6659 6610 7339
Plant Pathology Laboratory National Institute Por Agricultural Research, Quito, Equa 6826 National Institute Por Research In Dairying, Reading, U.K 7274 National Fesearch Council Of Canada National-University Inst. Of Agriculture, Rehovot, Israel 6874 Nebraska Agricultural Experiment Station, Lincoln New Mexico State University New Mexico Agricultural Experiment Station New York State Dept. Of Agriculture, Albany Division Of Animal Industry New York State Dept. Of Health, Albany Division Of Laboratories And Research New York University North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina Agricultural Experiment Station Dept. Of Plant Pathology North Carolina State College, Raleigh 6968 7072 North Carolina State University, Raleigh 6726 6825 6857 6873 6885 North Carolina State University, Raleigh 6726 7087 7115 7347 7698 North Dakota Agricultural Experiment Station North Dakota Agricultural Experiment Station North Dakota State University, Raleigh Department of Plant Pathology North Dakota State University, Pargo North Dakota State University, Pargo North Dakota State University, Pargo Northeastern Porest Experiment Station, Upper Darby, Pa. 6735 Northern Regional Research Laboratory, Peoria, Ill. Oak Ridge National Laboratory, Oak Ridge, Tenn. Biology Division Ohio Agricultural Experiment Station 7048 7105	dor 6739 7101 7667 7683 7387 7283 6661 7732 6808 6594 6791 7047 7041 7423 6706 6659 6610

Ohio Agricultural Experiment Station, Wooste		
Dept. Of Botany And Plant Pathology Ohio Agricultural Research And Development Co	6778	6964
Ohio Agricultural Research And Development Co	enter, Woost	
Dept. Of Veterinary Science		7493
Ohio State University Ohio State University Columbus	6668 6575	7567 6877
Ohio State University, Columbus Ohio State University, Columbus	0375	00//
Dept. Of Zoology And Entomology		6655
Ohio State University, Columbus, Ohio		0055
Ohio State University, Columbus, Ohio Dept. Of Zoology And Entomology		6607
Oklahoma State University 6444 646	6469	6476
Dept. Of Zoology And Entomology Oklahoma State University 6444 646 7528 7655 7703		
Oklahoma State University		
College Of Veterinary Medicine		7258
Old Government House, Chester, Eng.		7438
Oregon State University		7443
Oregon State University, Corvallis 671	4 6733	6750
6844 6875 6944 7723		
Oregon State University, Corvallis Department of Horticulture		6600
Oregon State University, Corvallis		6698
Dept. Of Botany And Plant Pathology	6719	6773
6817 6818	0715	0775
Oregon State University, Corvallis		
Dept. Of Entomology		6645
Oregon State University, Corvallis		
Dept. Of Plant Pathology		7748
Oregon State University, Corvallis		
Dept. Of Poultry Science		7687
Oregon State University, Corvallis		
Oregon Agricultural Experiment Station		7450
Dept. Of Veterinary Medicine		7459
Oregon State University, Corvallis		6728 7261
Parke, Davis And Co., Middlesex, England Pennsylvania Dept. Porests And Waters		7002
Pennsylvania State University, University Pa	rk	6748
Pineapple Research Institute Of Hawaii.		6994
Pineapple Research Institute, Honolulu, Hawa	ii	6993
Plant Industry Station, Beltsville, Md.		6958
Plant Industry Station, Beltsville, Md. Plant Research Institute, Ottawa, Canada		
Biochemistry Section		7755
Punjab College Of Veterinary Science And Ani:	mal Husband	су
7389		
Purdue University 685	4 7009	7027
Purdue University		3450
Animal Sciences Dept.		7653
man las we incomplete		1055
Purdue University		
Department of Entomology, Lafayette, India:	na	7752
Department of Entomology, Lafayette, India: Purdue University	na	7752
Department of Entomology, Lafayette, India Purdue University Dept. Of Animal Sciences	na	
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University	na 6571	7752
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology		7752 7681
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University		7752 7681
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University		7752 7681 7078
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine		7752 7681 7078 7448
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology		7752 7681 7078
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind.		7752 7681 7078 7448
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School of Veterinary Sciences And Medicine		7752 7681 7078 7448 7298
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Veterinary Sciences And Medicine		7752 7681 7078 7448 7298 7228
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Veterinary Sciences And Medicine		7752 7681 7078 7448 7298
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind.		7752 7681 7078 7448 7298 7228
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Veterinary Sciences Purdue University, Lafayette, Ind. Purdue University, Lafayette, Ind. Dept. Of Biochemistry		7752 7681 7078 7448 7298 7228 7005
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind.		7752 7681 7078 7448 7298 7228 7005
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind.		7752 7681 7078 7448 7298 7228 7005 7736
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Dept. Of Entomology 648	6571	7752 7681 7078 7448 7298 7228 7005 7736
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Dept. Of Entomology 648' Purdue University, Lafayette, Ind.	6571 7 6572	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B	6571 7 6572	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology And B 6821	6571 7 6572	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind.	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Microbiology Purdue University, Lafayette Ind. School Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind.	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind.	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6482 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Clinics	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind.	6571 7 6572 iological Se	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6482 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Clinics	6571 7 6572 iological So hemistry	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Peterinary Medicine Purdue University School of Veterinary Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. School Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine	6571 7 6572 iological Se hemistry Public Heal	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc: Purdue University, Lafayette, Ind. Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Science And M	6571 7 6572 iological Se hemistry Public Heal	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250 th
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Entomology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine IN (Scien	6571 7 6572 iological Se hemistry Public Heal	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine	6571 7 6572 iological Se hemistry Public Heal	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Microbiology And Imunology	6571 7 6572 iological So hemistry Public Heal: r, Natick, F	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250 th
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc School Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Meicrobiology And Immunology R And W Paul Ltd., Ipswich, England	6571 7 6572 iological Se hemistry Public Heal	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. School Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Microbiology, Pathology And I 7297 Quartermaster Besearch And Engineering Cente: Chemicals And Plastic Division Queen s University, Kingston, Ontario Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England B.S.F.C.A., London, England	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7228 7005 7736 6707 6608 ciences 6801 7250 th ***********************************
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc: Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Microbiology, Pathology And I 7297 Quartermaster Research And Engineering Center Chemicals And Plastic Division Queen s University, Kingston, Ontario Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England Animals Free Clinic And Convalescent Ward	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7005 7736 6707 6608 ciences 6801 7250 th ***********************************
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University Dept. Of Entomology Purdue University School Of Veterinary Medicine Purdue University School Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Veterinary Clinics Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc. Purdue University, Lafayette, Ind. School Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England Animals Free Clinic And Convalescent Ward Regional Cereal Disease Research Laboratory,	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7005 7736 6707 6608 ciences 6801 7250 th ***********************************
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc: Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Microbiology, Pathology And I 7297 Quartermaster Research And Engineering Center Chemicals And Plastic Division Queen s University, Kingston, Ontario Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England Animals Free Clinic And Convalescent Ward	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7005 7736 6707 6608 ciences 6801 7250 th ***********************************
Department of Entomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine Dept. Of Microbiology, Pathology And I 7297 Quartermaster Besearch And Engineering Cente: Chemicals And Plastic Division Queen s University, Kingston, Ontario Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England Animals Pree Clinic And Convalescent Ward Regional Cereal Disease Besearch Laboratory, 6861	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7005 7736 6707 6608 ciences 6801 7250 th ***********************************
Department of Intomology, Lafayette, India: Purdue University Dept. Of Animal Sciences Purdue University School of Veterinary Medicine Purdue University School of Veterinary Science And Medicine Dept. Of Veterinary Science And Medicine Dept. Of Veterinary Sciences And Medicine Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Biochemistry Purdue University, Lafayette, Ind. Dept. Of Botany And Plant Pathology Purdue University, Lafayette, Ind. Depts. Of Botany And Plant Pathology And B 6821 Purdue University, Lafayette, Ind. Depts. Of Botany, Plant Pathology And Bioc: Purdue University, Lafayette, Ind. Depts. Of Veterinary Science Dept. Of Veterinary Science Dept. Of Veterinary Science And Medicine School Of Veterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Weterinary Science And Medicine Dept. Of Microbiology, Pathology And I 7297 Quartermaster Research And Engineering Center Chemicals And Plastic Division Queen s University, Kingston, Ontario Dept. Of Microbiology And Immunology R And W Paul Ltd., Ipswich, England R.S.P.C.A., london, England Animals Pree Clinic And Convalescent Ward Regional Cereal Disease Research Laboratory, 6861 Bothamsted Experiment Station	6571 7 6572 iological So hemistry Public Heal r, Natick, J 7322	7752 7681 7078 7448 7298 7005 7736 6707 6608 ciences 6801 7250 th Mass. 7688 6510 7323 7517 ash.

#### ORGANIZATION INDEX

	0101
Rothamsted Experimental Station, Harpenden, England Bee Dept. 6447 6483	6484
Royal Veterinary And Agricultural College, Copenhagen Laboratory For Special Pathology And Therapeutics	7507
Royal Veterinary College, Bertfordshire, England Dept. Of Medicine	7442
Royal Veterinary College, Hertfordshire, England Dept. Of Surgery	7538
Royal Veterinary College, London, Eng. Beaumont Hospital	7238
Royal Veterinary College, London, England Dept. Of Physiology	7602
Royal Veterinary College, London, England Division Of Biochemistry	7417
Rutgers - The State University Rutgers - The State University, New Brunswick, New Jersey	7657
Department of Plant Biology Rutgers State University, New Brunswick, N.J.	6925
Dept. Of Entomology Rutgers University	7647
Dept. Of Plant Biology Rutgers University, New Brunswick, N.J. 6896	7129 7099
Sankyo Company, Ltd., Shinagawa-Ku Tokyo, Japan Takamine Laboratory	6841
Santiago, Chile Food And Agriculture Organization Of The United Nations	3
Zoonoses And Preventive Medicine Schering Corp., Madison, Wis.	7522
Animal Bealth Division American Scientific Laboratories	7629
School Of Veterinary Medicine University Of California, Davis	7307
School Cf Veterinary Medicine, Cambridge Dept. Of Animal Pathology	74 16
School Of Veterinary Medicine, Cambridge, England 7506	7294
Scottish Borticultural Research Institute, Dundee, Scotla 6798	and
Sericultural Experiment Station, Suginami-ku, Tokyo, Japa Dept. Of Pathology	an 6478
Shaver Poultry Breeding Farms Ltd., Bawdeswell, England 7245	.,,,,
Sioux Falls Laboratories, S. Dak. Veterinary Diagnosic Services	7514
South Dakota Agricultural Experiment Station, Brookings 7582	
South Dakota State College, Brookings Dept. Of Plant Pathology 6833	6845
Southern Regional Introduction Station, Experiment, Ga. 6918	
Southwestern Great Plains Field Station, Bushland Texas Agricultural Experiment Station	6516
Spillers Ltd., Cambridge, England Technical Research Station	7476
Spillers, Ltd., Cambridge, Eng. Technological Research Station	7477
State University College Of Forestry At Syracuse Univ., 1 7015	N - Y -
State University Of New York, Buffalo College Of Education	7583
State University, Utrecht, Netherlands Institute For Tropical And Protozoan Diseases.	
Veterinary Faculty 7304 Stored-product Insects Laboratory, Manhattan, Kan.	7305 6688
Tela Railroad Company, La Lima, Bonduras, Central America 6930	a
Tennessee Agricultural Experiment Station, Knoxville 7669	6581
Tennessee Valley Authority, Wilson Dam, Ala. Division Of Health And Safety	
Malaria Control Branch Texas A And M University, College Station	6635
College Of Veterinary Medicine Texas A And M University, College Station	7311
Texas Agricultural Experiment Station College Of Veterinary Medicine	
Dept. Of Veterinary Microbiology Texas A. and M. University	7437
Texas Agricultural Experiment Station Dept. Of Entomology	6596
Texas A. and M. University, College Station Texas Agricultural Experiment Station	
College Of Veterinary Medicine Dept. Of Veterinary Pathology	7354
Texas Agricultural Experiment Station 6496 Texas Agricultural Experiment Station, Bushland Texas Agricultural Experiment Station, College Station	6986 6999
Texas Agricultural Experiment Station, Sussiand 7074 7083	0,333
Texas Agricultural Experiment Station, Yoakum Plant Disease Experiment Station	6762
PAGE 182	0.02

 TON TAPEX	
The Connecticut Agricultural Experiment Station	7059
The Connecticut Agricultural Experiment Station, New Hav	en
7016	
The Johns Hopkins University, Baltimore, Md. School Of Hygiene And Public Bealth	
Dept. Of Pathobiology	6554
The Ohio State University, Wooster	
Ohio Agricultural Experiment Station	
Dept. Of Botany And Plant Pathology	6796
The Pennsylvania State University, University Park Dept. Of Zoology And Entomology	6633
The Rockefeller Foundation, Bogota	0000
Colombian Agricultural Program	7055
The State University Of New Jersey	7010
Dept. Of Entomology The State University, New Brunswick, N.j. 7568	7010 7569
The State University, New Brunswick, N.j. 7568 The State University, Utrecht, Netherlands	,505
Institute For Veterinary Surgery	
Dept. Of Roentgenology	7318
The Wildfowl Trust, Slimbridge, Glos. Tidewater Research Station, Holland, Va. 6754	7343 6755
Twyford Laboratories Ltd., London, England	7351
U. S. Dept. Of Agriculture	
Agricultural Research Service	
Entomology Research Division 6452 6549	6680
7032 7060 7062 7665 U. S. Dept. Of Agriculture	
Forest Service	
Lake States Forest Experiment Station	6465
U. S. Dept. Of Agriculture, Beltsville, Md	
Agricultural Research Division Crops Research Division	6824
U. S. Dept. Of Agriculture, Beltsville, Md.	0024
Agricultural Research Service	
Entomology Research Division	6682
U. S. Dept. Of Agriculture, Fort Collins	
Forest Service Rocky Mountain Forest And Range Experiment Station	7077
U. S. Dept. Of Agriculture, Kerrville, Tex.	
Agricultural Research Service	
Entomology Research Division	7579
U. S. Dept. Of Agriculture, Laurel, Md.	
Forest Service Northeastern Forest Experiment Station	7034
U. S. Dept. Of Agriculture, Mesa, Ariz.	
Agricultural Research Service	
Entomology Research Division	6603
U. S. Dept. Of Agriculture, Yakima, Wash. Agricultural Research Service	
Entomology Research Division	7565
U. S. Dept. Of Agricuture	
Agricultural Research Service	7671
Human Nutrition Research Division U.P. College Veterinary Science And Animal Husbandry, In	
Dept. Of Pathology And Bacteriology	7510
U.S. Air Force, Duluth, Minn.	
343D Dispensary	7391
U.S. Army Qm Research And Engineering Center, Natick, Ma Chemicals And Plastics Division	7754
U.s. Department of Agriculture	
Crops Research Division	6710
U.s. Department of Agriculture.	
Agriculture Research Service Crops Research Division	6751
U.s. Department of Agriculture, Belle Mead, New Jersey	5,51
Agricultural Research Service	
Market Quality Research Division	6779
U.s. Department of Agriculture, Beltsville	
Agricultural Research Service Crops Research Division	6790
U.s. Department of Agriculture, Berkeley	
Forest Service	
Pacific Southwest Forest and Range Experiment Station 6913	
U.s. Department of Agriculture, Brookings, South Dakota	
Agricultural Research Service	
Entomology Research Division	
Northern Grain Insects Research Laboratory	6927
U.s. Department of Agriculture, Clemson Agricultural Research Service	
Crops Research Division	
Fruit and Nut Crops Research Branch	6736
U.s. Department of Agriculture, East Lansing	
Agricultural Research Service Crops Research Division	6881
U.s. Department of Agriculture, Fort Collins	5051
Forest Service	
Rocky Mountain Forest and Range Experiment Station	6855
U.s. Department of Agriculture, Logan Agricultural Research Service	
adviourat negerion pervice	

	Crops Resea s. Departme			Orlando			7090
	Agricultura	1 Research	Service				60.14
σ.	Market Qual S. Dept. Of			.on			6914 7122
υ.	S. Dept. Of Agricultura	Agricultu	re				
	Crops Resea	rch Divisi	ас				6862
υ.	S. Dept. Of Agricultura						
	Entomology	Decent D	Inigian		6455	6461	6494
	6574 7018	6657 7031	6658 7040	6672 7042	6985 7043	6988 7046	7011 7063
	7066	· /0/0	7075	7111	7562	7578	7676
٦.	7678 S. Dept. Of		ce				
	Agricultura University	1 Research	Service	e			6892
J.	S. Dept. Of	Agricultu	ce				
	Animal Dise S. Dept. Of			search	Division		7694
	Forest Serv	vice					30.00
υ.	Southern Fo S. Dept. Of			TION			7068
	Agricultura	1 Research	Service				6556
	Entomology S. Dept. Of	Agricultu	ce, Altug	uerque,	N.M.		
	Forest Dise S. Dept. Of			Тома			6524
	Agricultura	1 Research	Service				2252
σ.	Crops Resea S. Dept. Of			Glade,	Fla.		7757
	Agricultura Crops Resea	1 Research	Service				6934
	S. Dept. Of	Agricultu	re, Belts				6897
	S. Dept. Of Agricultrua			ville,	Md.		6732
J.	S. Dept. Of	Agricultu	re, Belts		Mđ.		
	Agricultura Horticultur			2			69 19
σ.	S. Dept. Of Agricultura			ville,	Md.		6977
σ.	S. Dept. Of	Agricultu	re, Belts	ville,	Md.		0377
	Agricultura Beltsville			oratory	,		
т	Animal Dise S. Dept. Of	ase And Pa:	casite Re	search	Division		7483
	Agricultura	1 Research	Service				
	Crops Resea 6837		ວ <u>ກ</u> 7123	6724 7131	6789	6815	6828
σ.	S. Dept. Of Agricultura			ville,	Mđ.		
	Crops Resea	rch Divisi	ao				
σ.	Plant Indus S. Dept. Of			ville.	Md.	6847	7728
	Agricultura Entomology	al Research	Service		6485	6506	6507
	6508	6525	6526	6527	6544	6545	6546
σ.	6649 S. Dept. Of		7230 re. Berke	elev. Ca	lif.		
	Forest Serv	vice				C+++++++	
	Pacific Sou 6705	5				Station	
σ.	S. Dept. Of Agricultura			sburg,	Va.		
	Crops Resea	rch Divisi	ас				6737
υ.	S. Dept. Of Agricultura			usa, La	•		
п.	Crops Resea S. Dept. Of			an. Mon	+		6948
	Agricultura	1 Research	Service				
σ.	Entomology S. Dept. Of	Research D Agricultu	ivision re, Brook	ings, S	. Dak.		6547
	Northern GI	ain Insect	s Researd	h Labor	atory		6926
υ.	S. Dept. Of Agricultura	al Research	Service	e ATTT6'			
σ.	Entomology S. Dept. Of			sville.	6557 Tex.	6559	7029
	Texas Agric	cultural Ex	periment	Station	1		6597
U.	.S. Dept. Of Agricultura				TOE, TEX.	'	
	Market Qual Field Crops				:h	6894	6895
σ.	S. Dept. Of	E Agricultu	re, Colum	ibia, Mo		0034	0055
	Forest Serv Columbia Re	esearch Cen					
0	Central Sta S. Dept. Of	Adricultu	Experime	ent Stat	ion re.	6989	7085 7712
U	S. Dept. Of S. Dept. Of	f Agricultu	re, Corva	illis, 0	re.		
	Forest Scie	ances Labor	atory				

	Station	
Pacific Northwest Forest And Range Experiment Forest Service	Station	6582
U.S. Dept. Of Agriculture, Davis, Calif.	6756	6891
U.S. Dept. Of Agriculture, Davis, Calif.		
Agricultural Research Service Crops Research Division		6705
U.S. Dept. Of Agriculture, Durham, N.C.		6785
Forest Service		
Southeastern Forest Experiment Station		6771
U.S. Dept. Of Agriculture, Geneva, N.Y.		
Agricultural Research Service Entomology Research Division		6648
U.S. Dept. Of Agriculture, Glenn Dale, Md.		00.0
Agricultural Research Service		
Plant Quarantine Division		6776
U.S. Dept. Of Agriculture, Greenport, N.Y. Agricultural Research Service		
Animal Disease And Parasite Research Division		
Plum Island Animal Disease Laboratory		7498
U.S. Dept. Of Agriculture, Gulfport, Miss.		
Forest Service		
Southern Forest Experiment Station Forest Disease Laboratory		7716
		6981
U.S. Dept. Of Agriculture, Houma, La. U.S. Dept. Of Agriculture, Kerrville, Tex.		
Agricultural Research Service		7677
Animal Disease And Parasite Research Division U.S. Dept. Of Agriculture, Kerrville, Tex.		7677
Agricultural Research Service		
Entomology Research Division		6532
U.S. Dept. Of Agriculture, Laramie, Wyo.		
Agricultural Research Service		6617
Entomology Research Division U.S. Dept. Of Agriculture, Lincoln, Neb.		6617
Agricultural Research Service		
Entomology Research Division		7019
U.S. Dept. Of Agriculture, Logan, Utah	6950	6951
U.S. Dept. Of Agriculture, Logan, Utah Agricultural Research Service		
Animal Disease And Parasite Research Division		7249
U.S. Dept. Of Agriculture, Manhattan, Kan.		
Agricultural Marketing Service		
Stored-Grain Insects Laboratory		7758
U.S. Dept. Of Agriculture, Olympia, Wash. Agricultural Research Service		
Animal Disease Eradication Division		7394
U.S. Dept. Of Agriculture, Olympia, Wash.		
Agricultural Research Service		7393
Animal Health Division U.S. Dept. Of Agriculture, Portland, Ore.		1333
Forest Service		
Pacific Northwest Forest And Range Experiment	Station	
	Deacter	
Forest Disease Research	Deatzez	6722
U.S. Dept. Of Agriculture, Prosser, Wash.	0000202	6722
U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service		6722
U.S. Dept. Of Agriculture, Prosser, Wash.		6722 6908
U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch U.S. Dept. Of Agriculture, Prosser, Wash.		
U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service		
U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division		
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash.</li> </ul>		6908 6953
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> </ul>		6908
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash.</li> </ul>		6908 6953
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> </ul>		6908 6953 6760
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash.</li> </ul>	6860	6908 6953
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> </ul>		6908 6953 6760 7130
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> </ul>		6908 6953 6760
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif.</li> </ul>		6908 6953 6760 7130
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> </ul>		6908 6953 6760 7130
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> </ul>		6908 6953 6760 7130 6727
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> </ul>		6908 6953 6760 7130 6727 6738
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash.</li> <li>Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash.</li> <li>Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> </ul>		6908 6953 6760 7130 6727 6738 7454
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> </ul>		6908 6953 6760 7130 6727 6738
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash.</li> <li>Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash.</li> <li>Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pulman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> </ul>		6908 6953 6760 7130 6727 6738 7454
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pulman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Suppler Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Subert. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Subert. Of Agriculture, State College, Miss.</li> <li>Dept. Of Agriculture, State College, Miss.</li> <li>Agricultural Research Service</li> <li>Subert. Of Agriculture, State Service</li> <li>Subert. Of Agriculture, State Service</li> <li>Subert. Of Agriculture, State</li> <li>Subert. Of Agriculture, State</li> <li>Subert. O</li></ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Divisio</li></ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589 6712
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pulman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Stillwater, Okla. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Divisio</li></ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589 6712
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Stillwater, Okla. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589 6712 6708
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service</li> <li>Soil And Water Conservation Research Division</li> <li>Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agricul</li></ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589 6712
<ul> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Crops Research Division Vegetables And Ornamentals Research Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Agricultural Research Service Soil And Water Conservation Research Division Northwest Branch</li> <li>U.S. Dept. Of Agriculture, Prosser, Wash. Irrigation Experiment Station</li> <li>U.S. Dept. Of Agriculture, Pullman, Wash. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Raleigh, N.C. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Salinas, Calif. Agricultural Research Service Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss.</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, State College, Miss. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Stillwater, Okla. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> <li>U.S. Dept. Of Agriculture, Tempe, Ariz. Agricultural Research Service</li> <li>Crops Research Division</li> </ul>		6908 6953 6760 7130 6727 6738 7454 6960 6589 6712 6708

183

## ORGANIZATION INDEX

	ORGAN
Agricultural Research Service	
Entomology Research Division U.S. Dept. Of Agriculture, Urhana, Ill.	6540
Agricultural Research Service	
Crops Research Division	6744
U.S. Dept. Of Agriculture, Vincennes, Ind. Agricultural Research Service	
Entomology Research Division	6997
U.S. Dept. Of Agriculture, Washington, D.C. Agricultural Research Service	7229
U.S. Dept. Of Agriculture, Washington, D.C.	
Agricultural Research Service Animal Inspection And Quarantine Division	7352
U.S. Dept. Of Agriculture, Whittier, Calif.	
Agricultural Research Service Entomology Research Division	7076
U.S. Dept. Of Health, Educ. And Welfare, Hamilton, Mont.	
National Institutes Of Health National Institute Of Allergy And Infectious Diseases	
7334	
U.S. Dept. Of Health, Education And Welfare, Bethesda, Md	-
Public Health Service National Institute Of Allergy And Infectious Diseases	
Lahoratory Of Parasitic Diseases	7427
U.S. Dept. Of Health, Education, And Welfare, Atlanta, Ga Public Bealth Service	•
Bureau Of State Services	25.25
Communicable Disease Center U.S. Dept. Of Health, Education, And Welfare, Atlanta, Ga	7575
U.S. Public Health Service	
Bureau Of State Services Communicahle Disease Center	7561
U.S. Dept. Of Health, Education, And Welfare, Savannah, G	
U.S. Puhlic Health Service Bureau Of State Services	
Communicable Disease Center	6677
U.S. Dept. Of Interior Bureau Of Commercial Fisheries	
Division Of Biological Research	
Marine Mammal Biological Lahoratory. U.S. Forest Service, Asheville, N.C.	7392
	6766
U.S. Forest Service, Columbus, Ohio Central States Forest Experiment Station	7001
Unilever Research Lab, Bedfordshire, England	7290
United Fruit Company, La Lima, Honduras United Nations, Phnom-Penh, Camhodia	7720
	7633
United States Ruhher Company, La Mirada, Calif. Naugatuck Chemical Division	
Research And Development Dept.	6998
Univ. Of Camhridge, Eng. School Of Veterinary Medicine	7248
Univerity Of California, Davis	1210
School Of Veterinary Medicine Depts, Of Pathology And Clinical Pathology	7441
Depts. Of Pathology And Clinical Pathology Universities Federation For Animal Welfare, London, Engla	nd
7497 University College Hospital Medical School, London, Eng.	
Dept. Of Bacteriology	6641
University College Hospital Medical School, London, Engla Dept. Of Bacteriology 6642	na 6644
University College Hospital, London	
Dental Dept. University College Of North Wales, Bangor	7440
School Of Agriculture	
Dept. Of Biochemistry And Soil Science University College, Dublin, Ireland	7300
Dept. Of Medicine	
Faculty Of Veterinary Medicine University Of Alberta, Canada	7422
Dept. Of Animal Science	7140
University Of Alberta, Edmonton, Canada Dept. Of Entomology	7674
University Of Arizona, Tucson 6834 University Of Arizona, Tucson	6928
University Of Arizona, Tucson Agricultural Experiment Station	
Dept. Of Entomology	7118
University Of Arizona, Tucson Dept. Of Plant Pathology	6711
University Of Arkansas	6065
Dept. Of Plant Pathology University Of Arkansas, Fayetteville	6966 7036
University Of Arkansas, Fayetteville University of Baghdad, Iraq Callega of Agricultura	6936
College of Agriculture University Of Baghdad, Iraq	0330
College Of Medicine	7503
Dept. Of Bacteriology University Of Birmingham	7593
Depts. Of Pathology And Bacteriology	7296
PAGE 184	

University Of Bristol			7260
Dept. Of Veterinary Medicine University Of Bristol, Eng.			7360
Dept. Of Veterinary Medicine			7361
University Of Bristol, England Dept. Of Bacteriology			7332
University Of Bristol, England			1332
Dept. Of Pathology			7408
University Of Bristol, England Dept. Of Physiology			7233
University Of Cairo, Egypt			1255
Faculty Of Agricuture			6445
University Of California riverside Citrus Experiment Station			7581
University Of California, Berkeley	5757	6777	6850
6938 6954 6961 6975 6	5976	7030	7717
7726 University Of California, Berkeley			
Dept. Of Biological Control			
Lahoratory Of Insect Pathology 6 6646 6647	5577	6637	6638
University Of California, Berkeley			
Dept. Of Entomology And Parasitology			6679
University Of California, Berkeley Dept. Of Plant Pathology 6819 (	5867	6974	7713
7738			
University of California, Berkeley			6593
Division of Entomology, University Of California, Berkeley			0293
Division Of Invertehrate Pathology		6618	6619
	5703 5937	6753 6967	6802 6984
7067 7125 7729 7750	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0 30 7	0304
University Of California, Davis			
Dept. Of Botany University Of California, Davis			7708
University Of California, Davis Dept. Of Entomology			7064
University Of California, Davis Dept. Of Entomology And Botany			6933
University Of California, Davis			0333
Dept. Of Plant Pathology	5716	6838	6906
University Of California, Davis Dept. Of Veterinary Fathology			7308
University Of California, El Centro			, 500
Agricultural Extension Service			7586
University Of California, Fresno State Dept. Of Public Health Mosquito Pr	oiect		6514
6515 6564	5		
University Of California, Irvine Division Of Biological Sciences			6541
University Of California, Los Angeles		6678	6700
6899 6970 6971			
University Of California, Los Angeles Dept. Of Zoology			6511
University Of California, Riverside	640	6667	6718
6852 6869 6946 6979 7 7727 7744 7747	7065	7114	7719
University Of California, Riverside			
	5982 7640	7004	7035
7084 7576 7580 7645 7 University Of California, Riverside	7649	7650	7661
Citrus Experiment Station			
Dept. Of Biological Control University Of California, Riverside			7058
Citrus Experiment Station			
Dept. Of Biological Control			6520
Lahoratory Of Insect Pathology University of California, Riverside			6539
Department of Plant Pathology			6952
University Of California, Riverside Dept. Of Plant Pathology 6741 6	5742	6745	6829
6978	0742	0745	0029
University Of California, Riverside			
Lahoratory Of Insect Pathology Dept. Of Biological Control			6538
University Of Cambridge			
Dept. Of Veterinary Clinical Studies			7450
University Of Camhridge Dept. Of Veterinary Clinical Studies.			7336
University Of Camhridge			
School Of Veterinary Medicine Dept. Of Veterinary Clinical Studies			7469
University of Contecticut University of Costa Rica, San Jose, Costa			6495
University Of Costa Rica, San Jose, Costa Dept. Of Parasitology	Rica		6666
University Of Delaware			0000
Virginia Truck Experiment Station			7017
Entomology Dept. University Of Delaware, Newark			7017 6990
University Of Duhlin, Ireland			

Trinity College	7376
University Of Edinburgh, Scotland Royal (Dick) School Of Veterinary Studies	
Dept. Of Veterinary Bacteriology University Of Florida	7312
University Of Florida Dept. Of Poultry Science University Of Florida	7342
Dept. Of Veterinary Science	7508
University Of Florida, Belle Glade Everglades Experiment Station 6939	7006
University Of Florida, Gainesville 6870	6929
University Of Plorida, Gainesville Dept. Of Plant Pathology 6725 6832	6972
University Of Florida, Gainesville Dept. Of Veterinary Science	7540
University Of Florida, Lake Alfred Citrus Experiment Station 6786	7098
University Of Glasgow	
Veterinary School University Of Glasgow	7262
Veterinary School Dept. Of Veterinary Pathology	7428
University Of Glasgow	7420
Veterinary School Veterinary Hospital	7502
University Of Glasgow Veterinary Eospital, Scotland University Of Glasgow, Scotland	7383
Veterinary Hospital	7415
University Of Hawaii, Honolulu College Of Agriculture	
Hawaii Agricultural Experiment Station University Of Hawaii, Honolulu	7646
Dept. Of Plant Pathology 6768 6769	6863
University Of Hawaii, Kapaa, Kauai Dept. Of Plant Pathology	
Dept. Of Plant Pathology Kauai Branch Station University Of Idaho	6945
Agricultural Experiment Station	6765
University Of Idaho Agric. Experiment Station, Caldwel 7310	T
University of Illinois University Of Illinois, Urbana 6579	7705 6784
University Of Illinois, Urbana	
Botany Dept. University Of Illinois, Urbana	6910
Dept. Of Entomology University Of Illinois, Urbana	7081
Dept. Of Flant Pathology 6767 6782	7704
University Of Illinois, Urbana Illinois Dept. Of Agric. Diagnostic And Research Lab	oratory
Agricultural Experiment Station College Of Veterinary Medicine	7616
University Of Kansas, Lawrence	
Dept. Of Entomology University Of Kentucky, Lexington 7053 7054	6676 7086
University Of Kentucky, Lexington Dept. Of Plant Pathology	6865
University Of Liverpool Dept. Of Veterinary Pathology	
University Of Liverpool Field Station, Neston, Eng.	7370
Dept. Of Veterinary Preventive Medicine University Of Liverpool, Eng.	7605
Dept. Of Veterinary Freventive Medicine	7530
University Of Liverpool, England Dept. Of Veterinary Pathology 7369	7526
University Of Liverpool, England School Of Veterinary Science	7299
University Of Maryland Dept. Of Poultry Science	
University Of Maryland	7451
Dept. Of Veterinary Science 7434 University Of Maryland, College Park 6956 7014	7445 7051
7103 7572 7675 University Of Maryland, College Park	
Dept. Of Botany	6783
University of Massachusetts University Of Massachusetts, Amherst	6457 7108
University Of Massachusetts, Amherst College Of Agriculture	
Feed And Fertilizer Control Service	7680
University Of Michigan, Ann Arbor Berbarium And Dept. Of Botany	6464
University of Minnesota 6519 6697 6709 6780 6794 7056 7127 7224 7284	6731 7539
7541 7644 7654	.555
University Of Minnesota Dept. Of Plant Pathology And Physiology	
	7128
University Of Minnesota Dept. Of Poultry Science	7128 7136
University Of Minnesota Dept. Of Poultry Science University Of Minnesota, Duluth	

11	TON TUDEY		
	Dept. Of Biology		6995
	University Of Minnesota, St Paul		6816
	University Of Minnesota, St. Paul 6840 6935 6957	6842	6879
	University Of Minnesota, St. Paul		
	Animal Disease Eradication Division		7407
	University Of Minnesota, St. Paul Dept. Of Entomology And Economic Zoology	6456	6609
	6611	0100	0005
	University Of Minnesota, St. Paul Dept. Of Plant Pathology And Botany	6715	7643
	University Of Minnesota, St. Paul	0/15	1045
	Dept. Of Plant Pathology And Physiology		6866
	University Of Minnesota, St. Paul Fisheries And Wildlife		
	Dept. Of Entomology		6497
	University Of Minnesota, St. Paul		
	Institute Of Agriculture Dept. Of Plant Pathology And Botany	6876	6893
	University Of Minnesota, St. Paul		
	Institute Of Agriculture Dept. Of Plant Pathology And Physiology		6702
	University Of Missouri		7648
	University Of Missouri Dept. Of Agricultural Chemistry		-
	University Of Missouri, Columbia	6820	7139 6987
	University Of Missouri, Columbia		
	Dept. Of Horticulture		6701 6915
	University of Montana University Of Nebraska		0915
	Dept. Of Agronomy		7120
	University Of Nebraska Dept. Of Poultry Science		7141
	University Of Nebraska		
	Dept. Of Veterinary Science	7534 6922	7535 6940
	University Of Nebraska, Lincoln University Of Nebraska, Lincoln	0922	0 940
	Dept. Of Plant Pathology		7109
	University Of New Hampshire, Durham University Of Pennsylvania, Phila.		6868
	School Of Veterinary Medicine		7341
	University Of Pennsylvania, Philadelphia		6518
	Zoological Laboratory University of Pittsburgh		6653
	University Of Queensland, Brisbane, Australia		7700
	Veterinary School University of Rhode Island		7309 6493
	University Of Rhode Island, Kingston		7025
	University Of Sheffield, Eng. Dept. Of Bacteriology	7596	7597
	University of South Dakota	1590	6451
	University of South Dakota University Of The Philippines, Los Banos, Laguna	L	
	College Of Agriculture Dept. Of Entomology		6530
	University Of Tokyo, Bunkyo-ku, Tokyo, Japan		
	Faculty Of Agriculture University of Udaipur, India	6552	6553
	Agricultural Experiment Station		
	Department of Plant Pathology		6788
	University Of Utah, Salt Lake City University Of Utrecht, Netherlands		6943
	Institute Of Veterinary Bacteriology		7536
	University of Virginia University of Washington	6674	7088 6931
	University Of Western Ontario, London, Canada	0074	0551
	Dept. Of Zoology	Conodo	6587
	University Of Western Ontario, London, Ontario, Dept. Of Biochemistry	canada	6600
	University Of Wisconsin		6812
	University Of Wisconsin Dept. Of Entomology		6590
	University Of Wisconsin		0590
	Dept. Of Poultry Science	7137	7138
	University Of Wisconsin, Madison 6758 6831 6851 6872 6900 6907	6814 6923	6823 6924
	6965 7722 7731 7743		
	University Of Wisconsin, Madison Dept Of Plant Pathology		7756
	University Of Wisconsin, Madison		
	Dept. Of Entomology 6570 7008 7673	7026	7672
	University Of Wisconsin, Madison		
	Dept. Of Plant Pathology 6804 6813	6878	6884
	6898 6962 University Of Wyoming		7104
	University, Stockholm, Sweden Institute Of Organic Chemistry And Biochemistr		
	Institute Of Organic Chemistry And Biochemistr Veterinary Investigation Center, Wolverhampton,	y England	6509
	7337		
	Veterinary Investigation Centre, M.A.A.F., readi	ng, Engl	and

7406	
Veterinary Investigation Centre, M.A.F.F., leeds, Eng. 7542	
Veterinary Investigation Centre, Norwich, England	7364
Veterinary Investigation Centre, Penrith, England	7240
Veterinary Investigation Centre, Sutton, Eng.	74 10
Veterinary Investigation Centre, Sutton, Eng. Veterinary Investigation Centre, Sutton, England	7272
7273	
Veterinary Investigation Centre, Weybride, England	7326
Veterinary Investigation Centre, Weybridge, England	7325
Veterinary Investigation Centre, Wolverhampton, Eng. Veterinary Investigation Centre, Yorkshire, England	7480
Veterinary Investigation Centre, Yorkshire, England	7453
Veterinary Research Division, Belfast, Northern, Ireland	
7529	
Veterinary Research Institute, Onderstepoort, South Afric 7396	a
Veterinary Research Laboratory, Kabete, Africa	
Dept. Of Veterinary Services	7505
Veterinary Research Laboratory, Kenya, Africa	7239
7595	
Veterinary Research Laboratory, Mpwapwa, Tanganyika	7630
Veterinary Research Laboratory, Southern Rhodesia	7269
Veterinary Research Laboratory, Tanganyika, Africa	7482
Virginia Agricultural Experiment Station	
Shenandoah Valley Research Station	7080
Virginia Agricultural Experiment Station, Blacksburg	6535
Virginia Polytechnic Institute	6856
Virginia Polytechnic Institute, Blacksburg	
	6825
	7632 7455
War Dept., Porton Down, Salisbury, Eng.	/455
Washington State University Dept. Of Aniwal Sciences	7142
Washington State University, Frosser	/142
Irrigation Experiment Station	6761
	6883
7436 7725	
Wellcome Research Laboratories, Kent, Eng.	7462
Wellcome Research Laboratories, Kent, England	7461
7466	
Wellcome Research Laboratory, Kabete, Kenya	7599
Wellcome Veterinary Res. Station, Tunbridge Wells, Eng. 7603	
Wellcome Veterinary Research Station, Sussex, England	
7270 7604	
Wesleyan University, Middletown, Conn.	
Dept. Of Biology	7709
West African Cocoa Research Institute, Tafo, Ghana	6947
West African Institute For Trypanosomiasis Research	7519
West Virginia University, Morgantown	7082
West Virginia University, Morgantown	7724
Dept. Of Plant Pathology, West Virginia University, Morgantown	1124
Dept. Of Plant Pathology, Bacteriology, And Entomology	
6774	
	7116
Wisconsin Conservation Dept., Madison	
Wisconsin Conservation Dept., Madison Wisconsin State Dept. Of Agriculture, Barron	
Wisconsin Conservation Dept., Madison Wisconsin State Dept. Of Agriculture, Barron	7116

# U.S. DEPARTMENT OF AGRICULTURE WASHINGTON, D.C. 20250

## OFFICIAL BUSINESS

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. POSTAGE AND FEES PAID U.S. DEPARTMENT OF AGRICULTURE